

printout

Keystone MacCentral Macintosh Users Group  www.keystonemac.com

Keystone MacCentral March Program

Mar 15, 2022 **07:00 PM**

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

This month we plan to discuss more intricacies of SnapSeed

&

how to use iCloud



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 © 2021, Keystone MacCentral, 310 Somerset Drive, Shiresmanstown, PA 17011.

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By Adam Engst

Cloud Storage Forecast Unsettled, with Possible Storms

Long ago, cloud storage meant Dropbox. With the rise of Apple's iCloud Drive, Google Drive, Microsoft's OneDrive, the enterprise-focused Box, and a host of competitors, it has become near-impossible to keep track of everything that affects regular users of cloud storage services. Here's an attempt to bring those who don't pay close attention to the field up to date.

My Cloud Storage Setup

It might seem as though you could pick one cloud storage provider and stick with it, but I haven't found it to be that easy. Cloud storage has become yet another weapon in the ecosystem wars. If you rely entirely on Apple products, you may be able to get away with iCloud Drive, and the same goes for Google with Google Drive and Microsoft with OneDrive. However, as soon as you venture outside a walled garden, whether that means Gmail or Microsoft Office, it's hard to stick to just one provider, as I found. Further complicating the situation is the need to collaborate with others in whatever ecosystem they use, whether that's Dropbox, Google Drive, or Box.

After Dropbox limited free accounts to three devices (see "[Dropbox Limits Free Accounts to Three Devices](#)," 14 March 2019, and note that the company doesn't advertise this limitation on its [pricing comparison page](#)), I stopped using it as much for sharing files between my devices—at minimum, I have an iMac, MacBook Air, iPhone, and iPad, and there are often several older devices in play as well. I didn't need more storage than was available with my free account, so I was uninterested in paying Dropbox \$9.99 per month for the full 2 TB in Dropbox Plus. But I still use Dropbox for sharing files with people on the Internet; perhaps it's just that I've done it for so long, but Dropbox feels like the easiest and most reliable way of sharing with others.

For sharing files between my devices, I decided to switch to iCloud Drive, figuring that I should know more about Apple's solution. I had to upgrade to 2 TB of [iCloud Drive storage](#) because I needed more than 200 GB for iCloud Photos and our Family Sharing group, so I was already paying Apple \$9.99 per month for cloud storage—that was another strike against paying for Dropbox.

That's not all. My Gmail archive finally exceeded the space available (Google provides 15 GB for free, and I had a grandfathered plan that gave me 20 GB more for \$5 per year), forcing me to upgrade [Google One](#) to 100 GB for \$19.99 per year. Kudos to Google for not making me jump all the way to the 2 TB tier, which is priced in line with Apple and Dropbox at \$9.99 per month. I use Google Drive heavily now, largely because it's the best way of accessing Google Docs and Google Sheets, which don't even count against my storage. For that, I interact with Google Drive primarily through its Web interface; the Finder integration comes into play only when I'm working with native Mac files.

Lastly, Tonya and I pay the [Microsoft 365](#) subscription fee of \$99 per year to have Word and Excel available when we need them. Although we don't use anything else in the subscription, it includes 1 TB of OneDrive space, making Dropbox even less necessary should I suddenly discover the need to store a terabyte in the cloud. However, I've never needed OneDrive—or used it beyond a quick test.

In an ideal world, cloud storage would just work, providing a sufficiently large pool of online storage that you could access quickly and fluidly, syncing as desired among your devices. In recent times, however, things have been more unsettled.

