Colorado Springs Metro Area

August '22

Contents

## Next Meeting:
Monday
August
8th

Photos Bug Could Share Albums with the Wrong People

by JOSH CENTERS

Photos for the Mac has a strange bug that could cause you to share an album with people other than those who you intend. Let me show you how to replicate the bug so you can avoid it.

Open Photos and find Shared Albums in the sidebar. Hover the pointer over Shared Albums, and click the + button that appears to open the popover to create a new shared album.

Enter a name for the shared album. Then, click in the Invite People field and start typing a contact's name. As you type, Photos automatically suggests entries from your contacts. So far, so good.
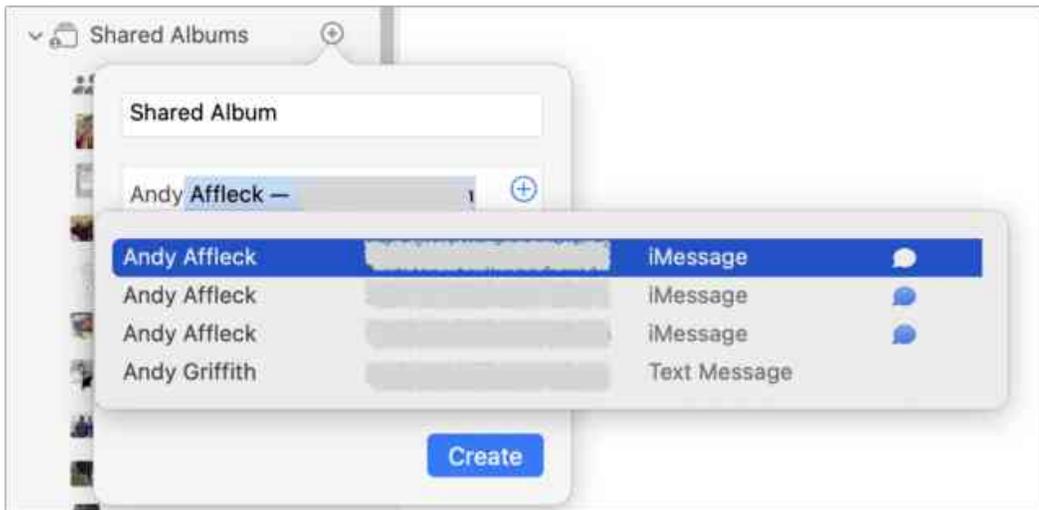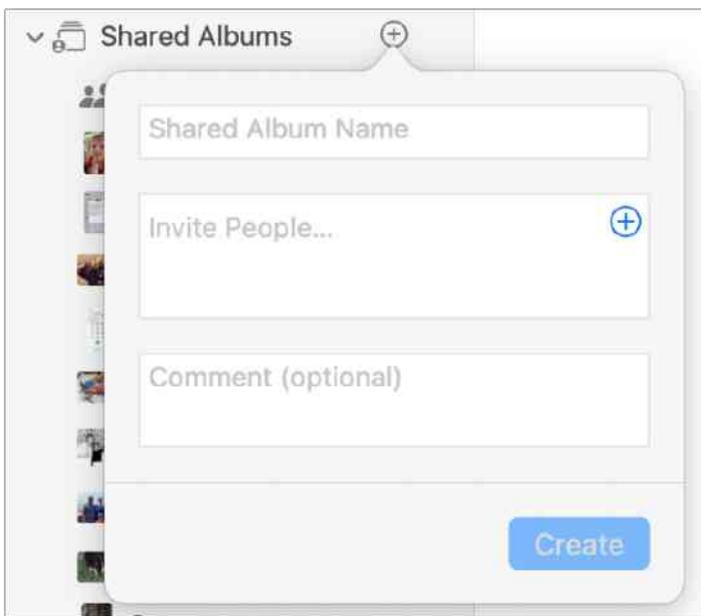
But let's say you inadvertently hit the wrong key and press Delete to fix it—perhaps typing andy when your contact goes by andrew. As long as there are any autocomplete suggestions showing, instead of delet-

OFFICERS

President
Jim Johnson
mahatma@freemasonic.org

Vice President
Mark Griffith
megriff@mac.com

Treasurer
Skip Mundy
skip2@mac.com

Secretary
Mike Marus
jmarus@me.com

Directors at Large
Jeff Jensen
jeffj@smmug.org
George Kahler
geokahler@smmug.org
Jean Marsh
jmarsh@smmug.org
Sharon Romero
sromero@smmug.org
Dave St. Andre
dstandre@smmug.org
Pam Wilson
pwilson@smmug.org
Ralph Woodard
rwoodard@smmug.org

SIG News

NO SIG MEETING THIS MONTH!

Scan this QR code to be taken to our SMMUG web site

ADVERTISING

MEETING DATES

Our regular monthly meetings are on the second Monday of every month. Upcoming meeting dates are as follows:

August 8
September 12
October 10
November 14
December12

Join/Renew

MISSED AN ISSUE?

You can find the previous issues of the Silicon Summit posted in PDF format at the **SMMUG website**.

THIS MONTH AT SMMUG

August 8, 2022
5:30 Pizza Party - See page 3 for info.

Club News

Announcements

Annual Pizza Party!

Please join us at our annual SMMUG Pizza Party on August 8th. This is social meeting, and there will be no program to interrupt the fun and socializing (former and current members are welcome to attend). As always, the pizza and soda are free to club members, but you will have to pay for any alcohol drinks or desert that you order.

The party will be at **Fargos at 2910 E Platte Ave.**, which is on the north side of Platte, just east of Circle. The party starts at 5:30 and runs to 7:30 pm. Ask for the SMMUG party when you enter the front door.

Door Prizes For The August Meeting:

Sharon has put together several door prize bags that she will be bringing to the Pizza party. These along with a $10 gift card will be raffled off - on-sight. So no email drawing this month.
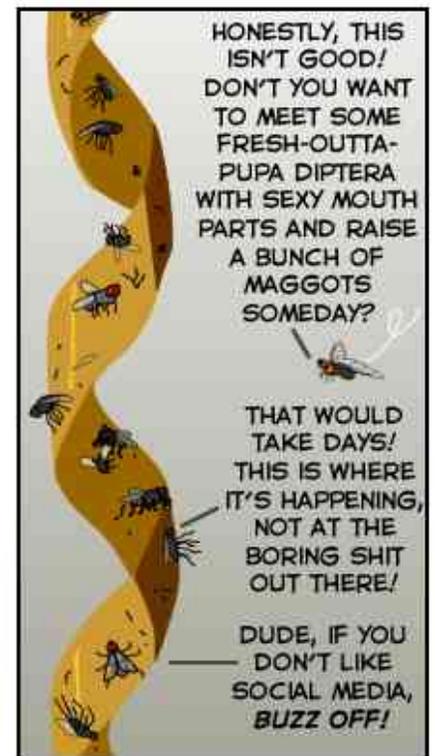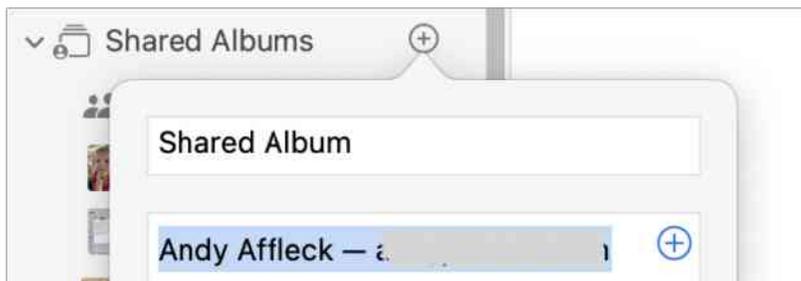
ing the last character you typed, as you'd expect, Photos adds the top suggestion to the invite list! Which is exactly the opposite of what you wanted to do.

In essence, Photos is interpreting the Delete key as the Return key, which is very, very wrong. If you failed to pay attention, you could end up sharing your album with all sorts of unintended people.

But it gets worse. Let's say you know about the bug and need to remove an inadvertently added contact before creating the album. Imagine that, instead of pressing Delete to delete the last character you typed, you decide you want to start over entirely. If you do that by double-clicking the name you're typing and pressing Delete, Photos will freeze hard. You'll have to Control-click the Photos icon in the Dock and choose Force Quit to recover.
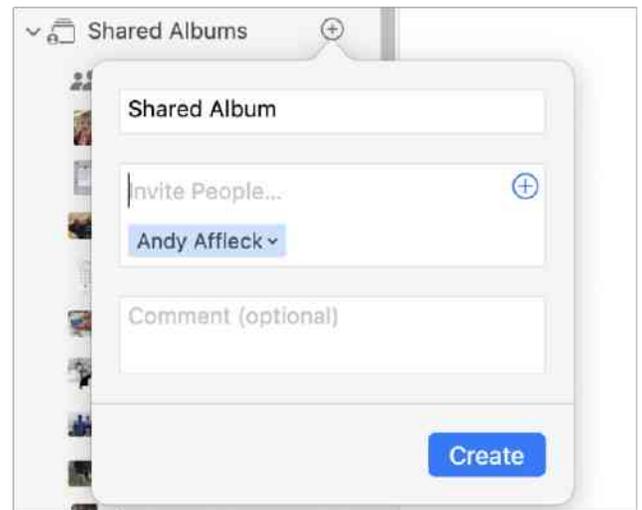
The only way you can back out of entering a contact once you've started is to

press Escape to dismiss the suggestions, then select the text that's showing, which you can do with a double-click or a drag. Once
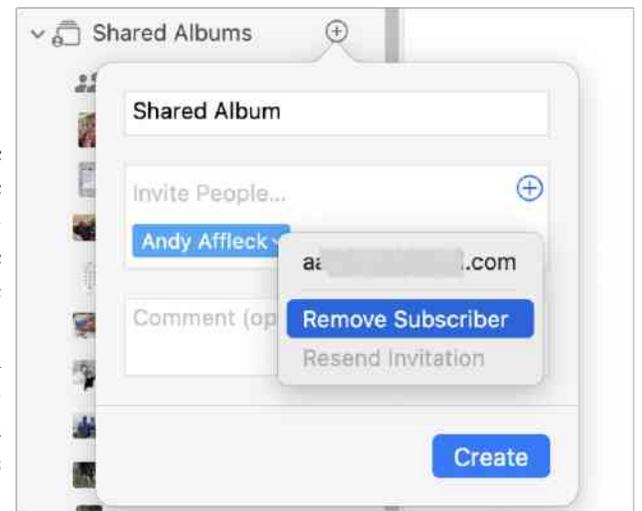
the text is selected, pressing Delete removes it properly.

If you've ended up with the wrong contacts at the bottom of the Invite People field, removing them is also fussy. Clicking a contact to select it and pressing Delete does nothing, nor does positioning the insertion point next to a contact and pressing Delete or Forward Delete. The only way to delete a contact from the Invite People field is to click the little downward-pointing arrow next to the contact's name and choose Remove Subscriber.

Apple has **reportedly known about this bug** for at least two years. Adam tested all this with me and was able to replicate my results. Plus, Julio Ojeda-Zapata also told us that the bug still exists in the version of Photos in the macOS 13 Ventura public beta. Here's hoping Apple fixes it before the final release of Ventura later this year.

Facebook Change Ensures Tracking by Preventing URL Stripping

by ADAM ENGST

Many sites add parameters to marketing campaigns for tracking purposes. Along with the UTM parameters that you've likely seen at some point, notable examples include the Facebook Click Identifier (fbclid), Google Click Identifier (gclid), and Microsoft Click Identifier (msclkid). Whenever we put links in TidBITS, we remove all unnecessary parameters to prevent our readers from being further sucked into the social media sausage machine. More important, Brave has automatically stripped tracking parameters from URLs since 2020, and **Mozilla just added URL stripping to Firefox 102**.

So much for that. According to Martin Brinkmann at ghacks.net, **Facebook has changed its URL scheme** to prevent Brave, Firefox, and others from stripping URL parameters. Instead of using parameters that can be identified and removed, Facebook now combines the page address with the tracking parameters in an encrypted blob. Remove that blob from a Facebook URL and anyone who clicks will end up on Facebook, but not at the desired page.

Considering this move in the light of **yet another insightful condemnation of social media**, we encourage everyone to focus on real people in the real world and avoid social media like the corrosive pestilence that it is.

