

printout

Keystone MacCentral Macintosh Users Group ❖ www.keystonemac.com

Keystone MacCentral June 18th Meeting

Please see your membership email for the links to this month's Zoom meeting or email us at KeystoneMacCentral@mac.com.

During our program this month we plan to discuss

- ❖ Review of WWDC new updates
- ❖ Adding ring tones to your iPhone
- ❖ 4K Downloading



We have virtual meetings via Zoom on the third Tuesday of each month:

Emails will be sent out prior to each meeting. Follow the directions/invitation each month on our email – that is, just click on the link to join our meeting.

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Keystone MacCentral is a not-for-profit group of Macintosh enthusiasts who generally meet the third Tuesday of every month to exchange information, participate in question-and-answer sessions, view product demonstrations, and obtain resource materials that will help them get the most out of their computer systems. Meetings are free and open to the public. **The Keystone MacCentral printout** is the official newsletter of Keystone MacCentral and an independent publication not affiliated or otherwise associated with or sponsored or sanctioned by any for-profit organization, including Apple Inc. Copyright © 2024, Keystone MacCentral, 310 Somerset Drive, Shiresmanstown, PA 17011.

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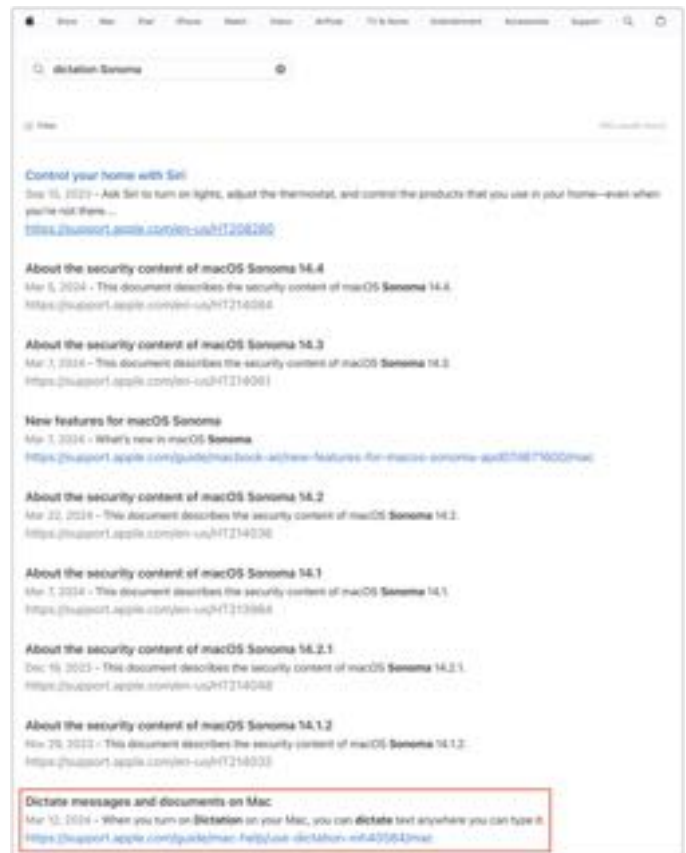
By Adam Engst

Apple Launches Documentation Site for Manuals, Specs, and Downloads

Over the past five years or so, Apple's user-facing documentation has drastically improved. I don't know exactly why that is, but I'd attribute it partly to the demise of Macworld magazine (see "[Macworld Lays Off Staffers, Closes Print Edition](#)," 10 September 2014). Within a few years, some former Macworld writers and editors had landed jobs with Apple, an experience one friend described as "surreal" after covering the company for two decades. There they joined a few other well-known industry figures who had made their way onto Apple's documentation team. Since then, I've noticed a distinct upward trend in the utility, clarity, and comprehensiveness of Apple's documentation. (And when I send corrections to one of my friends, they get fixed. [Duty calls!](#))

Search, but Ye May Not Find

What hasn't improved over that time is the search engine on Apple's website, which is shockingly bad for 2024. For instance, imagine you want to learn more about dictation in macOS 14 Sonoma. If you search on "dictation Sonoma" on Apple's support site, you're presented with an article about controlling your home with Siri, release notes for two Sonoma security updates, a piece on new features in Sonoma, four more Sonoma security update release notes, and finally the desired "[Dictate messages and documents on Mac](#)" article. Worse, none of the articles above the desired one in the search results even include the word "dictation." Come on, Apple!



