

March 2019
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printout

Keystone MacCentral Macintosh Users Group ❖ <http://www.keystonemac.com>

March Program

This month we will have a round table discussion of items of interest.

Meet us at

Bethany Village Retirement Center

Education Room

5225 Wilson Lane, Mechanicsburg, PA 17055

Tuesday, March 19th 2019 6:30 p.m.

Attendance is free and open to all interested persons.

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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 © 2019, Keystone MacCentral, 310 Somerset Drive, Shiresmanstown, PA 17011.

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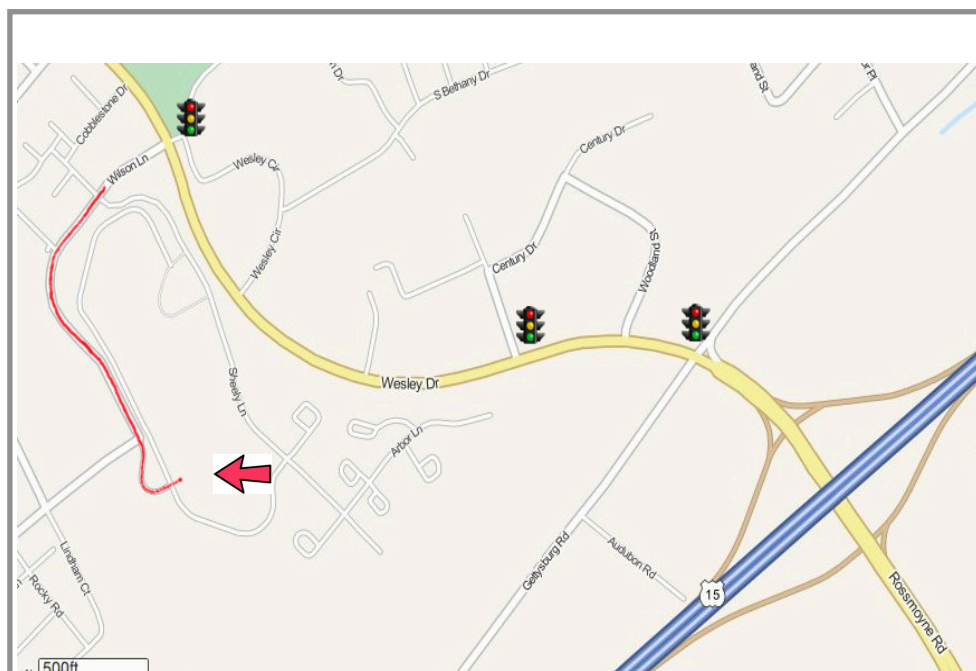
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Fed Up with Facebook?

Move Your Family to Slack

Nobody should trust Facebook with the private details of their life, but it can be hard to avoid. To quote the late, great Yogi Berra: “Nobody goes there anymore. It’s too crowded.” Facebook has become the commercial equivalent of the never-ending family, school, and former-workplace reunion. It’s where most people we know congregate online.

That has remained true even as Facebook has shown through a stream of misleading statements and outright lies that it treats its users like cattle in a digital abattoir. The company makes its money by cutting up our component parts — birthdates, social connections, topical interests, browsing habits — and selling them again and again to other companies. Its security and operational incompetence has also led to massive breaches of our private data, so even if Facebook’s promises were trustworthy, its delivery is unreliable.

In 2018 alone, it came out that Facebook had allowed the political-consulting firm Cambridge Analytica to [access tens of millions of user profiles](#) and later tried to mitigate the misuse by explaining it wasn’t technically a breach. Facebook [accidentally allowed data about billions of its users](#) to be gathered through searches. The company [negotiated secret agreements](#) with mobile device makers to share information with them, even if users had blocked third parties from their information. In a [leaked internal memo](#) from 2016, a Facebook executive said growth should outweigh all other concerns, even if it enabled terrorists. Facebook published an iOS VPN app, Onavo, designed to intercept users’ private data, violating Apple’s policy on data collection (see [“Beware ‘Protect’ In Facebook’s iOS App,”](#) 14 February 2018). After Apple made Facebook take Onavo down, Facebook repackaged the app and slipped it under Apple’s radar (see [“Certificate Wars: A Quick Rundown of Apple’s Dustup with Facebook and Google,”](#)). In the face of all this, Facebook was [mostly angry about public perception](#). And this list of offensive behavior is far from comprehensive!

Despite all that, [Facebook continues to show revenue growth](#), user growth, and an increase in routine use of its site. People stick with Facebook because of the network effect—it’s where family and friends are, and it’s a source of “news” (despite the fact that a substantial part of alleged news on the site has no substantive factual basis, [especially health news](#)).

Many people are disgusted with Facebook’s behavior, and while some have deleted their accounts and left the service,

many more grudgingly remain. The reason? “It’s the only way I can communicate online with some members of my family or old friends.”