Read original article
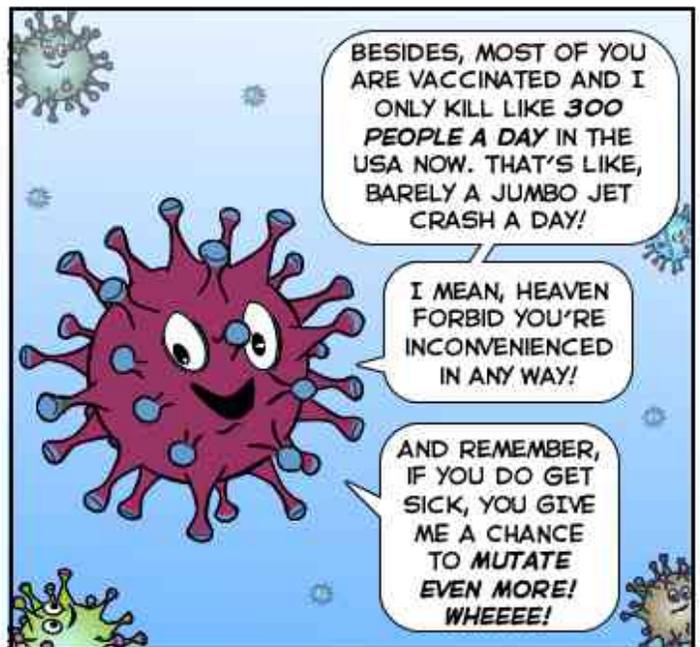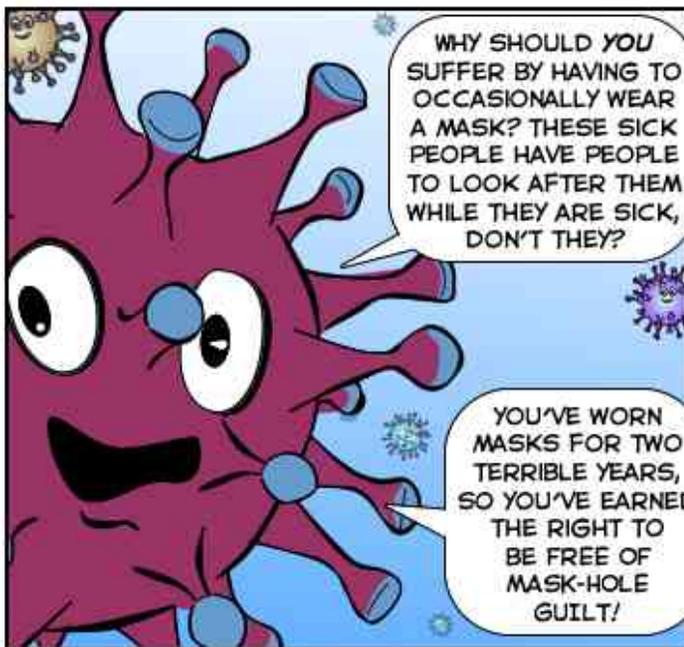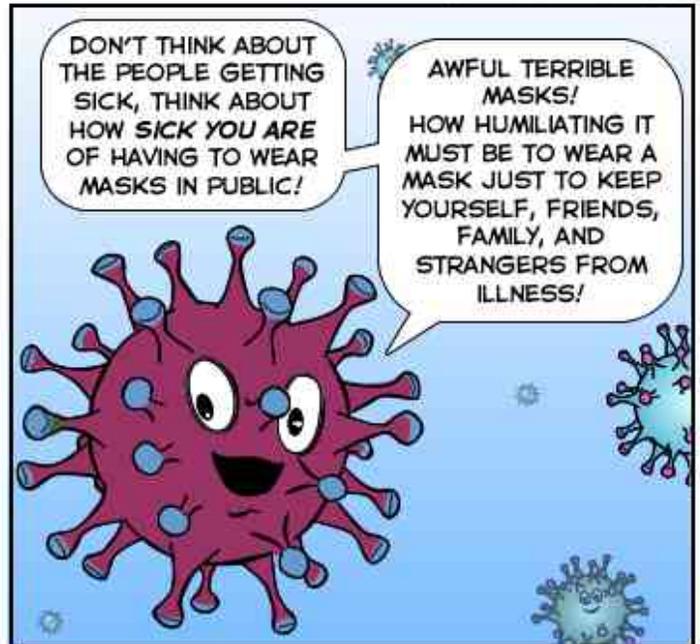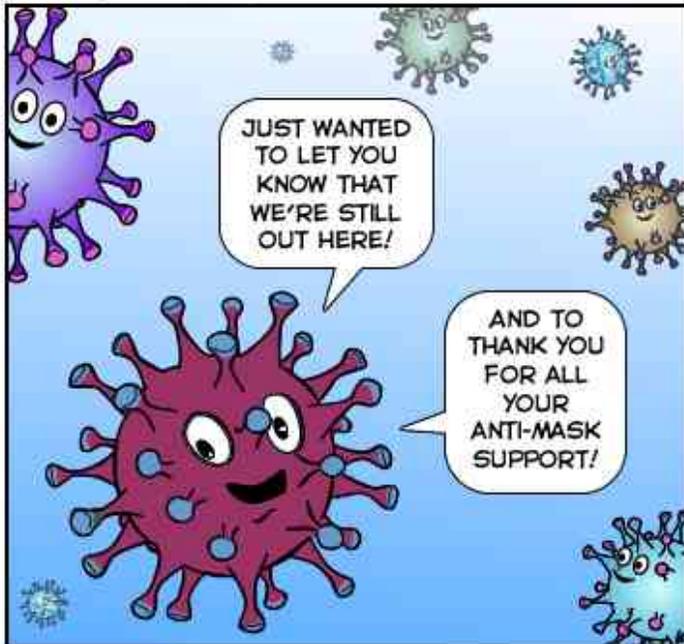
Can't wait for the next newsletter to see what the guys and gals at Joy of Tech are up to? Then simply go on over to their **website** and see past and current cartoons and other things

iOS, watchOS, & tvOS

Not Receiving SMS Text Message 2FA Codes? Call Your Carrier

by ADAM ENGST

SMS text messages are a weak, dangerous way of providing two-factor authentication codes, as we discussed years ago in "**Facebook Shows Why SMS Isn't Ideal for Two-Factor Authentication**" (19 February 2018). Unfortunately, even though the problems with SMS for 2FA are well-known, many companies and government organizations continue to use it. The problem is that, for most people, most of the time, it works. But I've just resolved a problem where SMS 2FA codes didn't work, and it's worth sharing in case you or someone else you know is experiencing a similar problem.

In August 2021, we switched from AT&T to T-Mobile, and it has been a highly positive move for the most part. At some point, however, I discovered that I couldn't log in to my **Social Security** account because it needed me to enter a code texted to my cell phone number. Despite several tries over a few days, the code never arrived on my iPhone. Since I have no near-term plans to retire and all other SMS text messages were arriving properly, it wasn't worth my time to figure out why.

A while later, I needed to log into the Finger Lakes Runners Club **QuickBooks Online** account, which also had an SMS-mediated login verification. That failed in the same way—the text message never arrived—but I was able to work around the problem by falling back to email. Although QuickBooks Online now offers app-based 2FA, turning it on requires being able to receive a text message first.

The problems continued. I couldn't turn on 2FA with a site called **TaxCaddy** that our accountant uses for transferring and tracking tax-related documents. The local credit union website we use for online banking wanted to send me a text message for some reason, but it never arrived—it was no great loss because I had to use Tonya's account anyway (and she never experienced any problems receiving 2FA codes). The straw that broke the proverbial camel's back was another local bank's website. It would let me log in and do most things but required an SMS 2FA code for making admin-level changes to users, which I needed so I could increase the amount my account could transfer between accounts.

So I called T-Mobile and explained my situation to the customer service rep. She understood the problem instantly and said she would remove the necessary block on my account. It took seconds, and as soon as she did it, I was able to verify that several of the previously blocked accounts could now send me text messages.
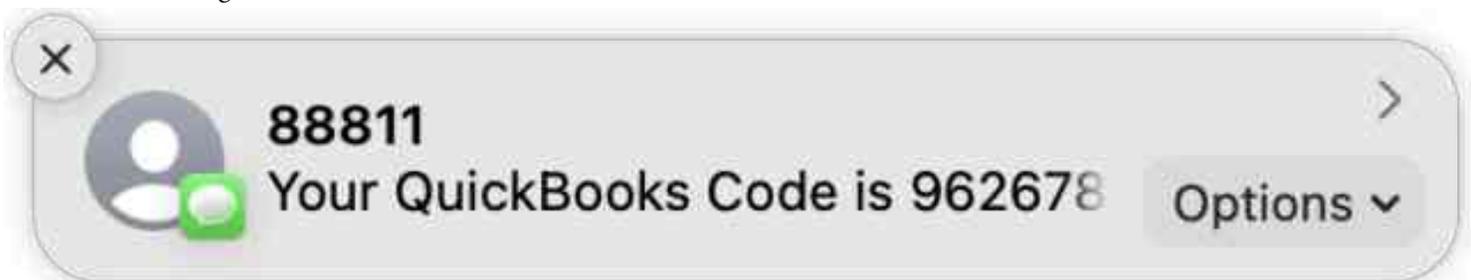
Why had this happened? The rep couldn't say for sure, but it was likely associated with T-Mobile's efforts to block scams. Most of those are voice-related, but apparently, they can also result in text messages being blocked. In other words, it's an opaque system, and there's no way of knowing exactly what happened. The commonality among the five websites I'd recorded as having troubles was that they all provided financial services. It seems odd that T-Mobile would block them, particularly government outfits like Social Security, but on the other hand, scammers might try to spoof text messages from such sites.

All's well that ends well, but the moral of the story is that if you aren't receiving SMS text messages, particularly those that carry 2FA codes, call your cellular carrier and ask if they're being blocked.

Apple Adds Lockdown Mode to Protect Activists and Government Targets

by GLENN FLEISHMAN

Apple has announced that a new **Lockdown Mode** will be coming to iOS, iPadOS, and macOS later this year to deflect attempts by government-level spyware to infiltrate the devices of targeted activists, protestors, journalists, and politicians. It's the latest measure taken by Apple in its significant efforts to protect its users' devices from being compromised and data taken without their knowledge or consent.

Lockdown Mode targets key points of weakness on always-connected devices that can connect to arbitrary servers around the world and be reached through Apple services, like Messages and FaceTime.

With Lockdown Mode enabled, you won't be able to receive anything but images and text via iMessage and MMS; all other document types will be blocked. Messages also won't preview links, among other not-yet-disclosed clampdowns. Plus, FaceTime and other Apple services that can receive arbitrary inbound invitations and requests will block everyone with whom you haven't previously initiated a call or request. (The block doesn't appear to cover anyone you've talked with before, only your outbound connections. Otherwise, someone who idly contacted you in the past as cover for a future hack would be permitted, among other scenarios.)

Those changes would have protected against the most recent severe exploit for Apple devices—a *zero-day* flaw, one that was exploited in the wild before Apple knew about it—which came through **maliciously formed PDFs** that bypassed Apple's 2020 addition of sandbox security to Messages (see "**BlastDoor Hardens iMessage Against Malware Assaults**," 4 February 2021).

Apple said that Lockdown Mode also prevents browsers from executing certain "complex web technologies," a reaction to past exploits and concerns about likely future vectors. Users can opt to add sites to a trusted list. In Lockdown Mode, wired connections are blocked whenever an iPhone is locked; Apple didn't mention iPads.

Lockdown Mode also blocks the installation of configuration profiles, which some attackers have exploited to intercept all data entering and leaving a device. Nor can devices in Lockdown Mode be enrolled into mobile device management, eliminating another known worry.

Apple has focused Lockdown Mode on users facing a known risk because it will limit some of what you can do on your devices. Even by that measure, tens of millions of Apple users worldwide could potentially benefit from enabling Lockdown Mode.

Consider, for instance, **Russia's aggressive arrests of any resident insufficiently patriotic** regarding its unprovoked invasion of Ukraine. Suddenly, many people in a nation of nearly 150 million might have reason to worry about state-sponsored spyware. Likewise, in America, the Supreme Court's recent decision overturning Roe v. Wade, coupled with law enforcement's behavior in past abortion-related cases, has privacy advocates concerned that police may seize the text messages and **digital activity** of pregnant people seeking medical care.

Alongside Lockdown Mode, Apple also announced a $10 million grant to the **Dignity and Justice Fund**, a grant-making organization formed within the Ford Foundation's New Venture Fund. Awards from this pool of money will fund "approaches to help expose mercenary spyware and protect potential targets." This could include outreach and awareness, bolstering the security of human-rights organizations, and directing research into spyware. Apple said the fund will be advised by a committee of human-rights-oriented technologists drawn from groups like Amnesty International and Citizen Lab. Ivan Krstić, Apple's head of security engineering and architecture, will also serve on the committee.