Even when Apple's support search engine works, it mixes support articles, documentation, and discussions from the Apple Communities forums. You can filter the results to include just one of those categories at a time, but how many users will know the difference between support articles and documentation?

Thankfully, Google, Brave Search, and Bing all do a better job. At least a dozen times per week, I search Apple's support documentation by adding "Apple support" to my search terms. The desired article comes up at the top in all the search engines I asked to find "dictation Sonoma Apple support."

In short, always search for information on Apple's websites using an independent search engine. Using Apple's is a waste of time. I hope everyone inside Apple

realizes this, too, and it's just one of those things that hasn't gotten sufficient attention yet.

Browse to Avoid Befuddlement

Apple's search capabilities may be terrible, but the company has just created an alternative approach to making its extensive documentation more readily available to users. The new Documentation site offers a browsable directory of information organized by product.

In classic Apple fashion, its name is hard to pin down. The top-level label is "Documentation," but the heading on the main page is "Manuals, Specs, and Downloads," and the titles of the HTML pages all say "Manuals and Downloads," even when they contain only specs links. I'll stick with Documentation, in part because the URL is <https://support.apple.com/docs>.

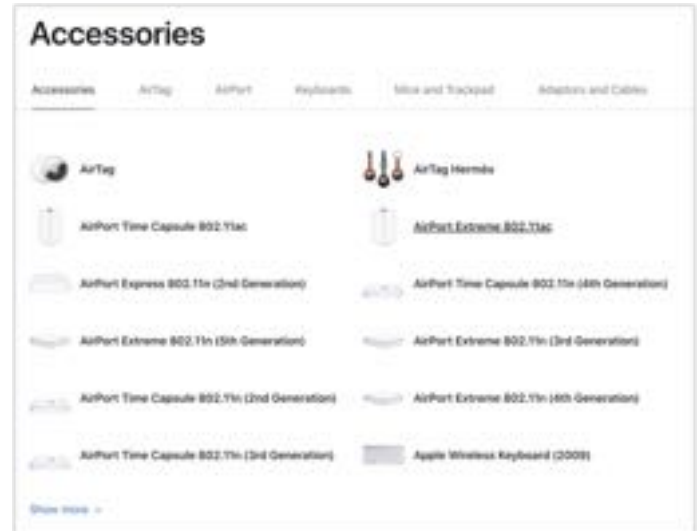
The Documentation site is available in multiple languages—I confirmed French, German, Italian, and Spanish—and in English for at least the US, Australia, Canada, and the UK. I don't know exactly what's different on each, but even the top-level items change sometimes, likely to reflect the Vision Pro not being available everywhere yet.

Whatever you do, don't use the search field, or you'll be back in Apple search result hell.



Click a category's icon to navigate to a page that chronologically lists up to 12 current and recent products, sometimes with a Show More link to reveal the remaining items in that category. Some large categories, like Accessories, offer subcategories across the top, so you can drill into AirTag, AirPort, Keyboards, Mice and Trackpad, and Adaptors and Cables separately. That's particularly helpful because the top-level collection of accessory pages

seems weirdly organized until you realize it's chronological within each subcategory.



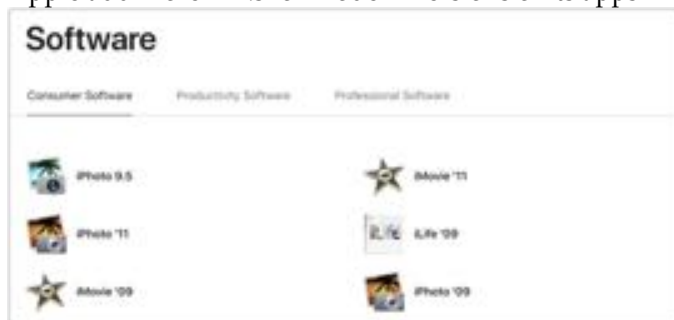
For hardware products, Apple usually provides online versions of whatever minimal documentation shipped in the box, plus a guide to the hardware (MacBook Air Essentials) and the complete operating system user guide (macOS User Guide). Repair manuals are also included when available. Every hardware product also has a link for tech specs.