What if there were another way in which family or close friends could interact in an environment that let them speak freely and share photos and videos without Facebook’s compromises? There is: Slack.

Slack On

Slack is a group-messaging system aimed at businesses and organizations that combines multi-person conversations, direct messaging, and file sharing. At last report, Slack had [eight million daily users](#), three million of whom are in paid groups. The rest use a robust free tier, which is perfect for families.

Members of a Slack “workspace” can upload photos, chat in public channels open to anyone in the group, and use private channels or direct messages for discussions that only the participants know about and can see.

My bias is that I just published a new book on how social groups, nonprofits, and businesses can use it, called [Take Control of Slack](#). However, it wasn’t until *after* the book came out that I had a conversation with TidBITS Publisher Adam Engst about how well Slack could provide safe, controlled online communications for families that are sick of Facebook. It’s also a reasonable solution for friend groups that stay in close contact and want to use a system that is not owned by Facebook (as WhatsApp is) or another privacy-abusing tech giant and that has multi-platform support, unlike Apple’s iMessage.

For families, Slack’s combination of free apps, strong privacy, and free service could be what you need to ditch Facebook without losing online connections.

Free apps: Because Slack offers apps and browser support across macOS, iOS, Windows, and Android, you aren’t tied to iMessage, WhatsApp, Facebook Messenger, or other systems that require an ecosystem buy-in with a company whose interests don’t align with yours.

Strong privacy: Slack’s privacy is robust, because the company treats whoever sets up a Slack group as its customer, doesn’t examine messages or media posted to groups, doesn’t insert advertising, and doesn’t extract and sell information for marketing purposes. Slack promises to keep your data private, and even

goes out of its way to require governments to go through appropriate safeguards and hoops to obtain messages. (In my book, I look at Slack's guarantees in some detail.)

Free service: The company makes its money — substantial money — on its paid tiers of service, which allows it to operate its free tier as a relatively trivial marketing expense.

Slack may be such a good way for families to communicate that it might even bring back online relatives who gave up on other communities.

What Can Your Family Do with Slack?

Slack is designed around conversations — chat, but structured! — that persist in a long, chronological stream. This kind of informal conversation works well for family groups, where most of what you want to say is inconsequential on a grand scale, and it's all about being sociable.

Each Slack workspace acts like an independent conversational Web site. The person who sets up the workspace invites people, who become members. Only members can view a workspace or post in it. Each workspace is entirely private: without a login, no one else can see anything in it at all.

Slack workspaces provide a sense of place: all discussion is organized into a public or private conversation. Public conversations take place in channels, which are like chat rooms open to all members of the Slack group. These channels do best with descriptive names that let people know why they should join.

For families, I recommend setting up public channels by branches of an extended family (so your sister can ignore your in-laws' conversations), parts of the country (so relatives who live elsewhere don't have to see the local family members' dinner plans), and events (like Thanksgiving dinner or a reunion). Channels help split up discussions, so people who are interested in only certain topics or a particular branch of the family aren't overwhelmed by irrelevant chatter.

Private conversations can take place in private channels, which are completely hidden from anyone who hasn't been invited to the channel by the creator, and direct messages (DMs), which work just like group chats or Twitter DMs and are similarly invisible to other Slack workspace members.

Members can upload files of any type to any conversation, so Slack is a great way to share photos, movies, Word files, and PDFs. There's even a way to create a formatted post within Slack that everyone can see and optionally can be allowed to collaborate on.

As with any messaging app, notifications are important. Slack has put a lot of effort in there, offering native notifications across every platform it supports, including

browser-based notifications in macOS and Windows for its Web apps.

Minor Downsides

Despite its many advantages for family communications, Slack isn't perfect. Its notifications, for example, are so flexible that it can be confusing to set them up for less-experienced users. More on that shortly.

Slack's limits on free workspaces shouldn't affect families. Free Slack workspaces can only view and search through the most recent 10,000 messages and use its audio and video calling features for one-on-one — not group — conversations.

There is one problem for families that derives from Slack's privacy rules: it prohibits those under 16 from using its service, likely due to the European Union's General Data Protection Regulations (GDPR). In the US, children 13 and older may consent to disclose personal information, but the GDPR raised that age to 16. Canada has no legal minimum age. In both the US and EU, a parent can provide consent, but apparently Slack doesn't want to get into that level of detail.

That said, Slack's enforcement is minimal. It notes, "If you learn that anyone younger than 16 has unlawfully provided us with personal data, please contact us and we will take steps to delete such information." I wouldn't advise you to use a service and violate its rules, but it's also clear this is Slack's attempt to comply with regulations without the burden of enforcing them.

Slack's main limitation for family use is the lack of any way to group photos and videos. You can upload and view media, but there's no gallery feature. If that's important, you can paste in links to galleries stored elsewhere, including shared iCloud albums, or use Flickr. Flickr's new owners, SmugMug, have [robust privacy rules](#) and show ads only on the limited Flickr free tier. Your family could purchase a [single Flickr Pro account](#) (\$50 a year), and share photos in private albums.