Lockdown Mode marks both an evolution and an escalation in Apple's battle to balance compliance with legal government actions with illegal, extrajudicial, and criminal efforts to penetrate iPhone, iPad, and Mac security. Last year, Apple sued a major global government spyware supplier,
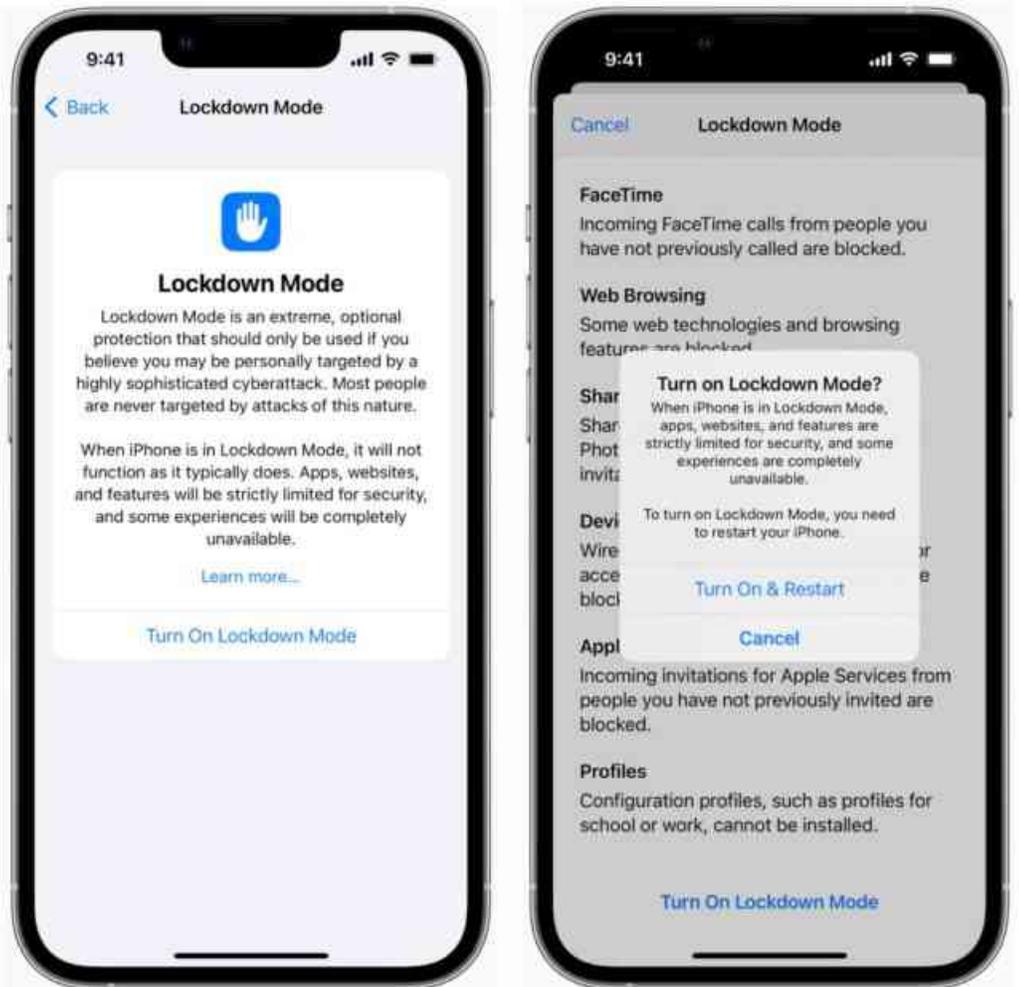
NSO Group, for its alleged role in exploiting Apple products and services (see "**Apple Lawsuit Goes After Spyware Firm NSO Group**," 24 November 2021).

Not all potential uses of spyware are inappropriate. NSO Group and similar companies consistently claim that the primary use of their products is to combat terrorism and human trafficking. Yet there's no evidence of what Apple calls "mercenary spyware" aiding in such, while NSO Group's Pegasus has allegedly been used to target **journalists in Mexico**, **politicians in the Catalonia region of Spain**, and **human-rights activists in the United Arab Emirates**, among others.

When Apple announced its lawsuit against NSO Group last year, the company said it would give $10 million to Citizen Lab and Amnesty Tech, part of Amnesty International, along with any damages it received if the company prevailed in its lawsuit. This new announcement doesn't reference that grant, even though it notes the same sum and says damages from the lawsuit will be part of the pot it donates to the New Venture Fund. Apple should provide more clarity here—are these separate initiatives, or did the previous grant get folded into this new approach?

Lockdown Mode arrives in iOS 16, iPadOS 16, and macOS 13 Ventura later this year. Enabling it appears to require just a tap, a confirmation, and a restart. You can turn it off with the same simplicity.

Should you enable Lockdown Mode even if you're unlikely to be targeted by state-sponsored actors? We suspect it will be overkill for nearly everyone and quickly become frustrating if you're not worried about your personal safety. But as far as we can tell, there's no harm in enabling it as a test or for temporary protection.

We'll see how effective Lockdown Mode ends up being in the real world, but based on the early description, Apple has set a new high-water mark in its commitment to security in the unequal battle between governments and individuals.

Use AssistiveTouch for Customizable Shortcuts on the iPhone and iPad

by JOSH CENTERS

I've long been a fan of the AssistiveTouch feature in iOS (and I have receipts to prove it: see "**Work Around a Broken iPhone Button with AssistiveTouch**," 24 July 2013). AssistiveTouch creates a virtual button that opens a menu giving those with limited dexterity one-touch access to common functions that may otherwise be difficult to use, like Control Center and the App Switcher, both of which require finicky gestures.

But AssistiveTouch has come a long way since I wrote about it nearly a decade ago, offering many more features and customization options. Most intriguing, AssistiveTouch can now trigger shortcuts, letting you turn it into an always-accessible menu of whatever quick actions you can create in Shortcuts. In that respect, it's much like the Back Tap accessibility feature Adam wrote about a couple of years ago, but with a visual interface instead of the sometimes funky double or triple tap requirement (see "**iOS 14's Back Tap Feature Provides Interaction Shortcuts**," 24 September 2020).
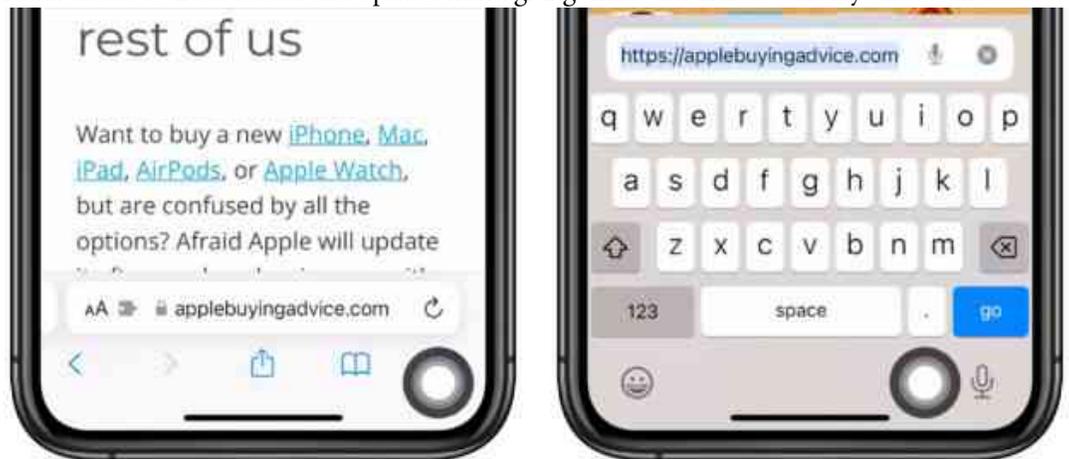
AssistiveTouch Basics

You can find AssistiveTouch settings in Settings > Accessibility > Touch > AssistiveTouch. Turn on AssistiveTouch there, and a circular button appears on your screen, floating above everything else. You can drag the button around as needed to keep it out of your way. In a nice touch, if you have the AssistiveTouch button anywhere on the bottom of your screen where it would get in the way of typing, it shifts to the left of the dictation key when you open the onscreen keyboard.

Tap the AssistiveTouch button, and a menu appears.

The Notification Center, Control Center, Home, and Siri buttons are self-explanatory, but Device and Custom require additional explanation:

- **Device:** Tapping this button provides access to a grab bag of system settings, like screen locking and rotation, muting, and volume control. Tapping the More button offers additional functions like the App
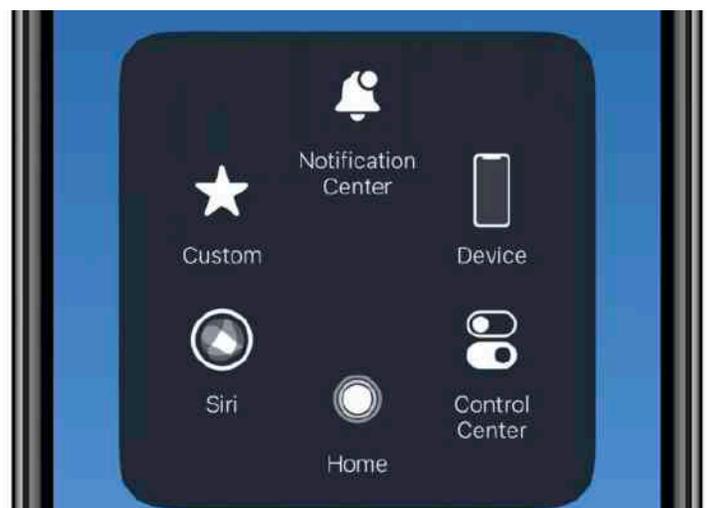
Switcher, taking screenshots, Emergency SOS, restarting, Reachability, additional gestures, Apple Pay, and shaking the device. (Shaking the device lets you undo an action, though you can turn that off in Settings > Accessibility > Touch if it annoys you.)
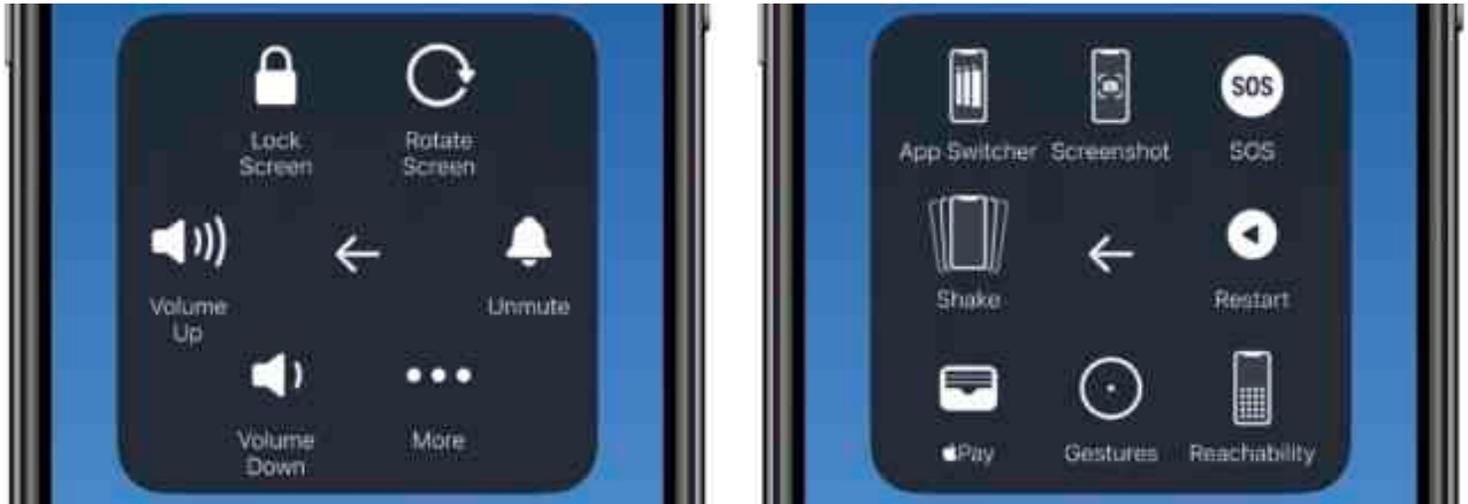
- **Custom:** The Custom button provides an interface that lets you simulate finger gestures like pinch and rotate, double tap, and long press. Tap a gesture, and a dark dot appears on your screen. Drag it to a place on the screen, and iOS will simulate the gesture at that spot. For instance, if you select Long Press and drop the dot over an app icon, its contextual menu appears. You can create custom gestures in Settings > Accessibility > Touch > AssistiveTouch > Create New Gesture.