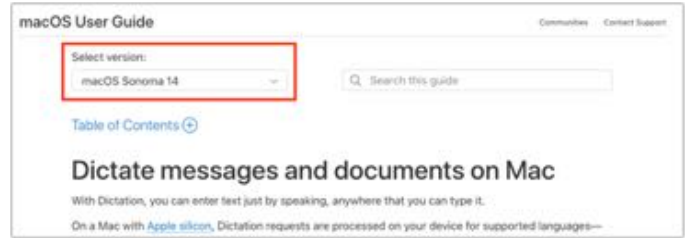
Software is more frustrating. The Mac category has a subcategory for macOS, but for each version of macOS, Apple only reliably includes a link to the macOS User Guide. Once you work back to macOS 10.15 Catalina, the page also includes links to all updates. The more recent macOS 11 Big Sur and later lack such update links, but realistically, they're not helpful—it's hard to imagine nearly anyone wanting to update an old version of macOS to a particular interim version.

What if you want an installer for an old version of macOS? The Documentation pages won't help you there, even though a quick Web search on "install macOS Apple support" turns up the "[How to download and install macOS](#)" page with App Store or direct download links for all versions of macOS back to OS X 10.7 Lion. Why aren't these download links on the associated Documentation pages?

Even stranger is the Software category, with three subcategories that are sorted randomly. Consumer Software includes the now-defunct iLife apps: iDVD, iMovie, iPhoto, iTunes, and GarageBand. With a few of them, you'll find downloads for the actual app; others just include plug-ins or add-ons. Although some of the apps in Productivity Software (the iWork apps) and Professional Software (Logic, Final Cut Pro X, and so on) are still in active development, nearly everything here is old. The Keynote page links to current user guides for each of Apple's platforms, but the Pages and Numbers pages don't. It's a real mishmash, and I'd like to see Apple add more links for modern versions of its apps.



The big win for the Documentation site is making it easier to access Apple's rather good user guides. Navigation within them is generally self-explanatory, and the search fields that say "Search this guide" are actually useful because they limit their results to the guide in question. But there's one important control I want to call out: the Select Version pop-up menu at the top of all internal pages.



That pop-up menu lets you travel back in time to previous versions of the page you're viewing. Exactly how far back depends on when the feature in question launched and when Apple started these user guides. Many pages go back to 2017 (macOS 10.13 High Sierra) or 2018 (iOS 12). The Mac Essentials guides sometimes change multiple times per macOS version to account for changes necessary to accommodate new models.



I realize my needs are unusual, but I often use the version menu to learn when a feature launched or how Apple has changed how it explains a feature. For most people, the main reason to know about the version menu is that you could end up on a version of the page other than the one you want.

Overall, Apple's new Documentation site is welcome, and I encourage everyone to bookmark it for future reference. Ironically, I had created an Arc folder of pinned tabs for all of Apple's user guides just before it appeared. I'll stick with that folder and add a top-level item to the Documentation site. 🗑️



By Howard Oakley & Adam Engst

Shopping for a faster external SSD

At The Eclectic Light Company, Howard Oakley writes:

By now, we should all be thoroughly confused with USB 3.1 Gen 2, 3.2 Gen 2x2, USB4, Thunderbolt 3 and 4. The fact that they can all be connected using a Thunderbolt 4 cable to a USB-C port on your Mac is of absolutely no help either. Given the lack of support for USB 3.x SSDs at speeds more than about 1 GB/s, today's quest is for something faster, with proper Trim and SMART health indicator support.