Start a Slack Workspace and Invite Your Family

If I've convinced you to give Slack a try, talk to your family and make sure that everyone is willing to install and use the apps. Like any change, it may require some persuasion, but explaining just how evil Facebook is may help. You may also want to encourage them to read this article. I recommend promising to help those who are less experienced technically get set up.


You can also start small: you don't have to invite everyone at once, and it may be a good idea to begin with your nuclear family or some of the savviest family members and then build from there.

Once you have sufficient buy-in, follow these steps.

Create a new workspace. Slack offers step-by-step instructions here. It's important to pick a good name for your team's Web URL, which is a subdomain of slack.com, because people may need to type it in and it should be recognizable. Try combining some form of your family surnames, as in hartford-gonzales-family.slack.com. Slack will tell you during setup if the name is available.

Set up channels. Create a small number of public channels that will help new Slack users find their footing. Slack creates #general and #random by default. I recommend creating a channel for each branch of the family that's participating, like #hartford-family and #gonzales-family. Also consider geographic channels if multiple family groups live near one another, such as #chicago and #miami. Finally, you might consider creating private channels for nuclear families so they can talk without worrying about others listening in. TidBITS co-founders Adam and Tonya Engst name such channels with the street address of the original family home for their branches, so their private channel with their son Tristan is #50-hickory. Channels can be renamed, so don't stress if you don't get it quite right to start.


Invite family members. Slack offers the opportunity to invite people to the group during setup, but it's better to wait until you have everything set up. Make sure you use everyone's preferred email address because that becomes their Slack login account name.



Join Aperiodical LLC on Slack

editors (editors@the-magazine.com) has invited you to join the Slack workspace **Aperiodical LLC**. Join now to start collaborating!

[Join Now](#)



Aperiodical LLC
Workspace URL: aperiodicalllc.slack.com

Slack sends an invitation with details about the workspace when you invite members.

Advise family members on how to set their Slack names. Slack lets you set a full name and a display name, and it's useful to figure out how Abigail, Abigail II, and Abigail Jane can be told apart. Names can be changed after they're initially picked.

Help family members install and configure the Slack apps. While Slack sends an invitation email with instructions, the next steps may be confusing for those who have only used built-in smartphone or desktop messaging apps, or has only ever installed

WhatsApp, where there's no central party controlling accounts.

One of Slack's key advantages and major difficulties has to do with notifications. The system is great about alerting you in a variety of situations that someone has posted in a channel, mentioned you by name, or responded to a direct message. But people may not always want to receive these notifications.

Some relatives may want zero notifications and will launch Slack once a day or so to check for updates manually, much as they might visit Facebook. Others may want notifications on their smartphone, but none on the desktop (or vice versa). Still others may want more notifications than the default for particular channels and conversations. You can also set a "do not disturb" period, when all messages are muted, which is handy if a nephew in college likes posting funny pictures late at night. Slack notifications require a little tweaking to get right, and you may spend the most time with family members figuring this part out. ([My book](#) has extensive details on how to work with Slack's notification settings.)

Notification Preferences: #take-control

Muting options
☐ Mute entire channel
You won't receive notifications for muted channels, and they'll appear grayed out in your channel list.
☐ Ignore notifications for @channel and @here

Notifications	All new messages	Just mentions*	Nothing
Desktop	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Mobile	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

* Includes mentions of your name or any of your keywords

[Reset to your default notification settings](#) [Done](#)

Slack has notification preferences you can set for your account in a workspace, as well as for channels and direct message conversations with three or more people.

You should expect at least a slight tech support burden for members of the group as people get used to the system. That's true of any digital project you champion, but at least Slack has a limited set of features and its own online help — it's a lot simpler for a new user than something like Facebook. (And of course, you can always turn to or recommend Take Control of Slack — there's even a bulk discount.)

Switching to a Slack workspace won't solve all the problems with Facebook. But it will help you and your relatives take a step away from the sausage factories of "free" social sites that exist to churn your personal information into cash. Like Apple, Slack treats you like a customer, not a raw material to be monetized. 🍷

#DeathToAutoPlay — No More Audio and Video That Plays Automatically!

Most technology annoyances fall into the category of “death by a thousand cuts.” Tiny text on dark backgrounds, controls that appear only when you mouse over an otherwise unremarkable spot, links that don’t stand out from surrounding text, and so on. We won’t even get into all the crud that happens silently in the background, with companies tracking your every move and monetizing every bit of personal information you disclose, knowingly or unknowingly. It’s no longer the Internet I signed up for.

But there’s one trend that’s so blatant, so patently offensive, so callously disrespectful of our time and attention, that we can no longer sit by and suffer. I am of course speaking of the dreaded auto-play videos. There is little more surprising — or even alarming — than having audio start blasting from your speakers while something starts moving before your eyes. It triggers all sorts of fight-or-flight reactions buried deep in our brainstems, wakes the kids, and scares the pets.