Note that the AssistiveTouch button also appears on the Lock screen, although some commands may require you to unlock the device before they execute.

Make the AssistiveTouch Button Disappear, Mostly

The primary drawback of AssistiveTouch is that it slaps a big button on your screen, and wherever you put it, it's certain to get in the way at some point. Fortunately, you can now make it far less distracting.

Go to Settings > Accessibility > Touch > AssistiveTouch > Idle Opacity, where you can adjust the Idle Opacity slider all the way down to 15% to make the AssistiveTouch button nearly invisible when you're not using it.

Customize the AssistiveTouch Menu

Useful though the contents of the AssistiveTouch menu are, they may not fit your needs. You can change what's presented in the menu by default. Go to Settings > Accessibility > Touch > AssistiveTouch > Customize Top Level Menu. Tap any of the icons to see a long list of actions you can use instead of the default action.
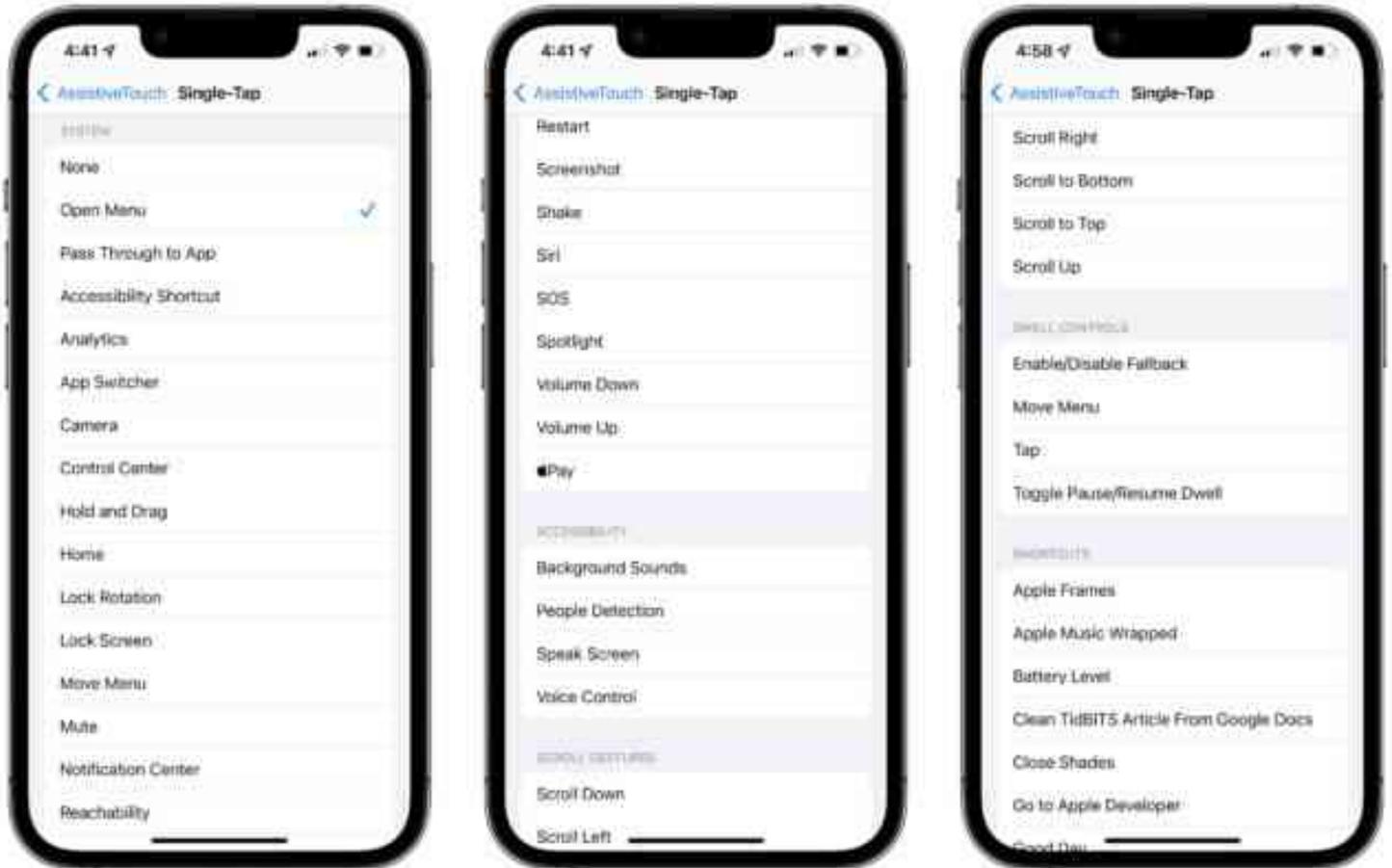
For instance, if you don't need help triggering Siri but have trouble double-pressing the side button to bring up Apple Pay, you could tap Siri, choose Apple Pay from the list, and tap Done. Note that all your shortcuts are listed at the bottom, so you can assign a shortcut to any slot on the menu.

By default, the AssistiveTouch menu shows six icons. You can tap the + and – buttons to add and remove icons, for a total of anywhere from one to eight. Be careful here—if you remove an icon and then add it back, its
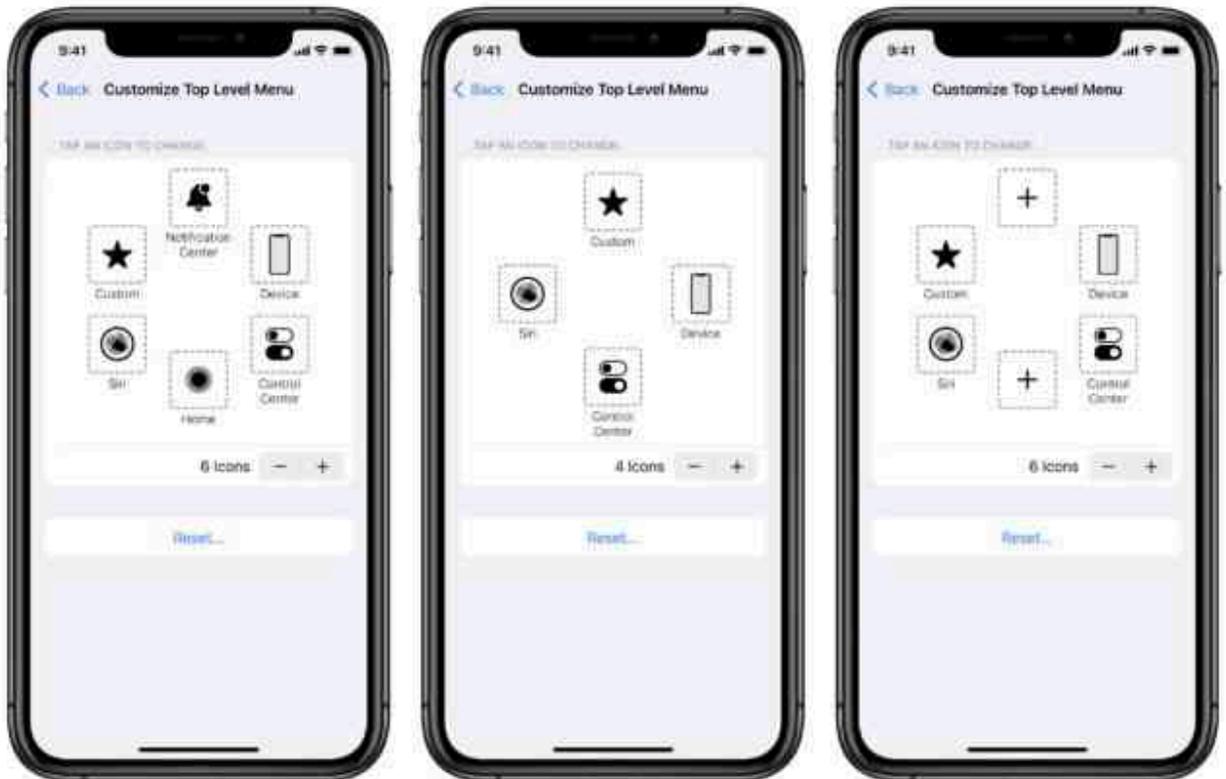
The AssistiveTouch menu defaults to six icons (left). You can tap the minus (–) to remove icons (center), but if you add an icon back with plus (+), it will come in blank and must be reassigned.

functionality will be cleared, and you'll have to reprogram it manually.

Don't worry if you mess up. Tap the Reset button below the icon customization interface to restore all the AssistiveTouch defaults. Beware that this button resets both the menu and all AssistiveTouch settings other than any custom gestures you've created.

Customize the AssistiveTouch Button

I realize I've rather buried the lede here, but now that you know what the AssistiveTouch button does and how you can customize its menu, the real excitement comes when you discover that you can attach custom actions to a single tap, double tap, or long press of the button instead of just using the AssistiveTouch menu.

Open Settings > Accessibility > Touch > AssistiveTouch. Under Custom Actions, there are three settings: Single-Tap, Double-Tap, and Long Press. Tap one and choose an action to change it. The options are the same as when you're customizing menu options, which means that you can do anything that it provides or that you can create in Shortcuts.

There are tons of interesting possibilities here. I'm experimenting with using a single tap of the AssistiveTouch button to open the Camera app, a double tap to set a HomeKit scene, and a long press to open the AssistiveTouch menu. That way, a single tap lets me quickly open the Camera without fumbling with Control Center, making it easier to capture snapshots of my kids being cute. I can double-tap the button to turn my lights off. And I can still access the plethora of commands available in the AssistiveTouch menu by pressing and holding the button.

So there you have it—a subtle, always-available button to which you can attach three or more actions. What do you plan to do with it?
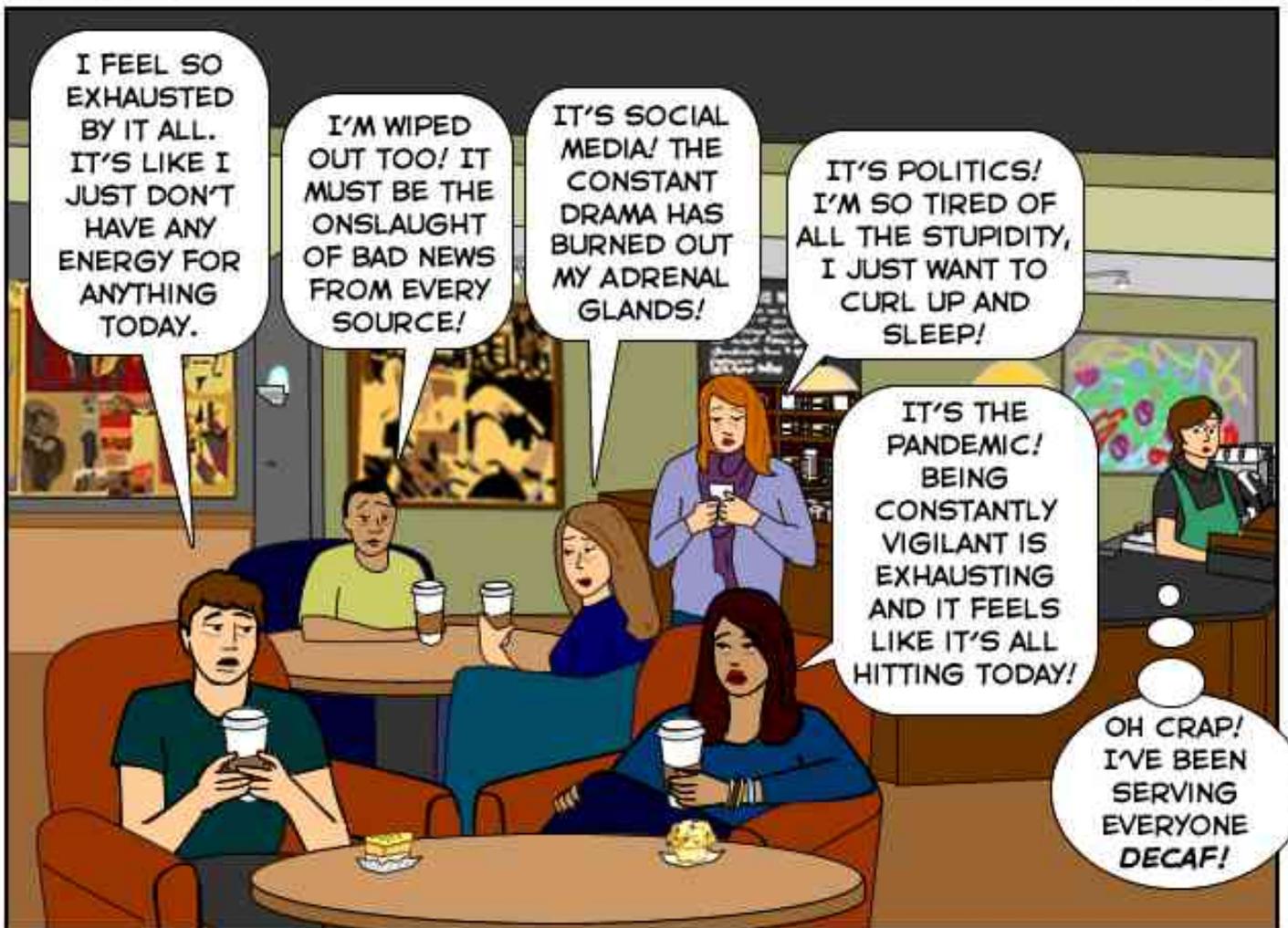
Macs & macOS