I currently rely on inexpensive external SSDs for Time Machine and Super Duper backups because they're silent, and I'm willing to trade a lower price for more-than-adequate performance. But those in the market for the fastest available external storage should read Howard Oakley's explanation of the technologies in play and recommendation of SSDs that connect using Thunderbolt 3, Thunderbolt 4, or USB4.

Before we can go shopping, let's clarify some terms we're likely to meet.

NVMe and PCIe

NVM Express, universally abbreviated to NVMe, provides the device interface for faster SSDs, in this case generally those of M.2 physical format or 'form factor'. It's preferred over the slower Serial ATA or SATA, which isn't well-supported by macOS.

Support for NVMe was introduced in OS X Yosemite 10.10.3, and its hardware interface first came in 2016 Mac notebooks.

PCI Express, normally shortened to PCIe, is a high speed expansion bus, providing the link between SSD and Mac. This comes in versions up to 7.0 and multiple lanes, usually given in its x number, from x1 to x16. A typical minimum requirement is PCIe 3.0 x4, providing four lanes each at 8 GT/s for a total of just under 4 GB/s throughput, although we're not going to see anything on the higher side of 3 GB/s in practice.

Thunderbolt

PCIe is one of the three components in Thunderbolt, alongside DisplayPort for displays, and power for external devices. Thunderbolt 3 supports PCIe 3.0 x4 and (as a fallback) USB 3.1 Gen 2 for data connections. Thunderbolt 4 extends that with USB4 support.

Intel Thunderbolt controllers can support one or two ports with a single PCIe 3.0 x4 link, or a low power single port with a PCIe x2 link. The first of those is relevant to Intel Macs, whose built-in Thunderbolt controllers each have to support two ports using a single PCIe x4 link, so transferring data on both ports at once can result in reduced transfer rates. Apple silicon Macs effectively have one controller per port, ensuring that they can sustain high transfer speeds throughout.

Intel has also supplied a Thunderbolt controller intended for low power use: its JHL6240 chip can only deliver a PCIe 3.0 x2 link, two lanes of the four expected in Thunderbolt 3, which explains why some Thunderbolt 3 peripherals only manage half the expected transfer rates.

To recap, by this stage we know we're looking for NVMe with PCIe 3.0 x4 as a minimum, over Thunderbolt 3. But then comes USB4.

USB4

While true Thunderbolt 3 SSDs are quite unusual, an increasing number of enclosures and complete drives now boast USB4 and that they're "compatible with Thunderbolt 3 and 4". There are two tell-tales to look for: these products only claim compatibility with Thunderbolt, and when you look at their USB-C port and case, there's no sign of the official lightning bolt logo to indicate that they are genuine Thunderbolt products.

The confusion arises because, as far as data peripherals are concerned, USB4 is based on

Thunderbolt 3, and offers a similar 40 Gbit/s. While USB4 drives are normally backward-compatible with USB 3.2 and 2.0 (which don't help us at all), they can also be compatible with Thunderbolt 3, as an option. So a USB4 drive could be compatible with Thunderbolt 3, but won't usually be marked as such.

The bad news for Mac users is that no Intel Mac supports USB4, although most recent models have full-blown Thunderbolt 3. The only Mac models with USB4 support are Apple silicon, which from the earliest in November 2020 have USB4 and Thunderbolt 3 support. You'll see some otherwise accurate articles claiming that some Apple silicon Macs don't support USB4, but as far as I can tell, that's incorrect and they all do.

If we widen our search to include USB4, we could then end up with a drive that performs in the same class as Thunderbolt 3, until it's connected to an Intel Mac, when it falls back to its USB 3.x support, and delivers meagre 1 GB/s transfer speeds, a third of those we see with an Apple silicon Mac.

Products

OWC proclaims that they're "widely considered the Thunderbolt experts" and they're probably the only vendor that makes clear these distinctions in their products. Those currently include:

OWC **Envoy Pro SX**, with full Thunderbolt 3 support, but no USB 3.x fallback. This uses Intel's Alpine Ridge controller (JHL6340) from 2016, and is marked with the lightning bolt. I can vouch for its performance.