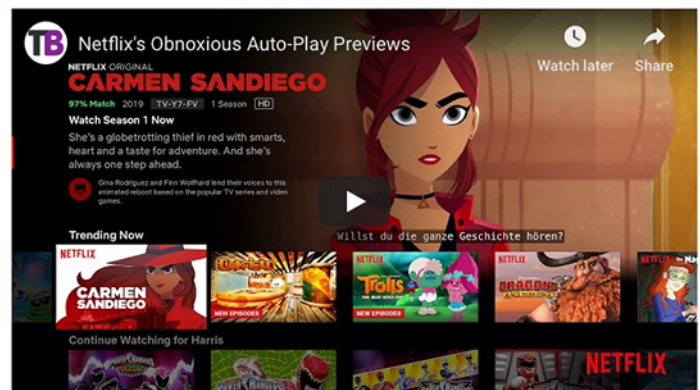
Over at the New York Times, Brian X. Chen penned a [thoroughly reasonable column](#) explaining why advertisers use auto-play videos and some of the technical solutions for reducing their impact. [Google Chrome tries to prevent them](#) from playing based on your behavior, and Safari on the Mac, which Chen doesn’t mention, [can also block them](#), either for a particular site or for all sites. And Firefox 66, due in March 2019, will [mute all auto-playing videos](#).

But I’m not feeling reasonable. [I’m as mad as hell, and I’m not going to take this anymore!](#) (To quote the 1976 movie Network.)



The auto-play offense that has pushed me over the edge is Netflix’s Apple TV app, which auto-plays previews for movies and TV shows as you browse through Netflix’s library. Within 3 seconds of when you navigate to a show’s

icon, it starts playing a preview for the show, complete with audio. It’s difficult even to read the show’s description in that amount of time, much less reflect on whether you might want to watch the show. As soon as the audio starts, it interrupts whatever thoughts might be going through your head (Josh Centers made this example video; it shows what he hears as his 5-year-old browses).



Worse, sometimes the audio is wildly inappropriate for children who might be listening. While I was writing this article, Sarah Perez of TechCrunch tweeted about [the obscenity-laden preview of the Netflix show Russian Doll](#), and the preview of another Netflix show, *Sex Education*, leads with “I’ve noticed you’re pretending to masturbate and I was wondering if you wanted to talk about it.” Looking forward to that conversation with your 9-year-old?

(This is different from Netflix’s Post-Play “feature” that automatically starts the next episode in a TV series if you don’t navigate away from the credits screen as one episode ends. Some devices will even automatically play related titles after you finish the last episode in a series or a movie. Personally, I consider this behavior nearly as offensive as the auto-play previews, but at least [Netflix lets you turn Post-Play off](#).)

Netflix is far from alone here. The most egregious offender in the Apple world for years was the [Macworld](#) Web site, which still auto-plays videos on many of its pages but now appears to default to muting the audio. (I gave up on Macworld long ago in protest of this behavior, in large part because the management also ignored the complaints of the writers over whose articles the videos played.) On a quick spin through the Web, CNN now seems to be among the worst when it comes to forcing you to listen to some video’s audio while you attempt to read a news article.

Auto-play videos are [horrible for usability](#). As Amy Schade of the Nielsen Norman Group says,

When users arrive at a webpage, they don't appreciate being surprised by video or audio content that begins playing without their consent. Video, and the accompanying audio, can confuse or distract users, and can interfere with their consumption of content on the page.

Those users who do not want to watch the video must devote cognitive resources and extra effort to figure out how to turn the audio off or pause the video, rather than focusing on their goals and information needs. Any movement on the page can be a distraction.

I'd go further and suggest that auto-play videos are an assault on our autonomy as human beings. They're an insidious effort to eliminate our free will and compel us to behave in a particular way: "Don't read that. Watch this instead." (Best read in an Obi-Wan Kenobi "These aren't the droids you're looking for" voice.)

Sure, it's just a small encroachment on free will now, but auto-play videos exist because they are supposedly more effective for advertising and stickiness. And at least on Netflix, we're paying for the privilege of being manipulated! Just because something is effective doesn't mean it's acceptable. If we sit idly by now, who knows what companies will try next to get us to watch, click, like, or buy.

So let's fight back. If these companies shoving these videos in our faces aren't willing to at least provide options to turn them off, let's exercise our right to be annoying right back with a little constructive — and hopefully costly — criticism. Perhaps auto-play videos are effective in some ways, but they're offensive in many others. We don't have to sit and take it like couch potatoes, especially when we're paying customers!