Storage Kernel Extensions Removed in macOS 12.3

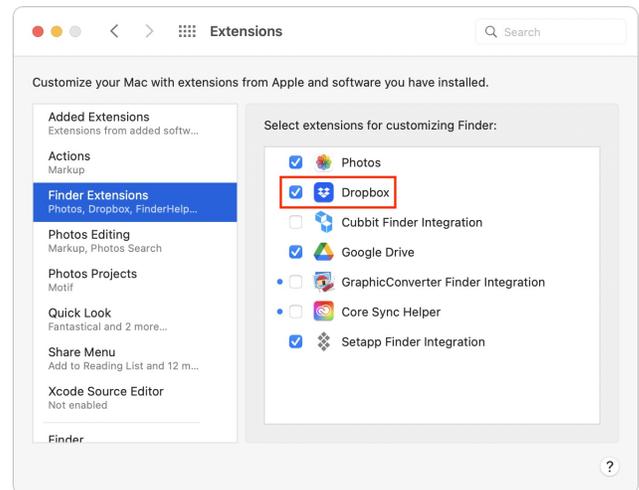
In the release notes for the beta of macOS 12.3 Monterey, Apple said the kernel extensions used by Dropbox and Microsoft OneDrive were no longer available. These extensions enable Dropbox and OneDrive to display files in the Finder as though they were stored locally and then download them on the fly when requested, a feature called on-demand downloads. Instead, cloud storage providers will have to use [Apple's new File Provider extension](#), which aims to provide a more coherent approach to supporting cloud storage. (For more details, see Apple's [WWDC 2021 presentation](#).)

Apple said that both Dropbox and Microsoft have replacements underway. Dropbox announced [a beta release that would fully support macOS 12.3](#) in March 2022. Microsoft has been talking about [changes to its Files On-Demand feature](#) since last year, and it released a [new version of OneDrive](#) last month that moves further in that direction.

It's hard to tell exactly what the situation is now, but it won't matter until macOS 12.3 ships. At that point, if you rely on the Finder integration of Dropbox or OneDrive, you'll want to delay upgrading unless Dropbox and Microsoft have shipped their updates.

Dropbox Finder Extension Can Get Disabled

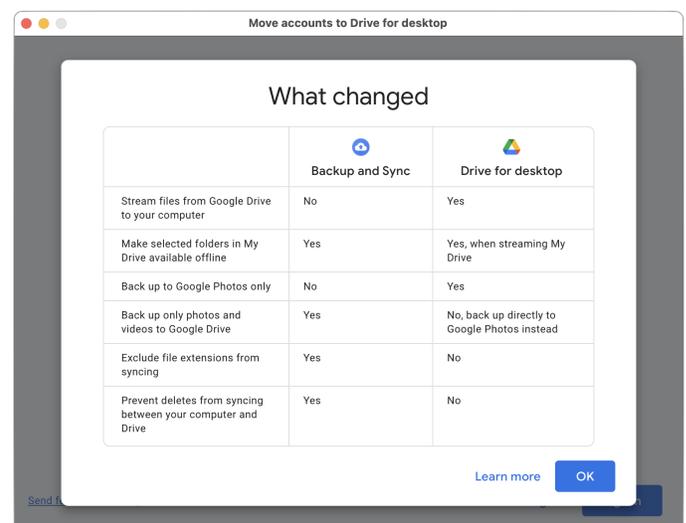
Speaking of Dropbox's Finder integration, its badges and contextual menu options (like the essential Copy Dropbox Link) haven't been appearing on my iMac running Monterey, though I think the problem predated my upgrade from macOS 11 Big Sur. Since I wasn't using Dropbox that much, I was putting up with the inconvenience of using the menu bar app when I needed to copy a Dropbox link.



If you're in a similar situation, the solution turns out to be simple: go to System Preferences > Extensions > Finder Extensions and enable Dropbox. As to how this setting got turned off, I have no idea. Bits get flipped sometimes.