OWC **Envoy Pro FX**, with full Thunderbolt 3 from an Intel Titan Ridge controller from 2018, and USB 3.2 Gen 2 fallback at 10 Gbit/s from a Realtek RTL9210 controller. This too delivers Thunderbolt 3 performance with both Intel and Apple silicon models, and bears the lightning bolt.

OWC **Express 1M2**, described as a "USB4 NVMe SSD", available as an empty enclosure or with an SSD installed. When connected to an Apple

silicon Mac, this delivers 40 Gbit/s to its Thunderbolt 4 port, but when connected to a USB-C port on an Intel Mac, OWC states that it falls back to USB 3.2 Gen 2 to deliver only 1 GB/s.

Of the enclosures currently available:

Satechi's M.2 NVMe Enclosure is claimed to support USB4 but not Thunderbolt 3, and falls back to USB 3.2 Gen 2 when full-speed USB4 isn't available.

Acasis 40Gbps Tool-free M.2 NVMe SSD Enclosure appears to be another USB4 model, although it's claimed to be "compatible with Thunderbolt 3/4", with a fallback to USB 3.2 Gen 2. The vendor doesn't provide information on its performance with Intel Macs.

Acasis multiple models of SSD enclosures have in the past included one that was claimed to be Thunderbolt 3 and was marked as such. Their current range appears to be based entirely on USB4, and there's no clear information about transfer speeds with Intel Macs.

Recommendations

If an external SSD will only be used with Apple silicon Macs, then USB4 should deliver similar performance to Thunderbolt 3 or 4, and is more readily available, particularly as empty enclosures.

For good performance and full support of SMART health indicators, SSDs that are also to be used with Intel Macs need to have official Thunderbolt support, with the lightning bolt logo. There don't appear to be any suitable empty enclosures available, though.

Thunderbolt 3 and 4 external storage is unlikely to become more available, and may well be replaced by USB4, which may or may not be compatible.

If possible, buy external SSDs and enclosures on a full-refund basis, so you can return them if they fail to meet expectations. 🗑️

By Adam Engst

Notes on Post-Pandemic Business Travel

Note: This article may be a bit late for many board members who have been traveling far and wide recently, but I think it should prove useful for anyone who travels by plane, train or car in the future.

- Editor

I spent much of last week in Salt Lake City, where I spoke at the ACES Conference for Apple consultants and managed services providers (many of whom are TidBITS Content Network subscribers). It was my first conference and solo business trip since the pandemic started in 2020, and it took some time to update my travel gear and habits.

Packing Pro

I'm surprised I haven't written about [Packing Pro](#), the iPhone app I've used since 2018 to generate trip packing and preparation lists. It's essentially a well-constructed and easy-to-use database dedicated to trip planning.

You create a trip, which has a name, dates, and notes. Then, you add items you want to pack, selecting them from an extensive pre-defined collection, along with tasks you need to accomplish before leaving (watering plants, refilling the cat food, hiding backup drives just in case a thief absconds with computers, etc.). As you assemble your suitcase and work through your jobs, you mark those items as completed in Packing Pro. That's it, unless you're even more OCD (obsessively cataloging data) than I am, at which point you can add all sorts of metadata to each item.



Jet-setter or homebody? A few other pre-pandemic trips must not have warranted a packing list.

What I like most about Packing Pro is that it remembers each trip, making it easy to replicate a previous packing list. Before Packing Pro, I had a simple Nisus Writer Pro document that I'd print and manually adjust for each trip, but a week-long family trip to California for Christmas requires rather different preparation than a several-day solo trip to Salt Lake City in the spring.

Packing Pro may not feel as though every pixel has been placed by a hipster designer, but developer Quinn Genzel has seemingly thought of everything when it comes to functionality. You can sync your lists via iCloud, share them (via email, AirDrop, Dropbox, Box, iCloud Drive, and email), customize the master catalog of over 400 items however you want, tweak the design, and more. It has a one-time payment of \$2.99 (a few optional \$0.99 in-app upgrades are also available) and is well worth it if you obsess over your data as much as I do. (I'm a piker—you should have seen my grandmother's packing lists!)