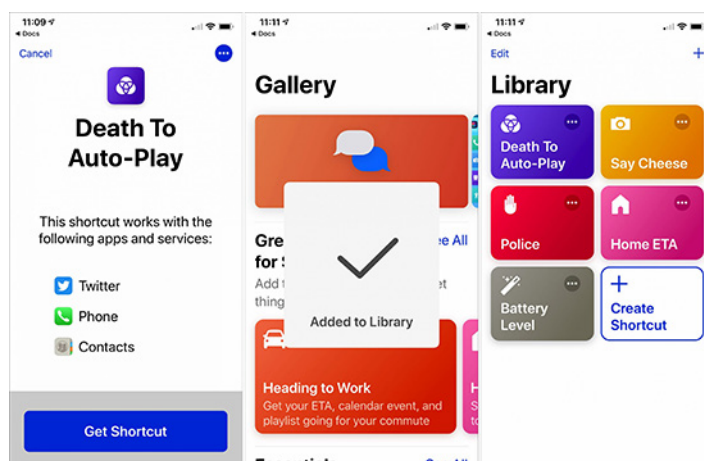
Since Netflix is what's making me crazy right now, I called the company's [customer support line](#) at 866-579-7172 and asked how to turn off the auto-play previews in the Apple TV app, knowing full well that it wasn't possible. I had to clarify a few times that I wasn't talking about the Post-Play feature, and I made it clear that I found the auto-play previews so annoying that they were causing me to avoid Netflix.

Eventually, after checking with higher-level support a few times, my rep came back and admitted that what I wanted couldn't be done. He said he would pass my feedback along to his supervisor though, and when I noted that I knew others who were equally as perturbed, he encouraged me to spread the word, saying, "The feature will be gone as soon as enough people tell us that they don't like it, so please have anyone else you know who's experiencing this get in touch." Now that's what I like to hear.

That call took 13 minutes (in my AirPods, while I was writing and editing this article, so it was only a couple of minutes of my time). A few sources on the Internet suggest

that it costs about \$1 per minute for an average call center to service a call. So my call cost Netflix \$13, meaning that the company lost money on me for the month. How about we scale that up? While we're at it, let's throw a spotlight on Netflix's behavior on Twitter too.

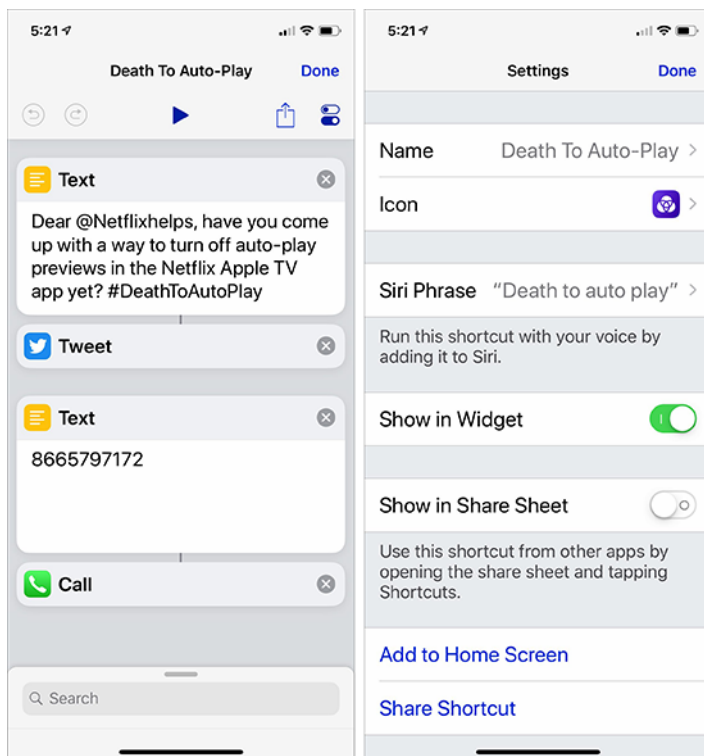
To make our rebellion more high-tech, I've created a simple shortcut in iOS 12's Shortcuts app to simplify contacting Netflix. It assumes that you have two apps installed on your iPhone: [Shortcuts](#) and [Twitter](#), but if you don't use Twitter at all, you can delete those steps in the shortcut. After you've downloaded those apps, on your iPhone, [add this shortcut to your Shortcuts app](#) and then switch to the Library view to access it. You may need to allow the Call action access to your contacts, but it works purely from entered text.



When you invoke the shortcut, it does two things:

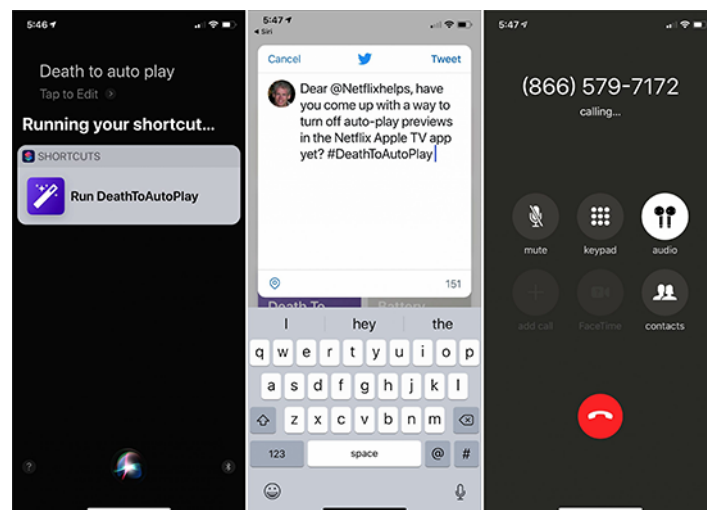
First, it posts a tweet to @Netflixhelps asking if Netflix has come up with a way to turn off auto-play previews yet. The shortcut has some suggested text for your tweet, but I encourage you to customize as you like — just leave the #DeathToAutoPlay hashtag so the tweets pile up in Twitter.

Second, it calls Netflix support, where I encourage you to ask if such an option exists, and when you're told that it doesn't, ask that the support rep pass the feedback along to management. Stay civil—it's not the support rep's fault—and remember that the goal is to cost Netflix money and ratchet up those feedback requests. Call just once in a month, and Netflix will lose money on you for the month. Call more frequently and the company's support costs will skyrocket.



To invoke the shortcut, I recommend recording a phrase you can use with Siri. Tap the toggle-switch icon at the top right of the shortcut, tap Add To Siri (it changes to Siri Phrase once you've recorded), and then record your phrase. I recommend "Death to auto-play!" because it's fun to say.

Then, whenever you're browsing through Netflix and being harassed by the auto-play previews, pull out your iPhone, invoke Siri, and say "Death to auto-play!" The shortcut will queue up a tweet that you can edit or just post by tapping the Tweet link (you may have to tap the hashtag to dismiss it first). Then it will dial Netflix support so you can have a costly conversation with a nice support rep.



Now I don't want to pick on Netflix. Wait, yes, I do! But we shouldn't forget that CNN and other companies deserve similar treatment (wikiHow has a [How to Contact CNN](#) article for Twitter handles and phone numbers). Feel free to repurpose my little shortcut for whatever company is trying to take over your brain with auto-play videos. Let's get that [#DeathToAutoPlay](#) hashtag trending! 🗑️

by Tim Sullivan

Rumors and Reality

Do Not Track: Safari (and I suspect other web browsers) have an option that requests that web sites not track you while you are browsing. The key word here is "requests." In fact the request is sent to websites, analytics companies, ad networks, plug in providers, and other web services you encounter while browsing. Most major tech companies, including Google, Facebook, and Twitter, do not respect the Do Not Track setting when you visit and use their sites.

Apple is removing the option from iOS 12.2 and macOS 10.14.4. They have however included what they call "Intelligent Tracking Prevention," which is more successful at preventing cross-site tracking, with Apple saying it prevents sites from "creating cookies or storing data" without "explicit consent."

China and the iCloud: Apple has been creating a presence in China. As in most international agreements, there is some give and take.

The Chinese government requires companies offering cloud storage to use local companies to store the data. In

Apple's case, it announced that it would comply with the law by partnering with Guizhou-Cloud Big Data (GCBD) – a company owned by the provincial government. Apple is opening a new data center (read iCloud) in China in partnership with GCBD.

Apple's iCloud terms and conditions for the country make it clear that GCBD will have full access to the data.

You understand and agree that Apple and GCBD will have access to all data that you store on this service, including the right to share, exchange and disclose all user data, including Content, to and between each other under applicable law.

While this shouldn't affect U.S. customers, there is a possibility that the GCBD could have access to some U.S. data. If an Apple ID was originally created in China, that may remain the country setting even if the customer is now living in the USA. Second, a U.S. customer who has spent some time in China may have changed their country or region during their stay.

Short of [cancelling your iCloud account](#) (and losing all of the services that provides) you can [edit the country or region setting](#) of your Apple ID to reflect your current country or region.

kernel_task: Thanks to Howard Oakley for explaining something that has bothered me for years. When my iMac is struggling under a heavy CPU load, performance suffers, and I can hear its fans ramping up. Checking in Activity Monitor often reveals that a process called kernel_task is taking a large percentage of the CPU. I mutter something unprintable and hope that things resolve themselves soon,

which they usually do, eventually. What the %\$#*^ could kernel_task be doing?

It turns out that kernel_task is actually stepping in to make the CPU less accessible to other processes that are taxing the CPU so intensely that they're causing its temperature to reach dangerous levels. In other words, kernel_task is protecting your CPU from overheating, and not itself causing the problem. Once the CPU temperature drops, kernel_task automatically backs off so other processes can resume their activity. *(Thanks to Adam Engst for this info.)* 🐉

By Dave Kitabjian

Seek and Ye Shall Find Things in the Dark with an iPhone Thermal Camera

I've had my eye on thermal imaging cameras for a long time. Not because I needed one, or because I need to [hunt prey like a viper](#), but because they just seemed so cool. The idea of viewing one of those 2D colorful infrared images of things in and around my home or "seeing" temperature was just such a fun concept for a geek like me. But given prices of over \$400 for even consumer-grade models, a thermal imaging camera was a novelty I couldn't justify.