Ars Technica Tracks Mac Update Lifespans

by ADAM ENGST

Long ago, we published "**Apple's Planned Obsolescence Schedule**" (2 November 2011), an attempt to determine the number of years different versions of macOS and iOS maintained backward compatibility. Over at Ars Technica, Andrew Cunningham has now taken a swing at the topic from a different direction, trying to determine **how many years Macs receive macOS updates** and if that's changing over time. He shows that the number of years that Macs received updates fell from 1999 through 2004, increased until about 2012, and then dropped again through the end of the data in 2016. The first dip matches the transition from PowerPC to Intel chips, and it seems likely that the recent downturn is related to the move to Apple silicon. The question is if the chart will start to trend back up once Intel chips have joined 68000 and PowerPC processors in the depths of Mac history. Interestingly, the average Mac receives 7 years of macOS updates from the date it's introduced, plus another 2 years of security updates.
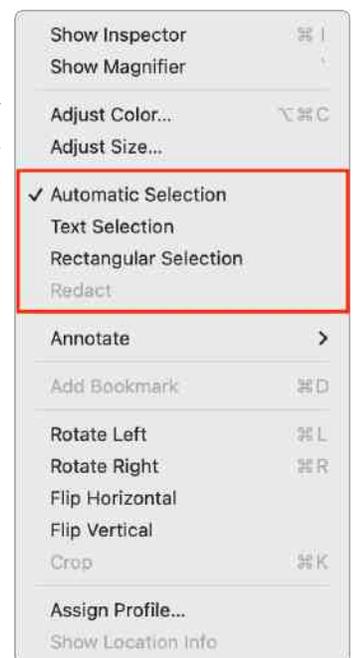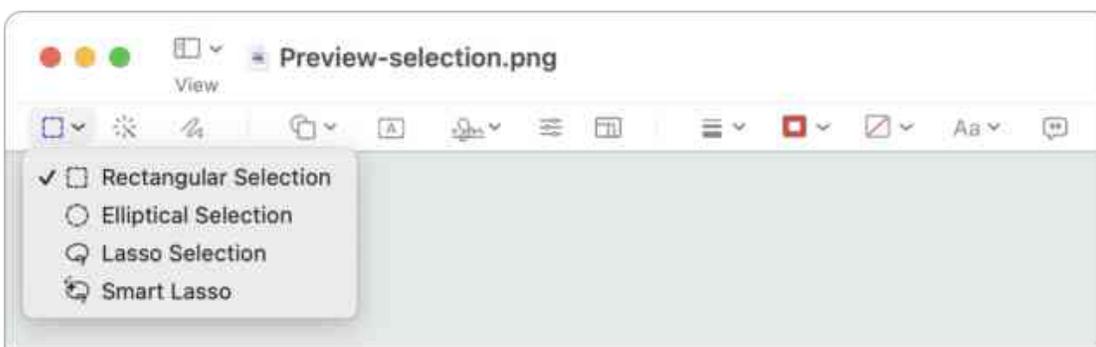
Read original article

TipBITS: How to Avoid Live Text in Preview More Easily

by ADAM ENGST

OK, this is embarrassing. After I published "**TipBITS: Disable Live Text for Easier Selecting in Preview**" (5 July 2022), **Ken Nellis commented** that after he read the article, he noticed that Preview in macOS 12 Monterey now has three selection-related options in its Tools menu: Automatic Selection, Text Selection, and Rectangular Selection. Ensuring that Live Text doesn't hijack rectangular selections is that easy? Oops.

I'm so familiar with Preview at this point that I didn't notice the change in the menu structure because I rely almost entirely on keyboard shortcuts and toolbar buttons and menus. Indeed, when I checked Preview on a Mac running the pre-Live Text macOS 11 Big Sur, it had only two commands in that menu: Text Selection and Rectangular Selection. Plus, the Text Selection command was never previously available when working on an image; it was only for selecting text in a PDF. (Rectangular selections work in both images and PDFs.) So that's my excuse, weak though it may be.

In the current version of Preview, Automatic Selection is the default, and it's what was tripping me up before. In that mode, Preview guesses whether you want to select text or draw out a selection rectangle. Most of the time, it guesses correctly, but if it starts selecting text and you want a rectangle, choose Tools > Rectangular Selection or click the selection pop-up menu on the left side of Preview's toolbar. Rectangular Selection is the default in that pop-up menu, and merely displaying the menu is enough to cause the Tools menu to switch to Rectangular Selection as well.

On the other side of the equation, if you keep getting a selection rectangle when you want to select text, choose Tools > Text Selection to force Preview to focus on characters.

My only remaining criticism, and I'll file this with Apple as a feature request, is that Preview should never perform a text selection when there's a rectangular selection in progress. Live Text annoyed me because I would open a screenshot that needed cropping, press Command-A to create a rectangular selection around the entire image, and get a text selection when I tried to move the blue selection handles.

If that happens now, I know that I can easily require a rectangular selection by clicking the selection pop-up menu, but even that shouldn't be necessary. First-world problems, I know!

TipBITS: Disable Live Text for Easier Selecting in Preview

by ADAM ENGST

I hope I'm not alone in using Preview for many basic graphic manipulations. As Josh Centers and I outlined in ***Take Control of Preview***, the app has a surprising amount of power for cropping screenshots, resizing images, adding annotations, and even editing pixels. (For instance, I frequently copy a rectangle of a screenshot's background color and paste it over something I'd like to "delete.")

Alas, cropping, which is one of the most common things I do in Preview, became harder in Monterey, thanks to the addition of Live Text. That's because Preview sometimes thinks I want to select text in the image rather than drag selection handles. Annoyingly, this problem is not predictable—I can run into it with a particular screenshot but be unable to reproduce it with the same screenshot later. Plus, the frequency with which I experience the problem has been falling, perhaps due to Apple improving the logic behind selecting.

If you're suffering from a click-and-drag giving you a text selection when you want a rectangular selection, I've found a trick for increasing your chances of being able to use the selection handles. Resize the window so you can see the canvas on the edge where you need to grab the selection handle. Then, approach the handle from the canvas side so macOS sees your click and drag as happening just outside the area where there's text.
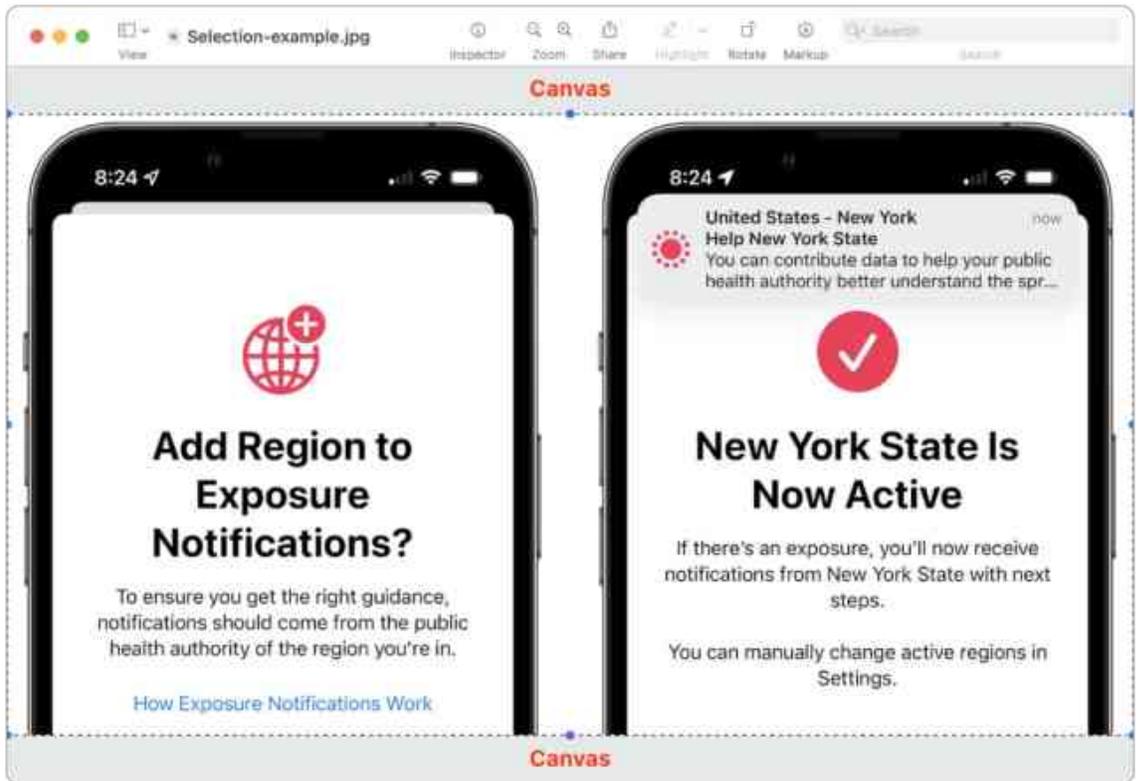
If that trick isn't sufficient, there's a way to return Preview to its normal selection habits. It requires turning off Live Text entirely, but as much as I think being able to select text in images is tremendously cool, I rarely need it, whereas I frequently crop images in Preview.

I didn't even realize that disabling Live Text was an option until I opened the Language & Region pane of System Preferences for another reason. But there it was, a checkbox labeled "Select Text in Images." Deselecting that ensured that I could always drag selection handles in Preview once again.

I started this article feeling quite pleased with myself for discovering this oddly placed checkbox for disabling Live Text, but my enthusiasm waned with my inability to reproduce the selection problem reliably. Most people probably aren't having any issues with Live Text taking over selections, but if you are, I hope my discoveries here help.
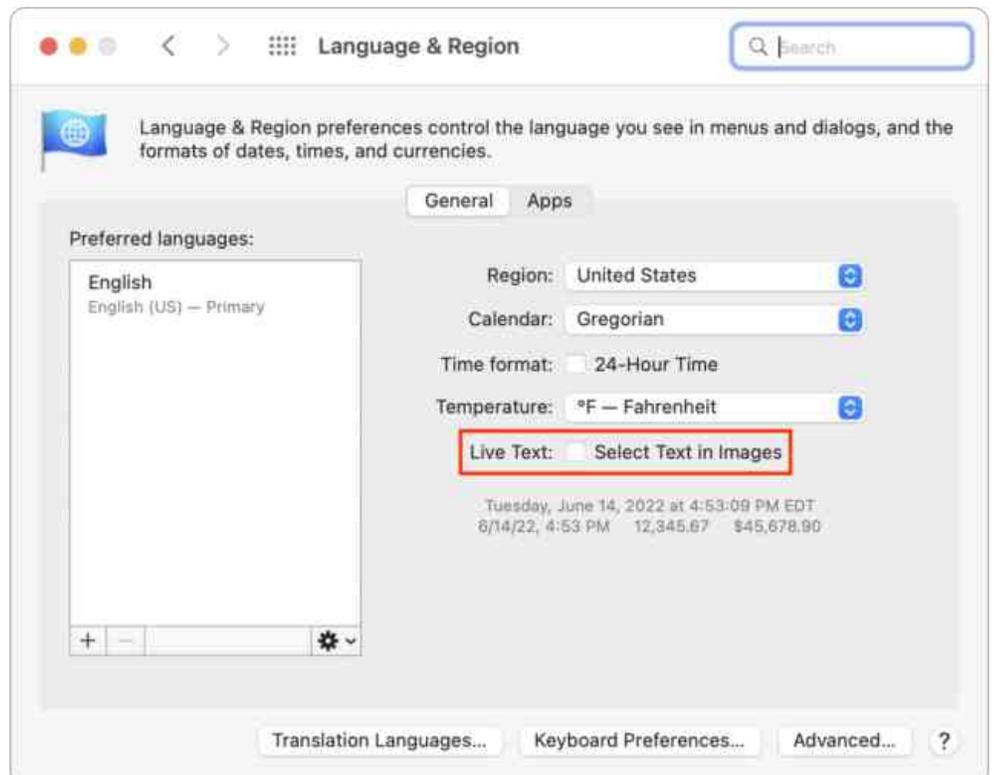
Use ChronoSync to Move Large Folders

by JOSH CENTERS

Imagine that you want to move a multi-gigabyte folder containing tens of thousands of files and subfolders to another drive to free up your Mac's internal storage space. Your first instinct would be to use the Finder and drag the folder where you want it to go. That's what the Finder is for, right? But it might not work.