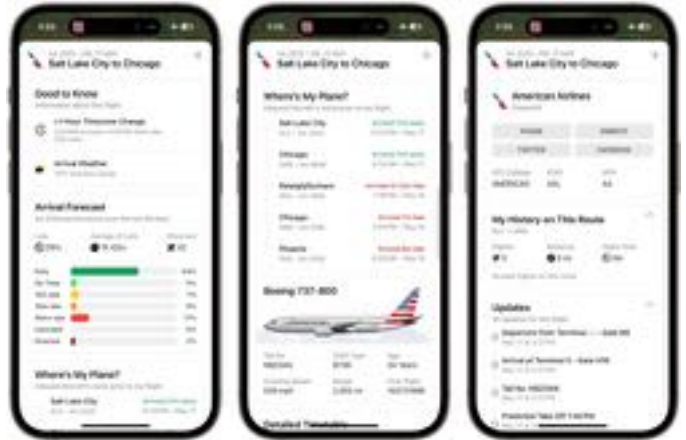
Flighty

I've written about how airline apps have become extremely helpful (see "[Using the Delta Airlines App and Apple Business Chat in a Snowpocalypse](#)," 15 November 2019), but this was my first test of Flighty, an independent flight-tracking app that's a poster child for Apple technologies. Like Packing Pro, it's essentially a database of information surrounding a trip that tracks flight numbers, arrival and departure times and gates, plane locations, historical arrival times, and much more. Unlike Packing Pro, Flighty has a gorgeous, modern design and provides a Lock Screen widget, displays Live Activities in the Dynamic Island and on the Lock Screen, and keeps you up to date with an elegant Apple Watch app.

You seed Flighty with flight numbers on specific days, and you can differentiate between your flights (which Flighty tracks forever) and those of friends (which it deletes after you've made your airport pickup run). A top-level My Flights screen summarizes upcoming flights underneath a map showing the flight plan. Tap a flight to focus the map on the plane and see more details. The map can show weather radar and even other planes nearby.



Oh, the detail! Scroll down to see vastly more data, including timezone changes, arrival weather, what type of plane you're on (I'm sure Boeing 737s are TOTALLY FINE NOW), a detailed timetable, contact information for the airline, your history on that route, and even an archive of updates. Those updates can make Flighty a little chatty—tone it down in the settings if you want—but as someone who finds information reassuring, I appreciated knowing that the incoming plane for my next flight was 7 minutes late.



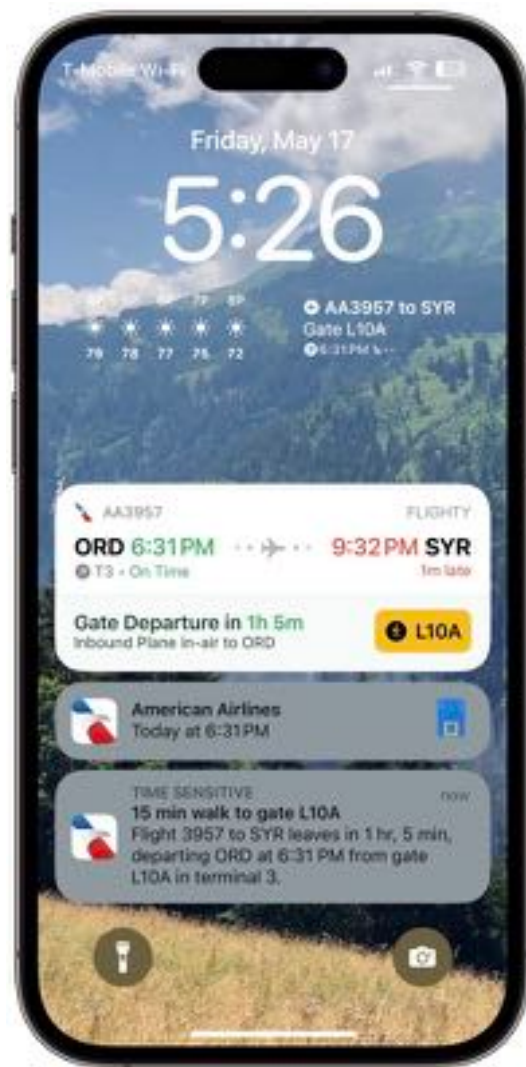
The more I poked at Flighty, the more impressed I became. The developers are serious travel geeks, so the app automatically builds gorgeous screens for the Flighty Passport that tracks all your flights (even extracting past ones from calendar events); reports on your total, average, and worst delays; and reveals details about which aircraft you've flown and how old they are. Such data is purely interesting trivia for me, but someone who travels regularly for business could use it to discover trends to improve their travel experience.