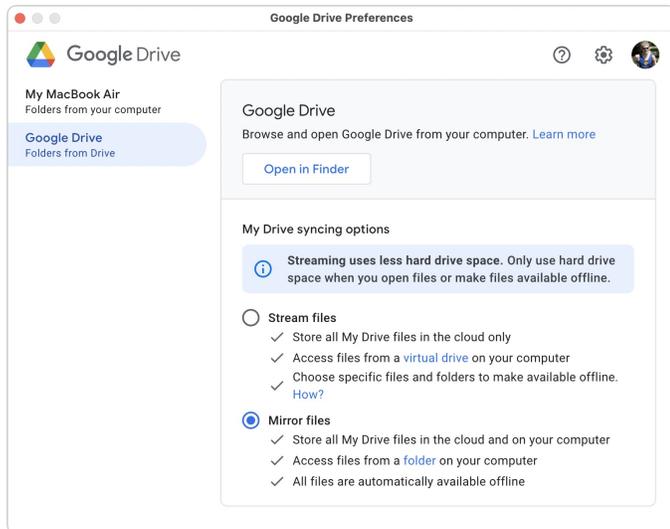
New Google Drive for Desktop App

Back in August 2021, [Google replaced its Backup and Sync Mac app](#) with [Drive for desktop](#), which appears in your Applications folder as Google Drive. This was a long-planned merger of the consumer-focused Backup and Sync app and the business-only Drive File Stream. The new app appears in your Applications folder as Google Drive.



I don't know if Google takes advantage of the new File Provider extension or not. It puts an ejectable Google Drive item in the Favorites section of Finder

window sidebars and offers a choice between streaming and mirroring files, with the mirrored option's local folder appearing in your home folder. (Access Google Drive's preferences from the menu bar app's gear menu.) On both of my Macs, I ended up with two Google Drive sidebar items, the ejectable one and another that pointed directly at the folder. In contrast, Dropbox and OneDrive put their items in the Locations section of the sidebar, where you can control their visibility from Finder > Preferences > Sidebar.



It's all a bit confusing, but remember that you can move anything in the Finder window sidebar around, even pulling Dropbox out of Locations and iCloud Drive out of iCloud, if you'd prefer to have them in the Favorites section. Or just delete them by dragging them off the sidebar.

Beware Disconnected Local Folders During Migration

In the move from Google Drive's Backup and Sync to Drive for Desktop, updating to the latest version of OneDrive, and installing the current version of Dropbox in Monterey, there's room in the migration process for your previous local folder to get disconnected from the new version.

As I mentioned, Google Drive maintains a folder called Google Drive in your user folder (which is where it would have been before, too, in all likelihood), whereas the folders for Dropbox and OneDrive now live in `~/Library/CloudStorage`.

Check your setup to make sure you don't have two folders—we ran into some confusion on Tonya's iMac because she had a manually created Google Drive folder in her Finder window sidebar that pointed to a different folder than Google Drive was using. Since she hadn't realized this, she had stored some files in the disconnected local folder that wasn't syncing to Google Drive.

Similarly, when I just installed Dropbox on my M1-based MacBook Air, it ignored the Dropbox folder in my home folder that had migrated there from my old 2012 MacBook Air. So I ended up with two Dropbox folders and had to delete the one in my home folder. You, like us, may need to do some manual merging to make sure everything is syncing.

Another aspect of these folder location changes is that any automation you have that looks for files in specific locations may break.

OneDrive Makes Files On-Demand Mandatory

I don't use OneDrive, but users are up in arms after its most recent update made the Files On-Demand approach mandatory, removing the option to keep all files local with a single switch. [Microsoft explained this move](#), but [users remain unhappy](#) for a variety of reasons.