Despite file management being one of its core functions, Finder isn't always the best choice for moving files and folders. Its inadequacies are seldom obvious when moving small batches, but moving large, complex folders can turn into a hair-pulling experience. That's because if Finder has a problem with a single file, it sometimes halts the entire transfer instead of skipping the problematic file.

In my case, it was a filename that was too long (and no, I don't know how that was possible), but various things can cause a file transfer to fail, like file corruption, the **Finder thinking the file is in use**, the inexplicable **Error Code 43** or **Error Code 36**, or the **Finder hanging during a long file copy**. Moving large amounts of data can take hours, and the last thing you want is a mysterious error wasting all that time.

I've dealt with this a lot lately, both in moving data to my Synology NAS and when I turned off iCloud Drive when troubleshooting sync issues, which dumped a 24 GB archive folder on my hard drive. (For more background, see "**Using a Synology NAS to Escape the Cloud**," 29 April 2022.) I was leery of deleting the folder because I couldn't be certain that iCloud had stored all the files, so I wanted to move it to my NAS to compare later. What started as a simple transfer ended up causing days of frustration.

A friend suggested using ChronoSync to move the folder. I'm familiar with ChronoSync, since we've covered it in our Watchlist for years, but I had always thought of it as a backup app. I checked **Setapp** and found that ChronoSync Express was included in my subscription. Otherwise, **ChronoSync Express** is $24.99 in the Mac App Store, and the full version of ChronoSync—which **offers a few more features**—costs $49.99. But ChronoSync Express is more than enough for syncing folders, and it does a darn good job of it.

Using ChronoSync Express to Move a Large Folder

Moving a folder with ChronoSync Express is a bit more work than drag and drop, but the app holds your hand through the process of creating the necessary task:

1. Click the tuxedo button by "Use a setup assistant." (You can also create a new synchronizer task manually by clicking the next button down; the steps are basically the same but take place in the task screen rather than as separate assistant screens.)
2. Click the button by Folder Backup
3. Click Get Started.
4. Drag the folder you want to copy into the Select a Source screen and click Next Step.
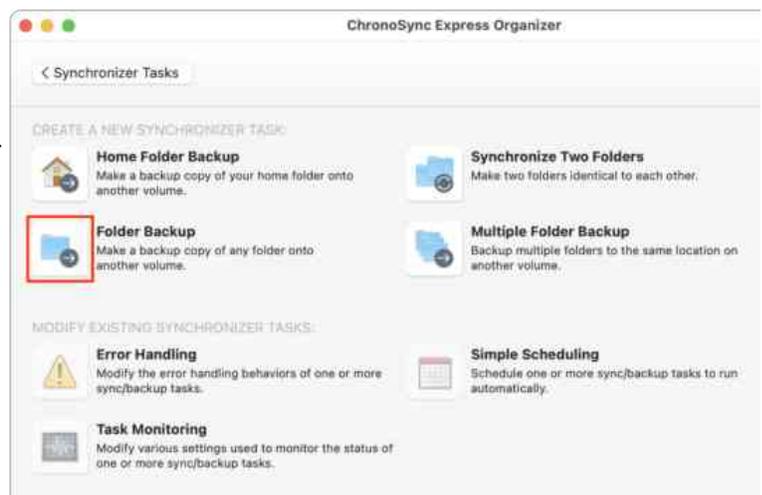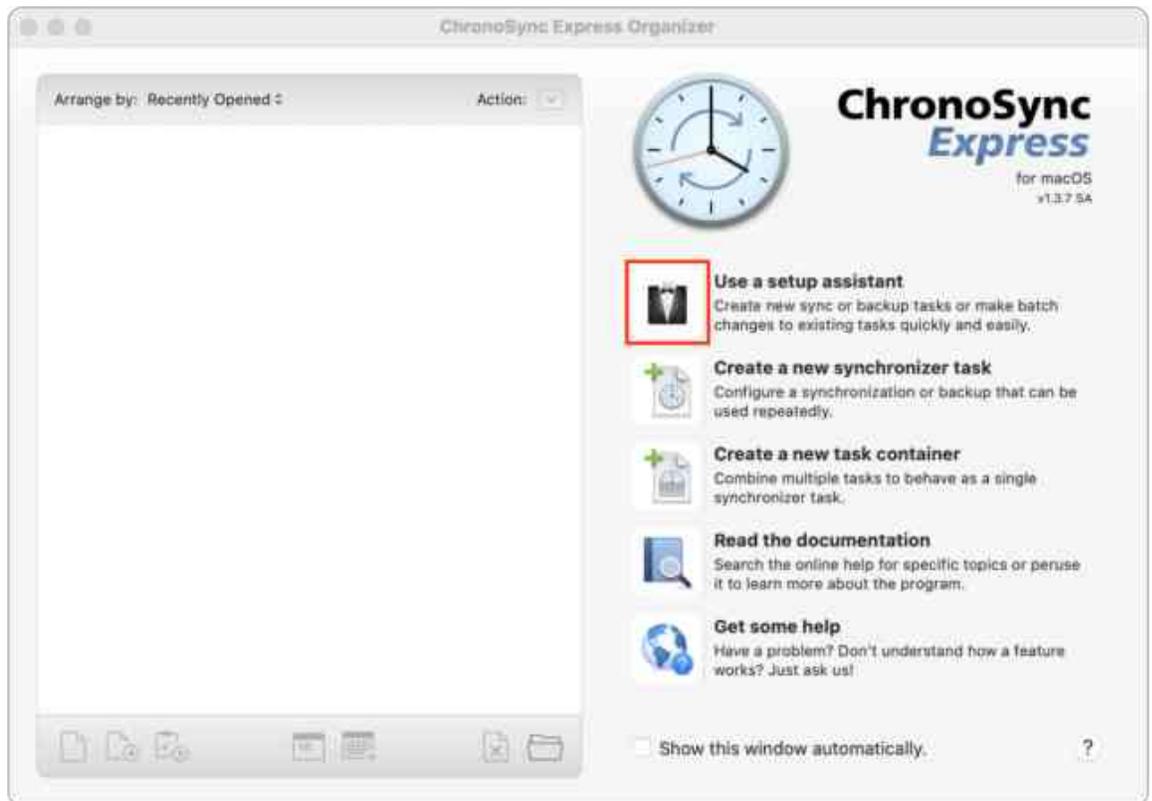
5. Drag the destination folder into the Select a Destination screen and click Next Step.

6. Keep "Backup all data" selected in the Backup Specific Types of Data screen and click Next Step.

7. In the Replaced/Deleted File Handling screen, deselect both checkboxes. Because we're performing a one-way, one-time copy of the folder, we don't need an archive, nor do we want to remove deleted files. Click Next Step.

8. Enter a custom task name if you want and click Create Task.

9. ChronoSync Express opens the new task with some instructions. Click OK to continue.

10. You could click Synchronize to start the transfer immediately, but I recommend moving on to the next step for additional configuration.

If you're in the same situation I was in, you may want to click Options in the sidebar, and in the Errors pop-up menu, choose Skip. The default setting, Report to User, pauses the transfer if there's a problem, prompting you to intervene. That can be a hassle if you set a large transfer to run overnight, only to find that it only partially completed because it was prompting you for input. When you set that pop-up menu to Skip, ChronoSync Express moves on to copying the next file when it encounters an issue.