Flighty's Apple Watch app is also well done, with a top-level screen showing flights and three detail screens for each flight showing progress, departure, and arrival information. I use my iPhone heavily while on planes, but I could imagine times when you wouldn't want to haul it out just to check progress.



Many of these capabilities may be overkill for those who seldom travel. The American Airlines app did an acceptable job of alerting me to flight information, and you still need it (or the equivalent from another airline) to check in, add boarding passes to Wallet, and deal directly with the airline. In fact, the American Airlines app one-upped Flighty by providing time estimates and directions for walking between gates, something that can be a source of stress on tight connections.



Frequent flyers will most appreciate Flighty, but even casual travelers (or those who often pick people up from the airport) will find it helpful. At its base level, Flighty is free, and everyone's first flight with Flighty receives all the Flighty Pro features for free. They include real-time flight tracking, push notifications, calendar sync, email import, delay forecast, plane locations, and more. (I have a test version of Flighty Pro, so I'm not entirely sure which features I'd miss if I lost access to the paid features.) Subscribing to Flighty Pro costs \$3.99 for a week, \$5.99 for a month (\$10.99 for a family), \$47.99 for a year (\$89.99 family), or a single \$249 purchase for a lifetime license (\$449 family).

T-Mobile In-flight Wi-Fi

Life has been busy of late, and my talk for the ACES Conference wasn't as far along as I wanted by the day I needed to leave. I would have to work on the airplane. That's no hardship—I appreciate activities that distract me from the “Why aren't we there yet?” feeling—but in my world, it is actively difficult to work without Internet access. On the way home, this article clamored for my attention—taking the entire day off would make for an even busier weekend.

In-flight Wi-Fi is expensive—it varies by flight but would have cost me \$19—but then I remembered that T-Mobile provides free in-flight Wi-Fi as a benefit. A little research in the T-Mobile app on my iPhone confirmed that my Magenta plan provided either four total flights of Wi-Fi per year or an unlimited number of 1-hour-per-flight Wi-Fi sessions for streaming. I'm now down to two full-flight sessions.



Enabling the T-Mobile free Wi-Fi was easy enough, if non-obvious. Once I activated Wi-Fi on my iPhone and was shown the American Airlines landing page, I had to scroll down to find a button that loaded another page. There, I had to switch to a Free Services tab, tap a T-Mobile button, and enter my phone number. Performance via the satellite

Internet connection was decent, and I had no trouble loading websites, working in Google Docs, and more.

What I couldn't do was get my MacBook Air fully online the entire time. Although the American Airlines landing page provided a button for transferring purchased access from another device, it asked for the email address used to purchase Internet access. It wouldn't take my email address or phone number, and I couldn't figure out any way to transfer my T-Mobile session. (On the second flight, where I cared more, I discovered there was an option to ignore an ad in exchange for 20 minutes of Wi-Fi connection time. I'm very good at ignoring ads.)

Not having my MacBook Air online much wasn't the end of the world. I do all my writing in Google Docs and have the Google Docs Offline extension in Arc, and since my documents were already open in Arc tabs, I had no trouble writing offline. I was even able to take the iPhone screenshots above and send them to the MacBook Air using AirDrop.