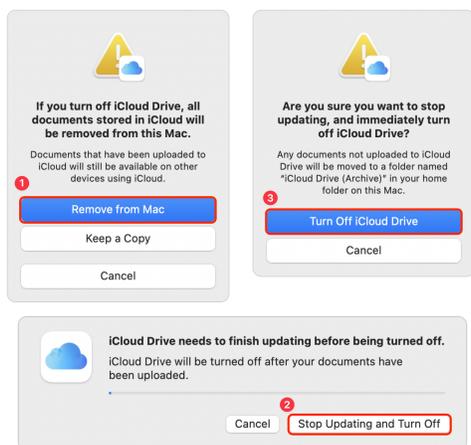
The workaround seems to be to "pin" files or folders, which keeps them local. If you want everything local, you have to pin all your top-level folders. Unfortunately, and this is causing consternation for users who have vast amounts of data stored in OneDrive, that means you have to redownload everything from the cloud.

iCloud Drive Needs Resetting Regularly

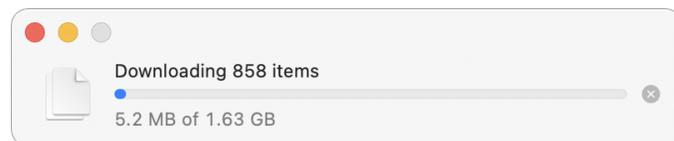
I'd like to say that iCloud Drive has worked fine for me, but the reality is that I've experienced several instances where syncing gets stuck, either for a single file or everything. An indication that this has happened is a cloud icon next to a file that never goes away, though you may be more likely to notice when a file you've created on one device never appears on another.

The first thing to try in such a situation is a restart. That may be all that's necessary to kick the necessary background processes into starting up syncing again. If nothing is syncing at all, a restart might fix it.

If you have only a small number of files that refuse to sync, a restart may not work. In that case, move those files out to the Desktop, go to System Preferences > Apple ID, and turn off iCloud Drive. After you work through the dire warnings, you can turn it back on to download everything fresh and reset syncing. To clarify, you don't generally want to keep all files on your Mac—just those that haven't been uploaded—and if iCloud Drive could update, you wouldn't be turning it off. In my experience, since iCloud is unable to update, you'll often get the promised iCloud Drive (Archive) folder in your home folder, where it could consume a lot of space.



When I did this just now to collect screenshots, iCloud Drive turned off and back on, but then promptly got stuck again; when I clicked the progress indicator in the Finder window sidebar next to iCloud Drive, I got a dialog telling me that it had downloaded 5.2 MB of 1.63 GB. When that failed to change, and I couldn't open anything else in iCloud Drive, I restarted, which cleared iCloud Drive to download everything as it should.



Apple, we shouldn't be left pining for an iCloud Drive refresh button. 🗑️

By Josh Centers

The Secret of the Apple Watch's Mindfulness App

The Apple Watch's Mindfulness app (formerly called Breathe) has always been something of an enigma. While the [benefits of meditation and controlled breathing](#) are well known, the [evidence surrounding mindfulness apps is murkier](#)—particularly one that defaults to 1-minute sessions. The app also reminds you to breathe at odd times, which is why I wrote "[How to](#)

[Manage Breathe Notifications on the Apple Watch](#)" (8 February 2021).

But my recent adventures in health tracking have uncovered another use for the Mindfulness app (see "[How I Finally Embraced the Apple Watch as a Fitness Tracker](#)," 7 February 2022). During Mindfulness sessions, the Apple Watch takes the opportunity to measure your heart rate variability

What Is Heart Rate Variability?

[HRV is an important measure of overall health](#), especially if you exercise. HRV tells you how many milliseconds of fluctuation there are in your heart rate, and believe it or not, higher is better.

Think of your HRV like your car's engine and transmission (assuming your car is still burning liquid dinosaurs). When you pass someone on the interstate, you want to see higher RPMs and hear the engine roar. But if your engine is roaring while parked, you can be pretty sure something major is wrong and you're probably due for a visit to a mechanic to fix the idle.

The same goes for your heart. It's normal for your heart rate to hover around 120 beats per minute while jogging down the road. But if it's at 120 bpm while you're sitting on the couch watching [Get Back](#), that's a sign something may be wrong. Either that, or you still get really excited about the Beatles.