11. Once you've changed the error reporting option, click Setup in the sidebar to return to the main task screen and click the Synchronize
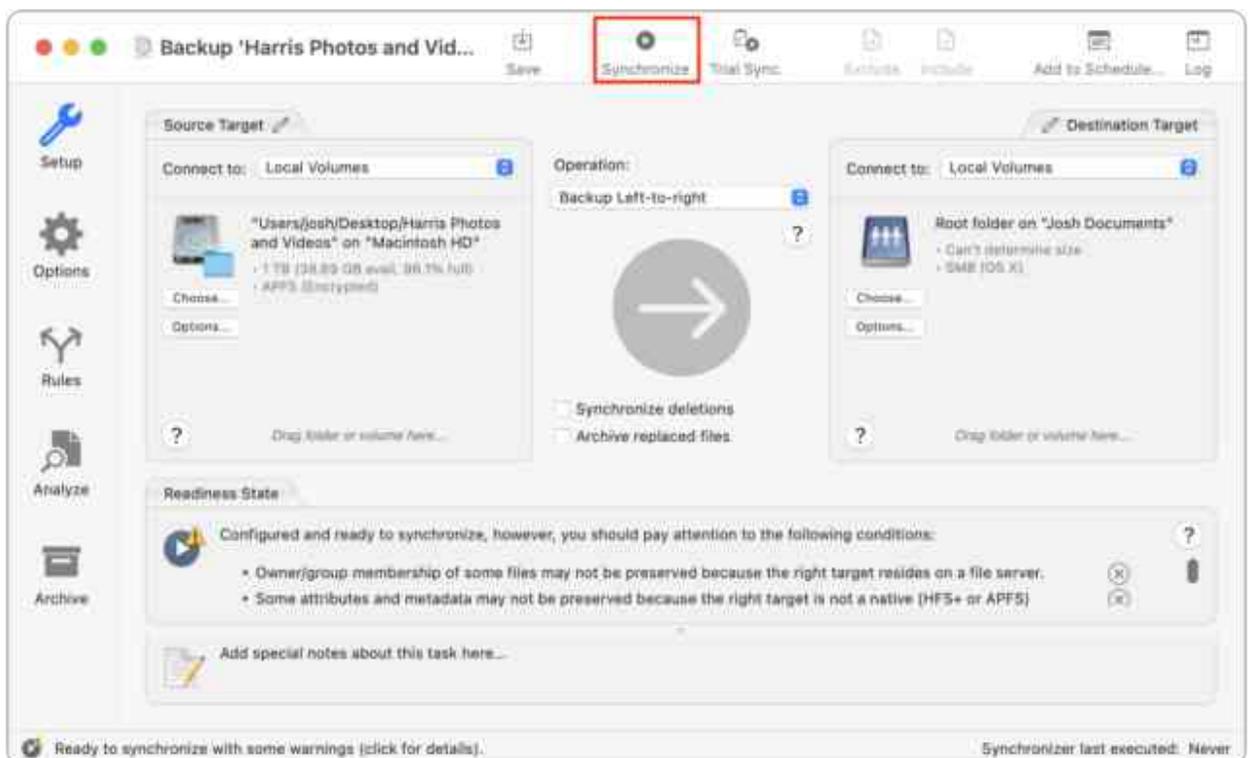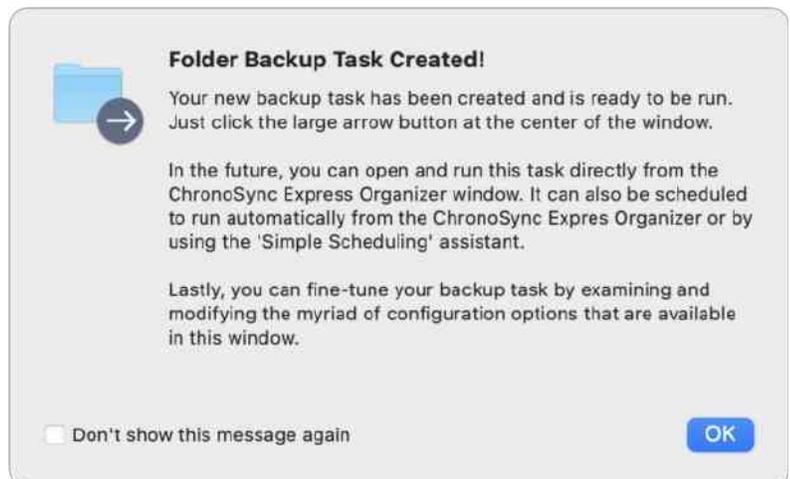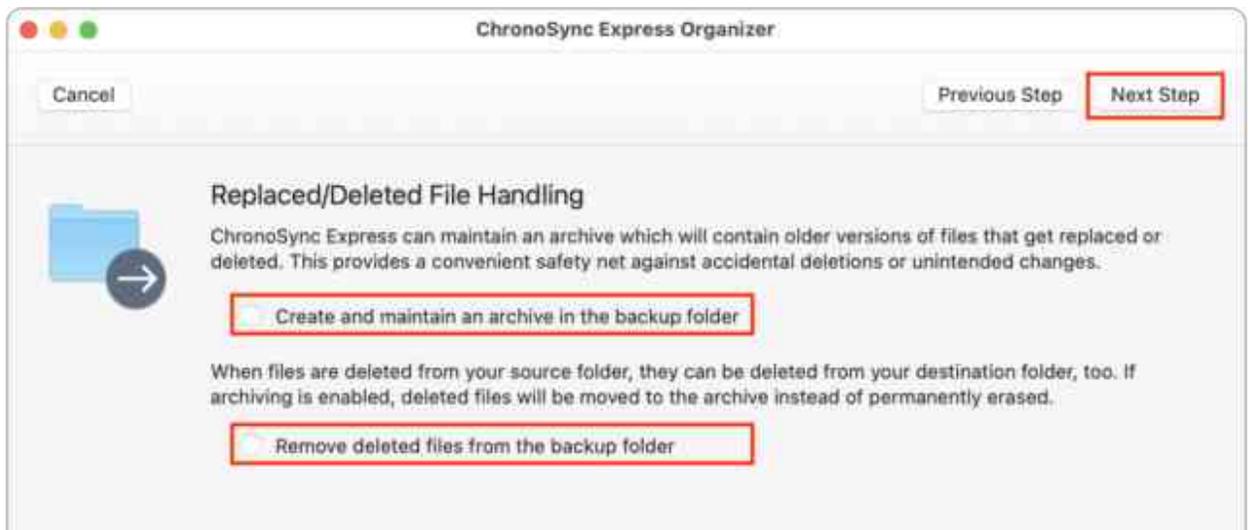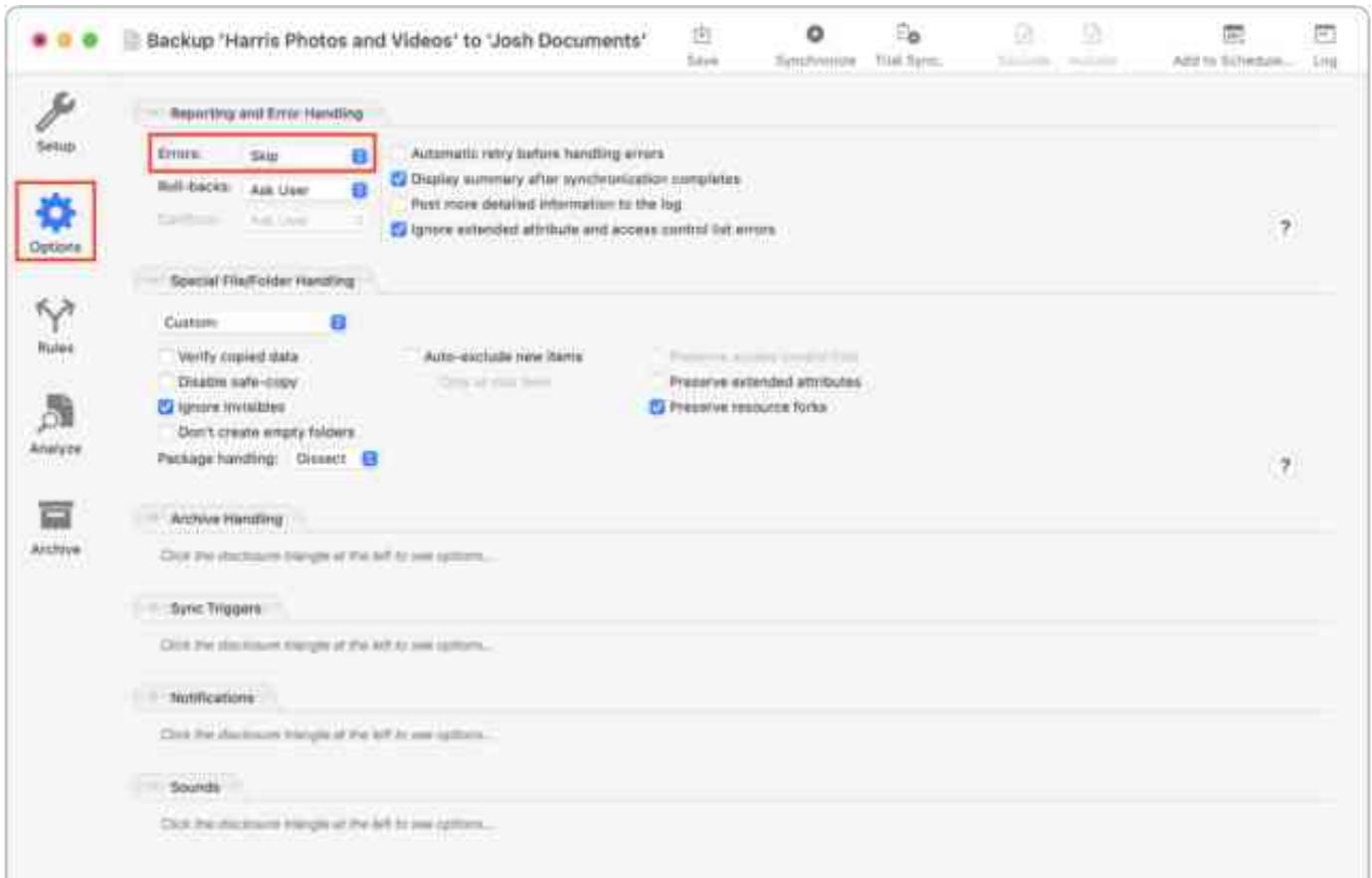
button to start the copy.

12. After the copy finishes, choose Actions > Open Log to see if anything was skipped.

If you're anticipating a lot of problems, instead of clicking Synchronize on the main task screen, click Trial Sync, which displays a list of files to be synchronized and warns you of potential problems before performing the full sync.

Needless to say, ChronoSync Express can do far more than merely transferring a folder that has stymied the Finder. But for reliably moving large folders while gracefully handling errors, it's now my go-to tool.

M2 MacBook Air Available to Order Now, Already Backordered

by JOSH CENTERS

Apple **opened orders for the redesigned M2 MacBook Air** on 8 July 2022 at 5 AM PDT; the first batch will ship and arrive in stores on 15 July 2022 (for more on what's new, see "**Apple Unveils M2-Powered MacBook Air and Updated 13-Inch MacBook Pro**," 6 June 2022). However, on Apple's website, ship dates have already slipped to mid-August.

The M2 MacBook Air comes in **two base configurations**: an 8-core CPU, 8-core GPU model with 8 GB of unified memory and 256 GB of storage for $1199 or an 8-core CPU, 10-core GPU model with 8 GB of memory and 512 GB of storage for $1499. If you don't need the M2 MacBook Air's improvements and want to save some money, you can still purchase the M1 MacBook Air from 2020, which starts at $999 for an 8-core CPU, 7-core GPU model with 8 GB of memory and 256 GB of storage.

As impressive as the M2 MacBook Air sounds, those who plan to perform processor-intensive tasks may want to hold off ordering until early reviews come in. There has been **a report of thermal throttling with the updated M2 13-**
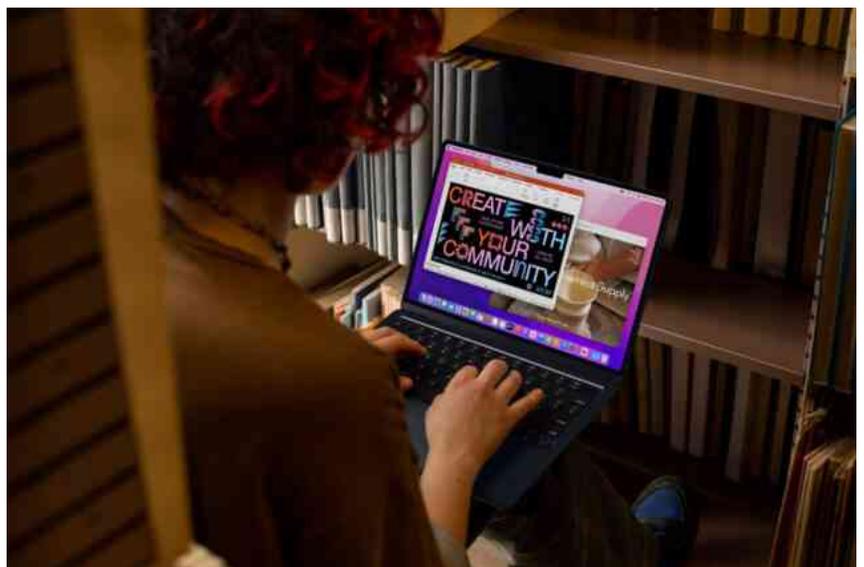
inch MacBook Pro while exporting 8K video, which is among the most processor-intensive tasks to throw at a Mac. Thermal throttling happens when the CPU temperature gets so hot that the CPU intentionally reduces its performance to cool down. The 13-inch MacBook Pro has a built-in fan, so it's better equipped to combat overheating than the fanless M2 MacBook Air. The relevance of the thermal throttling report is contingent on two key questions. First, would the thermal throttling have applied to any M2 13-inch MacBook Pro, or was it limited to that particular unit? Second, would thermal throttling have come into play with more normal usage patterns for a low-end laptop?

Apple Opens Public Betas for macOS 13 Ventura, iOS 16, iPadOS 16, watchOS 9, tvOS 16, and HomePod Software 16

by JOSH CENTERS

Apple has released public betas for macOS 13 Ventura, iOS 16, iPadOS 16, watchOS 9, tvOS 16, and HomePod Software 16 so you can test out new features like Lock screen customization and Stage Manager (remember, on the iPad, it's only available for M1 models; see "**The Real System Requirements for Apple's 2022 Operating Systems**," 9 June 2022).

As always, while Apple makes these betas available for everyone, you would be foolish to install one on a device you rely on for, well, anything. Apple has improved its development processes so even early betas are more stable than in the past, but you're guaranteed to run into bugs, incompatibilities, and possibly even data corruption.

Not only should you restrict these betas to dedicated test devices, but we also recommend that you avoid connecting your main iCloud account with the betas to avoid some bug causing an upstream problem. For instance, you wouldn't want a wonky Photos beta to delete all your custom albums. Although we always recommend making backups before you install a new version of any operating system, you shouldn't install these betas on anything that you can't erase at the drop of a hat without fear of data loss.

Unless you're a watchOS developer, we suggest that you avoid watchOS betas. While Macs, iPhones, iPads, and even Apple TVs provide methods you can employ to recover from a corrupted install, the Apple Watch does not. If you get into certain types of trouble, you'll have to get Apple's help to restore your Apple Watch.

Also, if you want to try out the HomePod Software 16 beta, be aware that it **supports only the HomePod mini**, not the original HomePod. Don't panic if you're still using a full-size HomePod, as the official release is supposed to support it later this year.

To try one or more of the betas, go to Apple's **public beta page**, choose your operating system, and follow the instructions, which usually involve installing a special profile on your device and then updating its operating system through Software Update.

Finally, remember that the main reason to test public betas is so you can report bugs, so be sure to revisit David Shayer's advice in "**How to Report Bugs to Apple So They Get Fixed**" (17 June 2020).

Picking a Power Station for a MacBook Pro (And More)

by ADAM ENGST

The curse of the modern world is that we're constantly condemned to think about batteries. Why is my iPhone running low on power so early in the day? Why didn't my Apple Watch charge last night? Will there be a power outlet on the airplane for my MacBook Air? And for an ever-increasing number of us, does my electric car have enough range for that road trip? Despite this mental churning, it's still possible to be surprised by a drained device at an inopportune time, as I recently discovered. But with a little forethought and the appropriate backup gear, such situations can be avoided.