Then I spotted the [Seek Thermal Compact Imager](#) by Seek Thermal at Amazon for about \$220—it's an infrared camera that cuts costs by using your iPhone's screen, power supply, and storage. When I combined that with the fact that a builder is actively insulating an addition to our home in sub-zero weather and I wanted to make sure that cold air wasn't leaking in, I finally had an excuse to buy one.

The Compact is available for both iOS and Android, and [Seek Thermal](#) makes two more advanced (and expensive) models, the CompactXR and the Compact Pro, that add range and resolution for an additional \$50 or \$200, respectively.

Hands-On With My New Eyes

Despite its name, the Compact, which comes with a nifty waterproof carrying and storage case, is smaller than I expected.

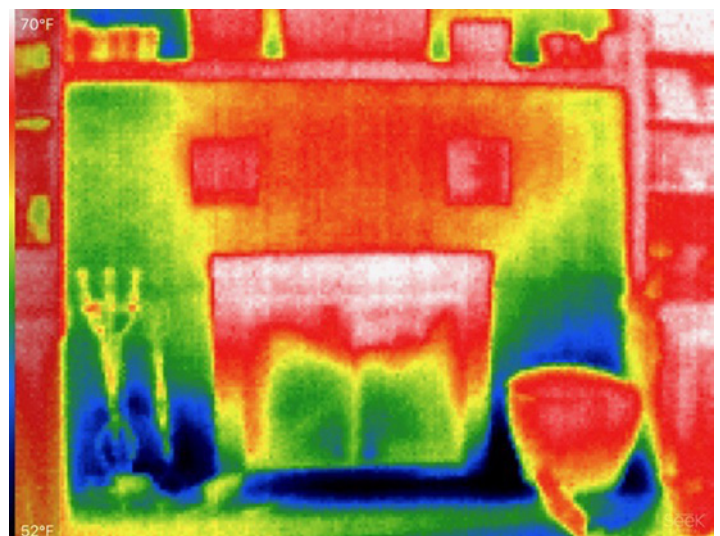


All you have to do on the hardware side is plug it into a Lightning port and adjust the focus ring. I was a bit disappointed that I needed to remove my iPhone 8 Plus from its protective case for the Lightning plug to seat properly, but that's a minor inconvenience.

Right away, I was impressed. As soon as I plugged the Compact into my iPhone, it prompted me to download the free [Seek Thermal app](#) from the App Store. After skipping the pleasantries of the welcome screens, I was able to start evaluating my surroundings in infrared.

Going On The Prowl

Exploring the house searching for air leaks is, of course, one of the main uses and cost benefits of the Compact. Some leaks, like the cold air emerging from beneath my fireplace, I expected. Others were a bit more of a surprise.



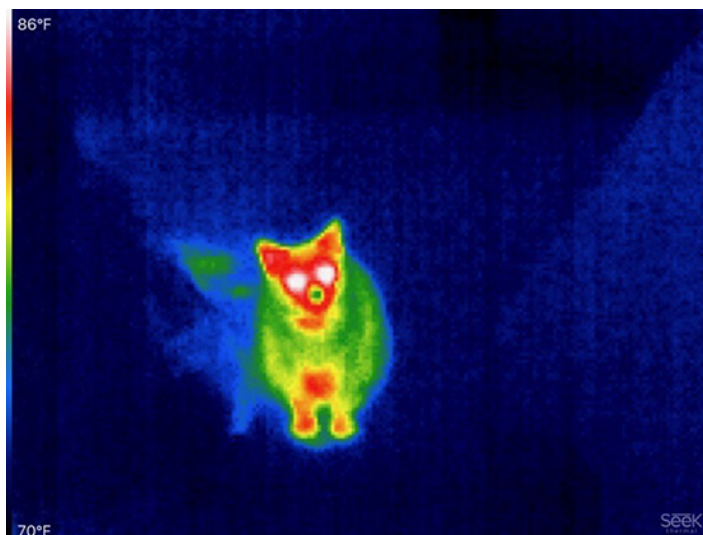
A thin temperature legend appears down the left edge of photographs. It shows the high and low temperatures as they correspond to the range of colors from white (hot) to

black (cold). To keep the images “pretty” with a wide dynamic color range, the Seek Thermal app doesn’t map colors to absolute temperatures. Instead, it reassigns the colors in real-time to the hottest and coldest temperatures in the given frame.