Just like your car engine, you want your heart rate to shift up and down in response to stimuli. If your heart rate is 50 bpm at rest and can go up to 200 bpm during strenuous exercise, you're in excellent shape. And probably fairly young.

Things that can negatively impact your HRV include inactivity and anxiety, as well as anything else that can affect your heart rate, like stimulants or lack of sleep. If you're on pins and needles, your heart rate may be higher than normal while resting, which can cause you to feel tired, which is why it's an important metric for athletes, whose heart rates are usually very low when at rest. (That's why the old saw about avoiding exercise to conserve heartbeats is completely backward; the better condition you're in, the lower your resting heart rate for the majority of the day and the fewer beats it will make over your lifetime.)

Heart Rate Variability and Training

If you don't already exercise regularly, HRV can clue you in on the best days to train. Apps like [Athlytic](#) analyze this data and present it to you in context, in plain language.

You don't need a third-party app to see your HRV measurements over time. You can view it in Apple's Health app. Go to Browse > Heart > Heart Rate Variability.



It's important that you don't read too much into the actual number in milliseconds. [HRV is highly individualized](#). There are some commonalities: it tends to be higher in men and athletes and lower in women and older folks. But what's more important is to take note of the trend. In the screenshot, I'm viewing my HRV graph by week, and my HRV was higher on Tuesday, which is usually the day I work out.

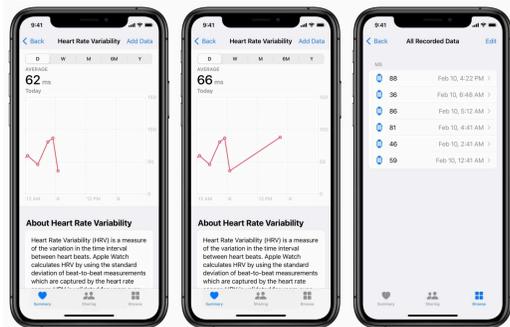
Above the graph is an average for the selected time period. Swipe right on the graph to go back in time and see how your HRV is progressing. My latest average is 48 ms, but if I scroll back, I see averages in the low 30s or even upper 20s, which suggests a correlation between joining a gym in December and my HRV increasing, which is encouraging.

What triggers an HRV measurement? If you wear your Apple Watch to bed, it will calculate HRV while you sleep. But what if you want to update it manually?

Using Mindfulness to Measure Heart Rate Variability

The developers of [Athlytic](#) (and the developers of many other fitness apps) recommend starting a Mindfulness session as soon as you wake up in the morning before you get out of bed or look at your phone so no external factors skew the reading. Athlytic's developers say that Mindfulness usually, but not always, triggers an HRV reading.

We decided to test this claim for ourselves. I checked my HRV at 4:21 PM and saw that it was 62 ms. I performed a 1-minute Mindfulness session and checked my HRV again at 4:22 PM to find that it had climbed to 66 ms. I then examined the raw data in the Health app under Browse > Heart > Heart Rate Variability > Show All Data > *Current Date* and found a reading had indeed taken place at 4:22 PM. You can dig through your raw data to see how many data points Health is recording for you every day—if it's only one or two, you might want to add more manually.



To start a Mindfulness session, press the Digital Crown, select Mindfulness from the app menu, and choose either Reflect or Breathe. It doesn't matter which. The default time is 1 minute, but you can increase it to 5 minutes by tapping the ellipsis button. Although most mindfulness advice suggests longer times for the overall benefits, 1 minute should be enough to trigger an HRV reading.



When using Mindfulness to measure HRV, ignore the app's prompts and breathe normally. According to Athlytic's developer, the deep breathing Mindfulness encourages could cause a skewed HRV reading.

To remind yourself to perform Mindfulness in the morning, open the Watch app on your iPhone and go to Mindfulness. Select Allow Notifications, and then, under Mindfulness Reminders, enable Start of Day. You can also tap Add Reminder to set a custom time.