Track Meets Need Power

One of my hobbies in the running world is directing track meets for the Finger Lakes Runners Club. That requires running a crufty Windows app called **HyTek Meet Manager**, something I've long done in virtualization using **Parallels Desktop** or **VMware Fusion** running on Tonya's 2016 MacBook Pro. Ignoring the annoyance of having to use Windows and Meet Manager, the approach has worked well for years.

(My setup is actually even more wonderfully arcane. For timing, we use a **Time Machine**, a race timing device created decades ago that combines a highly accurate timer with a small LCD screen, thermal printer, and keypad—that's what we're all staring at below. It supports both wired and wire-

less thumb switches for recording runners' times, can start a large display **Raceclock** automatically—the thing behind my head—and most importantly, can send results to Meet Manager. That connection starts as RS-232 serial at the Time Machine, is converted to USB with a **Keyspan RS-232 to USB adapter**, and then uses a USB-A to USB-C adapter to plug into the Mac, where the virtualization environment connects it to Windows. In Meet Manager, once I plug everything in, I have to tell it that the track button interface is using serial port 3. Then we print results using a **Canon Pixma iP110** mobile printer. I remain amazed that it works at all.)

All the hardware we use, including the MacBook Pro, Time Machine, Raceclock, and Canon Pixma printer, is battery-powered, which is essential for outdoor track meets because many tracks don't have power available where we set up on the infield near the finish line. I'm obsessive about ensuring that everything is charged before the meet because if something runs out of power, we have to scramble. Realistically, we have sufficient backup systems and experience that we can recover from the loss of any device, but it's not ideal.

So you can imagine my distress two weeks ago when, midway into the 800-meter race that was the second event of the five-event meet, my results clerk told me that the MacBook Pro had just warned that it was low on power and would be shutting down shortly if we didn't plug in it. We had been using it for maybe 90 minutes to deal with late registrations and heat changes, but that was nothing new—I've been relying on this MacBook Pro for years. I knew it was charged to 100% before I left the house, but I hadn't internalized just how old it was. It worked fine at last year's track meets, but they were both really short due to the pandemic and bad weather keeping people away, and as I suddenly realized, its battery was yet another year older and weaker in amps. (A strained analogy, I'm sure, but I couldn't resist the reference to the tune of Merle Travis's "**Sixteen Tons**.")

There was nothing to do but close the MacBook Pro's lid and carry on, knowing that we wouldn't be able to bring results in from the Time Machine or print results sheets for runners. There was no way to get my car onto the track, and although there was power in a press box at the track, I hadn't even brought the MacBook Pro's USB-C charger because I knew that we couldn't run the system from that location. But as I said, we know what we're doing, so we continued the meet without pausing, assuming that we could either bring the results in from the Time Machine the next day or type them in from the thermal printouts that each race generated. And that proved to be true—all's well that ends well.

More Power, Scotty!

Nevertheless, the experience troubled me. The MacBook Pro clearly wasn't going to survive an outdoor track meet again, so I needed to come up with a solution before the next meet later this month. Possibilities included:

- **Install a new battery:** For $199, **Apple would install a new battery** in an out-of-warranty MacBook Pro. But is it worth spending that much on a six-year-old laptop? A **battery replacement kit** from iFixit is only $139.99, but the **installation instructions** are rated difficult and require 88 disassembly steps.
- **Move to a new Mac:** I could run Meet Manager in Windows for ARM under Parallels Desktop on my 2020 M1 MacBook Air, which has much better battery life. I haven't experimented with this option because I have trouble believing that Windows for ARM will support old Windows software like Meet Manager, the Keyspan RS-232 to USB adapter, and the Canon Pixma iP110 printer driver. I'll eventually need to explore it, given that Intel-based Macs are going the way of the dodo bird, but spending time in Windows makes me short-tempered.
- **Acquire a PC laptop:** FLRC could get a new PC laptop that would presumably work with our system, but it feels like overkill for just six uses per year. While I suspect someone in the club would be happy to donate an old PC laptop, then we're back to worrying about battery life.
- **Get a power bank:** Numerous manufacturers make USB-C battery packs to charge laptops and other USB devices. While this option seems attractive at first blush, many of the recommendations I found in roundup articles are no longer available, and when they are available (such as **these products from Anker**), their prices range from about $100 to $200. Not terrible, but not cheap either, and a power bank seems like a too-specific solution to a general problem of battery-powered devices potentially failing.

None of these seemed like a sufficient win, but then a friend turned me on to yet another category of battery—the "power station" that's meant as a replacement for a gas-powered generator. On the high end, these things can weigh 50 pounds or more, cost several thousand dollars, and power appliances like hot plates and air conditioners. But on the low end, they get more interesting for my purposes.

The big name in the field appears to be Jackery, and its **Explorer 160** costs only $139.99 for 167 watt-hours of energy storage with an AC outlet, USB-C port, two USB-A ports, and a DC 12V port. It's reasonably light at 3.97 pounds (1.8 kg), which is important given the amount of gear I have to pack. The only downside is that its USB-C port puts out just 15 watts, not enough to charge the MacBook Pro while in use. I could plug the MacBook Pro into the AC outlet, but that seems limiting when there's a USB-C port. The **Explorer 300** puts out 60 watts over USB-C, but its 293 watt-hour capacity jacks its weight up to 7.1 pounds (3.22 kg) and price to $299.99.

That got me thinking that a manufacturer more attuned to the digital device market might be more appropriate. Indeed, the $249.99 **Anker 521 PowerHouse** offers 256 watt-hours, longer lifespan LiFePO4 batteries, two AC outlets, a 60-watt USB-C port, two USB-A ports, and a car outlet. But it's a hefty 8.2 pounds (3.72 kg). However, the $199.99 **Anker 511 PowerHouse** weighs only 1.9 pounds (0.86 kg) for a 97-watt-hour power station with an AC outlet, 45-watt USB-C port, and two 15-watt USB-A ports. For $50 more, the $249 **Omnicharge Omni 20+** offers an AC outlet, 60-watt USB-C port, two 18-watt USB-A ports, and 10-watt Qi wireless charging. Because it has only a 70-watt-hour battery, it weighs just 1.4 pounds (0.64 kg). Tempting, if pricey.

I couldn't resist delving into the rathole of random-brand Chinese manufacturers on Amazon, where I first found the $138 **ALLPOWERS Portable Charger**, which offers two AC outlets, a 60-watt USB-C port, two 15-watt USB-A ports, and DC output. It provides 154 watt-hours of energy storage in a package that's described as either "about 3 lbs" or (by Amazon) 4.38 pounds (1.99 kg). But some of its reviews gave me pause.

Then I ran across the **NECESPOW N90 and N150 Portable Power Stations**, both of which feature LiFePO4 batteries. The 2-pound (0.91 kg) N90 costs $85 and is an 87-watt-hour power station with a 45-watt USB-C port, two USB-A ports, and an AC outlet—sadly, its AC outlet accepts only two-prong plugs, which would prevent it from running the Raceclock. The larger N150 has a 161-watt-hour capacity, a three-prong AC outlet, a 65-watt USB-C port, two USB-A ports, and two 12V DC ports. It's on the heavier side at 5.5 pounds (2.49 kg) and costs $110.

After several hours of research, I finally unearthed the $89.99 **TECKNET Portable Power Station**, a 155-watt-hour, water bottle-sized device with a carrying handle that weighs 3.75 pounds (1.7 kg) and features a three-prong AC outlet, a 45-watt USB-C port, and three 18-watt USB-A ports. That seemed just about perfect for my needs, so I've ordered it and will find out how it performs in the real world at the next track meet. If you're looking for one of these power stations, pay close attention to all the specifications because they vary widely.

The Battery I Already Had

While discussing the power station concept with my friend, I realized I had an appropriate battery in the car all along! With the appropriate charging cable! This is all a bit embarrassing, but I want to share it nonetheless because the solution could also be useful for you.

Our Subaru Outback has a nasty habit of running its battery down if a door doesn't close entirely and leaves an interior light on for days (we mostly drive our Nissan Leaf because it's electric, but it's too small to carry

Multiple Outputs

Cooling Air Inlet

Independent AC Power Switch

150W AC Outlet

Cooling Air Outlet

LED Display (Red Dot Flashes When Charging)

LED Flashlight (Constant Light Mode/SOS Mode)

USB-C Output (45W/20V MAX)

3*USB-A Outputs (18W/12V MAX)

all the gear I need for a track meet). After years of fussing with jumper cables or using a slow, old-style battery charger, I bought a 1200A Tacklife KP120 Jump Starter (the current model would seem to be the $89.99 **T8 Pro**), which is an 18,000 mAh battery that can start a car with a dead battery in seconds. It's a brilliant device, and I've used it successfully with both the Outback and my 1959 Ford Powermaster 841 tractor. When not in use, it lives in the Outback, just in case the battery dies while we are away from home or need to jump-start someone else's car.

The Tacklife jump starter also has a USB-C port, two USB-A ports, and a DC port. Alas, the USB-C port puts out only 15 watts (5 volts at 3 amps), which means it can't charge the battery while the MacBook Pro is operating—macOS reports "Not charging" whenever it's plugged in. When the MacBook Pro was asleep, the jump starter was able to add roughly 50% of a charge to the MacBook Pro's battery, draining itself in the process.

That's not useful to me, so my question was if it would slow the rate of discharge, something that seems impossible to discern using any software utilities I could find. (Both **coconutBattery** and **iStat Menus** can report on power usage but not in a way that enabled me to see the difference when the jump starter was plugged in.)

Instead, I came up with this test, which, despite the photo, I didn't actually perform in the back of the car. First, with the MacBook Pro running from its internal battery, I played a YouTube video in Google Chrome for an hour, noting that the battery charge dropped from 100% to 56%. Then I ran the test again, this time with the MacBook Pro plugged into the 15-watt Tacklife jump starter the entire time. For the second test, the MacBook Pro's battery charge dropped from 100% to just 91%, a significant improvement. At the end, the jump starter was still showing three LEDs of capacity, but it showed two flashing when I started to recharge it, so I'd guess that it was about a third depleted. I can't say for certain that the jump starter would have provided all

the power the MacBook Pro needed for the track meet, but it certainly would have helped a great deal.

With luck, the TECKNET power station will run the MacBook Pro for the next track meet, along with any of our other battery-powered devices that might run out of power unexpectedly. But at least I know that the Tacklife jump starter is worth pulling out in a pinch.

If you can imagine needing to jump-start your car or charge digital devices while on the road, I highly recommend something like the Tacklife jump starter. Just make sure you have the appropriate cables—I've added a Lightning cable to the USB-C and micro-USB cables that came with mine.

About Us

The Silicon Mountain Macintosh User Group, Inc. (a nonprofit educational corporation) was formed in Colorado Springs, Colorado in 1985, and is one of the oldest Macintosh User Groups in the United States. SMMUG, Inc. is dedicated to helping members enjoy and learn about their Macintosh computer, iPhone and iPad devices.

Club membership is open to everyone and you are cordially invited to visit our free monthly General Meeting on the second Monday of each month, at 7:00 PM. For those new to the Macintosh, we have a Question & Answer session at 6:00 PM, where our collective expertise can help answer your questions.

All members receive a monthly newsletter, published on **our web site,** see great reviews of software and hardware, or can participate in the monthly door prize drawing. Each member gets one vote during annual Officer Elections. No corporate memberships are granted.

Our officers are volunteers and receive no pay. All funds raised are used for the cost of operating the club and its meetings.

Membership Application Form

Membership entitles you to access to our online forums, participation in prize drawings, and access to the bargains in the members area of the SMMUG website at www. smmug.org. SMMUG renewal membership dues ($30) apply to the calendar year and are paid each December for the following year. Use the following table for NEW MEMBERSHIP ONLY:

JAN 1 to MAR 31 - $30.00	APR 1 to JUN 30 - $20.00
JUL 1 to SEPT 30 - $15.00	OCT 1 to DEC 31 - $10.00

Please Print Clearly!   Today's Date _____

Name _____
Street Address _____
City/State/ZIP _____
Home Telephone _____ Business Telephone _____
E-mail Address _____
Have you previously been a member of SMMUG? _____
How did you learn about SMMUG? _____

Make your check payable to: **SMMUG**
Then mail or give this form and your check to:

SMMUG, Inc.
2100 Wood Avenue
Colorado Springs, CO 80907-6718

☐ Please make an online account for me.
  User Name _____

☐ Don't make an online account for me. I
  do not want one or I already have one.