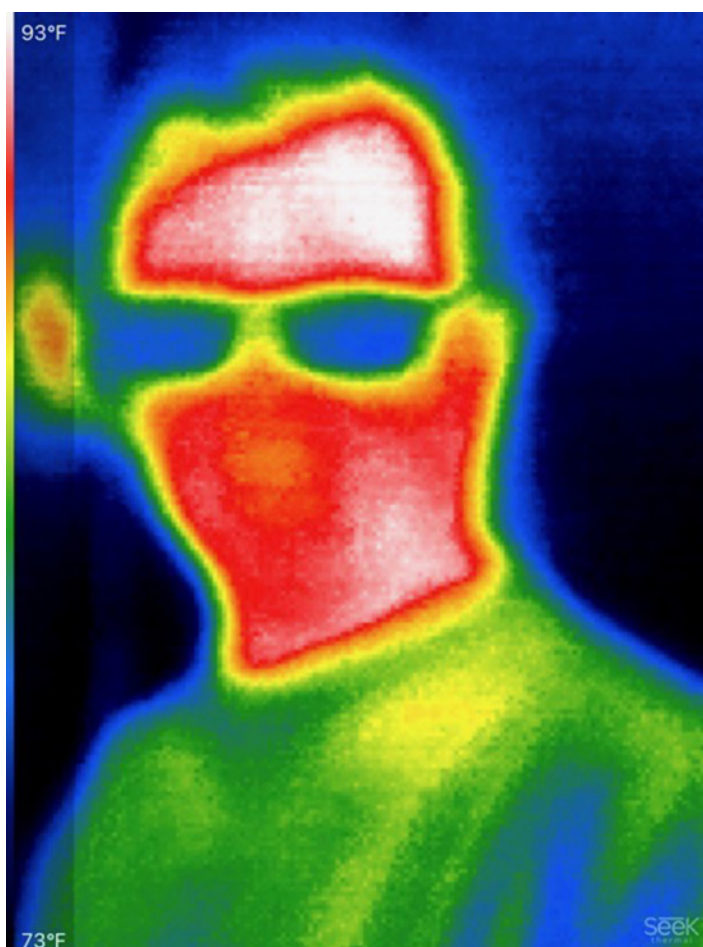
Captures from the Compact are saved directly to your Camera Roll, making them a breeze to share. I captured a few photos of my addition and sent them to my builder so he could address the issues before hanging the drywall.

The Compact Imager can also capture video, which might be useful for seeing what wildlife is nearby at night. And, it turns out that teenagers love watching the videos to relive hide-and-seek games in a dark basement.

With the Compact mounted on the bottom of the iPhone, it’s easy for your hand to get in the way of the camera. Fortunately, the Seek Thermal app can flip orientations so that you can spot cold corners of the dining room with the phone sideways or even upside-down.



And if you want to take a thermal selfie, simply remove the Compact from the Lightning port, insert it the other way, and say cheese.



The Compact has uses besides weather-proofing your home. For instance, it can help you find your cat when it’s trying to avoid a trip to the vet.

A Clear Choice

If you want a clearer picture, note that the focus ring can sometimes improve clarity. But the Compact’s sensor is just 206 by 156 pixels, so there’s only so much that focusing can do. Seek Thermal’s CompactXR model has the same sensor but a different lens that provides nearly double the viewing distance. The Compact Pro has the longer viewing distance and a larger sensor—320 by 240 pixels—but it’s also a lot

more expensive. I don't think most people will see enough benefit from the upgrades, but your use cases may vary from mine.

Comments on the [product's page at Amazon](#) suggest that the matching of color to temperature is not all that accurate. That's probably true, but generally irrelevant. When I see "blue" around my electric outlet, I know cold air is entering the room and I should insulate it. The exact temperature around the outlet is immaterial in that context.

There's one, clear downside to the accessory design of the Seek Thermal Compact Imager: I can't lend it to my Android-using friends as I could with a standalone thermal imager. But this minor downside is outweighed by the device's advantages: no batteries to change, zero effort to transfer images off the device for sharing, extreme portability, a large screen, and a rock-bottom price that inally puts thermal imaging within reach for geeks like you and me. 📷

Software Review

Apple Updates

macOS Mojave 10.14.3 Update

Feb 7, 2019 — 1.99 GB

System Requirements
– macOS Mojave 10.14.2

The macOS Mojave 10.14.3 update improves the security, stability and compatibility of your Mac, and is recommended for all users.

macOS Mojave 10.14.3 Combo Update

Feb 7, 2019 — 2.49 GB

System Requirements
– macOS Mojave 10.14

The macOS Mojave 10.14.3 update improves the security, stability and compatibility of your Mac, and is recommended for all users.

macOS Mojave 10.14.3 Supplemental Update

Feb 7, 2019 — 994.3 MB

System Requirements
– macOS 10.14.3

The macOS Mojave 10.14.3 Supplemental Update provides an important security update and is recommended for all users.

iTunes 12.8.2 for Mac

Feb 6, 2019 — 275.9 MB

System Requirements
– macOS version 10.11.4 or later

This update resolves an issue that may prevent iTunes from playing media to third-party AirPlay speakers. It also includes minor app and performance improvements. 📷

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