I found this useful the other day. I checked Athlytic as soon as I woke up, and it told me I was overtrained. I hadn't hit the gym in a few days, and I had just slept for 8 hours, so I should have been plenty ready for a workout. I initiated a Mindfulness session to capture more HRV data, after which Athlytic gave me a recovery rating of 100%. And I had a great workout that day.

Even if you're not into app-guided controlled breathing and meditation, it might be worth using the Mindfulness app on your Apple Watch in the morning to add to your HRV data. 🗑️

By Glenn Fleishman

New Apple Guide Offers Personal Safety Advice

Apple's new [Personal Safety User Guide](#), a website and [downloadable PDF](#), provides detailed recommendations and advice for Apple users that span numerous Apple services, apps, hardware, and websites. As the author of multiple books about staying safe, private, and secure in iOS, iPadOS, and macOS, you can imagine I had feelings about it—and they're largely positive!

It's a great move for Apple to offer a single comprehensive, readable, and searchable place for settings and advice surrounding personal safety. (The version I examined was dated January 2022.)

Apple makes the purpose of the guide very clear—there's no deflection of the potential for risk here:

Offering quick checklists and in-depth feature tasks, this resource is designed to help customers experiencing technology-enabled abuse, stalking, or harassment understand the options available across the Apple ecosystem that can help you protect your personal safety

The Personal Safety User Guide doesn't entirely meet that target, but it does provide more readily available and centralized information on the topic than the company has previously released. Primarily, it offers help in finding all the places across operating systems and apps you might be sharing media, location, personal information, or other data.

A Summary of the Personal Safety User Guide

The first section of the Personal Safety User Guide helps you review how your devices and software are set up. The guide walks you through modifying sharing settings and removing people or stopping sharing, as well as determining if you're sharing things about yourself you didn't intend to.

Several excellent pages provide in-depth advice on documenting suspicious behavior or settings. "[Document suspicious activity with a screenshot or video](#)" could be useful if you don't know the ins and outs of capturing screenshots and videos on an iPhone, iPad, or Mac.

Document suspicious activity with a screenshot or video

In some cases, such as if you see a notification that someone is attempting to use your Apple ID to sign in on a new device, you may want to take a screenshot or record video of the screen. You can then save these as image or video files.

Take a screenshot or screen recording on your iPhone, iPad, or iPod touch

- Do one of the following:
 - On your iPhone or iPad with Face ID: Simultaneously press and then release the side button and volume up button.
 - On your iPhone, iPad, or iPod touch with a Home button: Simultaneously press and then release the Home button and the side button or Sleep/Wake button (depending on your model).
- Tap the screenshot in the lower-left corner, then tap Done.
- Choose Save to Photos, Save to Files, or Delete Screenshot.
If you choose Save to Photos, you can view it in the Screenshots album in the Photos app, or in the All Photos album if iCloud Photos is turned on in Settings > Photos.

Take pictures or screen recordings on your Mac

- Press Shift-Command-5 (or use Launchpad) to open the Screenshot app and display the tools.
- Click a tool to use to select what you want to capture or record (or use the Touch Bar). For a portion of the screen, drag the frame to reposition it or drag its edges to adjust the size of the area you want to capture or record.

Action	Tool
Capture the entire screen	<input type="checkbox"/>
Capture a window	<input type="checkbox"/>
Capture a portion of the screen	<input type="checkbox"/>
Record the entire screen	<input type="checkbox"/>
Record a portion of the screen	<input type="checkbox"/>

- Select any options you want.
The available options vary based on whether you're taking a screenshot or a screen recording. For example, you can choose to set a timed delay or show the mouse pointer or clicks, and specify where to save the file.
The Show Floating Thumbnail option helps you work more easily with a completed shot or recording. It floats in the bottom-right corner of the screen for a few seconds so you have time to drag it into a document, mark it up, or share it before it's saved to the location you specified.
- Start the screenshot or screen recording:
 - For the entire screen or a portion of it: Click Capture.
 - For a window: Move the pointer to the window, then click the window.
 - For recordings: Click Record. To stop recording, click ⏏ in the menu bar. When the Show Floating Thumbnail option is set, you can do any of the following while the thumbnail is briefly displayed in the bottom-right corner of the screen:
 - Swipe right to immediately save the file and make it disappear.
 - Drag the thumbnail into a document, an email, a note, or a Finder window.
 - Click the thumbnail to open a window; there you can mark up the screenshot—or trim the recording—and share your result.