USB Type-A Isn't Dead Yet

My current devices are an iPhone 15 Pro and an M1 MacBook Air, which sport only USB-C ports. I brought Apple's two-port 35-watt USB-C charger and a pair of USB-C cables for the MacBook Air and the KU XIU X55 MagSafe charger I planned to use in the hotel to charge the iPhone, my Apple Watch Series 9, and my AirPods Pro (see "Going All in on MagSafe for the iPhone in the Office, Bedroom, and Car." 6 May 2024). That all worked swimmingly—points for USB-C simplifying things.

But I hit my iPhone's battery pretty hard on the longer flights between Chicago and Salt Lake City and wanted to charge using seatback power. Which had only USB Type-A jacks. Charging cables for which I hadn't thought to bring. Luckily, it turned out that Past Adam had long ago packed a USB Type-A to USB-C cable in my dongle bag, and once I discovered that fact, I was able to charge my iPhone while working. I could also have charged directly from my MacBook Air, of course, and the planes also had standard power outlets, although

they weren't turned on until sometime in the middle of my first flight.

The moral of the story is to make sure you always pack a USB Type-A to USB-C cable. I was so caught up in thinking that I only had USB-C devices that I failed to remember the ubiquity of USB Type-A jacks. In a bit of serendipity, the conference sponsor swag included a braided charging cable with USB Type-A on one end and a hydra-headed other end that provides USB-C, USB Micro-B, and Lightning. That's now living in my dongle bag.

TSA PreCheck

For my flight home, I ended up with an early afternoon boarding time, so I got to hang out with a friend from the conference at breakfast and on the way to the airport. We found the entrance to the security checkpoint, and my friend headed for the TSA PreCheck line. When I commented that I didn't have [TSA PreCheck](#), he gasped—it was as if I revealed I didn't have indoor plumbing.

My excuse is that the last time I looked into TSA PreCheck, probably in 2019, it required signing up at a large airport. We may have indoor plumbing in most places in Ithaca, but we do not have large airports nearby, so I've been taking my shoes off—it's amazing that we hicks even wear shoes, I know—every time I go through airport security. As we were having this conversation, three other conference attendees wandered up, and of course, they all had TSA PreCheck as well. I was clearly the rube.

But my friend let me in on a secret. Starting in 2018 and with increasing rollout through 2021, the office supply store Staples has provided the in-person side of TSA PreCheck signup. Who knew? And we have a Staples in Ithaca! Of course, when I checked the [Staples website](#), I discovered that, presumably due to our lack of universal indoor plumbing, I would have to drive 30 miles to the Staples store in Elmira instead. The next closest option would be the Syracuse airport, which is twice as far away.

Now I have to decide if it's worth doing TSA PreCheck or if we should figure out how to

schedule a trip to a major airport to get [Global Entry](#).

App Clips Live!

Unusually for me, I ended up with enough time at the airport to eat a sit-down lunch with two of my friends from the conference. The food at the Gourmandise Euro-Diner & Bakery was entirely edible and shockingly quick to arrive, but what surprised me was their payment approach. After our food came, the waitress printed out a QR code-emblazoned bill for each of us.

Scanning the QR code opened an App Clip, only the second time I've encountered one in the wild (see "[Tech Notes from a Cross-Border Trip to Canada](#)," 13 June 2022). Whereas my previous App Clip was entirely unnecessary—I could have just paid for gas at the pump with Apple Pay—this one was a nice shortcut. In this case, I tapped the Open button, approved the Apple Pay process, and received a receipt. One of my friends stumbled over a request to sign up for an account (I already had a Toast account), but his payment went through anyway, and although he wasn't sure if it had, when he tried again, the system helpfully informed him that the bill had already been paid.



This use of the App Clip technology was effective thanks to the QR code, which provided an easy way to link my order to Apple Pay. The waitress could have used an NFC-capable terminal to accept digital payment for the meal, but that would have required her to interact with each of us, which would have been slower and kept her from other tasks. Instead, the QR code let each of us pay separately at our own pace. And I'm sure the system alerted her that we'd paid. 🗑️