Depending on where you chose to save the screenshot or recording, an app may open.

Apple even admits that someone might have installed third-party apps for malicious or unknown purposes:

If you're concerned someone you once trusted installed an app on your device without permission, you can review a list of all apps installed on the device and review or change how each app accesses information.

The guide also highlights identifying and removing profiles, which enable one of the few ways people can be fooled into installing something on an iPhone or iPad that could easily monitor them. (Profiles can affect network traffic and other settings, and they make it possible for users to install developer-produced, non-App Store apps.)

You might also find useful "[Manage Family Sharing settings](#)," a solid chunk of good advice on managing members, removing members, and getting yourself removed from a Family Sharing group.

Apple shirks the Personal Safety User Guide's main duty by not digging more deeply into stalking and other unwanted tracking with "[Stay safe with AirTag and other Find My accessories](#)." It's a quick overview that doesn't even address even all the features Apple offers, much less add additional insight. It also links to an Apple support note instead of providing that detail directly.

Likewise, the section "[Avoid fraudulent requests to share info](#)" is both somewhat off-topic and frustratingly brief at just two paragraphs and a one-line note. Apple could have provided much deeper and more useful information.

Avoid fraudulent requests to share info

Use caution if you receive unsolicited messages prompting you to accept gifts, download documents, install software, or follow suspicious links. People who want to access your personal information use any means they can—spoofed emails and texts, misleading pop-up ads, fake downloads, calendar spam, even phony phone calls—to trick you into sharing information, such as your Apple ID or password, or to get you to provide a Verification Code for two-factor authentication (2FA).

For tips on how to avoid being tricked into compromising your accounts or personal information, see the Apple Support article [Recognize and avoid phishing messages, phony support calls, and other scams](https://support.apple.com/HT204759) (<https://support.apple.com/HT204759>).

Note: Phishing refers to fraudulent attempts to get personal information from you.

The second section, "[Safety and privacy tools](#)," feels much more generic than the first. It offers instructions on updating your devices regularly, configuring your devices for secure access (with passwords, Face ID, and Touch ID), setting up your Apple ID safely and with two-factor authentication, and enabling iCloud Data Recovery Service. (That awkward name is what it's called, but Apple doesn't use it in this guide, referring to it only indirectly in the "[account recovery contact](#)" section.) This "Safety and privacy tools" section ends by [walking readers through the new App Privacy Report feature](#) that is more about apps invading your privacy than other people.

Apple ends the Personal Safety User Guide with three checklists:

- See who has access to your device or accounts
- Stop sharing with someone you previously shared with
- Control how someone else can see your location

The guide should instead start with these checklists, which could act as a verbose table of contents to everything in the document, much like the Quick Start section in a Take Control book. Instead, they're relegated to the end, and only the first of them offers many links within the guide.

Room for Improvement

As a whole, the Personal Safety User Guide doesn't hew as closely to its mission statement as I hoped it would. It offers useful advice on safety related to data access and physical tracking, but then it somewhat wanders into the weeds with much broader advice related to remote hacking attempts and other efforts associated with criminals and identity thieves. Apple could make this latter information more directly relevant to those concerned about personal safety issues.

Nonetheless, this version of the Personal Safety User Guide is a first edition, and there's room for it to grow and mature into something that holds together better as a complete work. It doesn't have to be literature, but having stated its thesis, it should follow through more completely. 🗑️