

# printout

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



Meet us

**Tuesday, September 16, 2014 6:30 p.m.**

Attendance is free and open to all interested persons.

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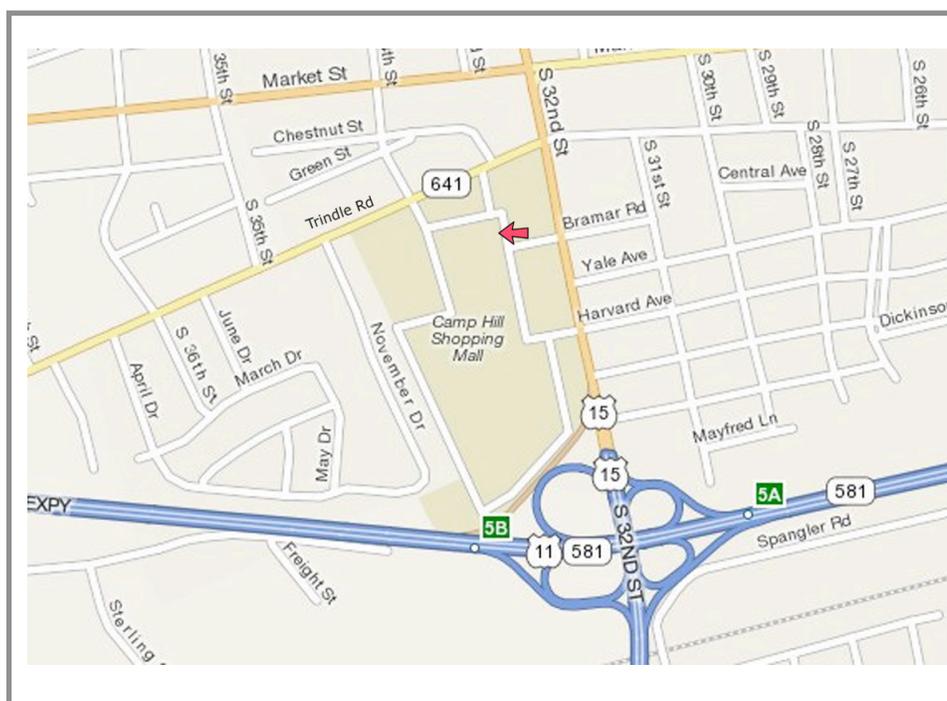
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# FunBITS: What Sets Beats Music Apart

**Rumors** are flying that Apple is lining up to purchase [Beats Electronics](#) (for background, check out [“Why Would Apple Drop \\$3.2 Billion on Beats?”](#), 9 May 2014), spurring endless speculation as to why. Beats has a number of things to offer Apple:

- A popular line of highly profitable headphones.
- The music industry connections and marketing expertise of its founders: record producer Jimmy Iovine and rapper Dr. Dre.
- A unique, if [not terribly popular](#), music streaming service.

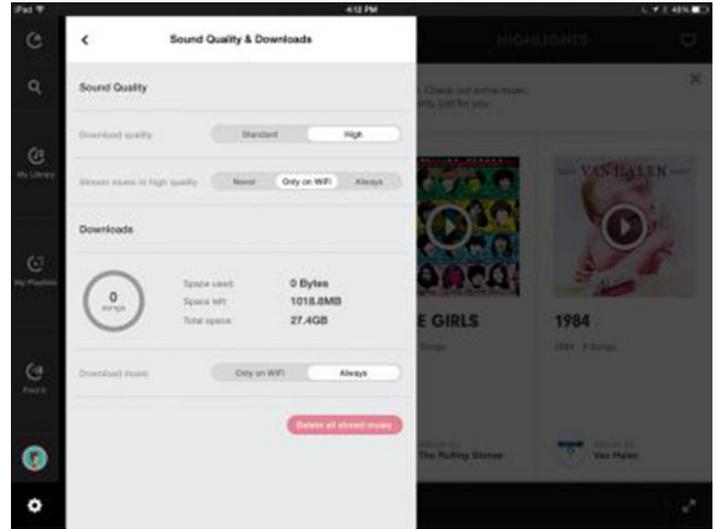
After the rumored deal was announced, I decided to take Beats Music for a spin, especially since it will likely vanish if Apple does acquire Beats.

Beats Music launched in January 2014 out of the ashes of the streaming service MOG, which Beats purchased in 2012. It shares many features with competitors like Spotify, Google Play Music (see [“FunBITS: Examining Google Play Music,”](#) 22 November 2013), and Rdio: \$9.99 per month, millions of songs, iOS apps, some sort of desktop client, playlists, social, blah, blah, blah.

Instead of boring you with all the typical music streaming things Beats Music does, I’d like to focus on the interesting things that set it apart from the competition.

**Better Quality Tracks** — When it comes to music streaming services, one big way they differ is in the bit rate — and thus the quality — of the tracks offered. For comparison, iTunes offers 256 Kbps AAC files, which are roughly equivalent to 320 Kbps MP3s. Spotify [offers up to 320 Kbps Ogg Vorbis-formatted tracks](#) to paid subscribers, but non-paying users are limited to 160 kbps Ogg Vorbis. [Google Play also offers up to 320 Kbps](#), but it’s unknown how many tracks are encoded at that bit rate. Rdio [has only up to 192 Kbps](#), though it’s [working on upgrading that to 320 Kbps AAC](#).

Almost every track on Beats Music is [a 320 Kbps MP3](#), with a “small minority” of tracks available at 256 Kbps. However, if you don’t want to burn through your mobile data cap on an iPhone, there’s an option to stream at 64 Kbps HE-AAC (High-Efficiency Advanced Audio Coding). In the iOS app, you can find that under Settings > Sound Quality & Downloads, and then set Stream High Quality Music either to Never or Only on WiFi.



I’m no audiophile, but I can notice a clear difference between Beats and the other services, even on mediocre equipment. The quality is better and more consistent than on most other services, and the difference really shows when I listen on my [Sony MDR-V6 headphones](#). (Though, admittedly, this is completely subjective.)

The other unadvertised difference I’ve noticed is that Beats doesn’t have a lot of filler tracks, like 30-second samples of unlicensed songs or dozens of amateur covers of “Royals.” Beats has “only” 20 million tracks compared to Rdio’s 25 million, but if most of those extra 5 million are junk, then I’d rather not have to sort through them.

**Close Ties With Artists** — Beats Music is unique in that it has closer ties to recording artists than the competition. Dre and Iovine brought on Nine Inch Nails frontman Trent Reznor as chief creative officer to [oversee the design of Beats Music](#).

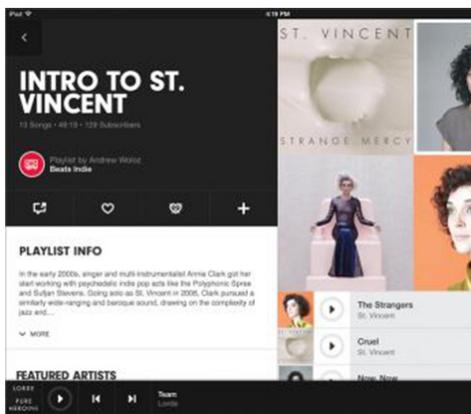
But Beats tries to also [do more for the artists themselves](#), promising higher royalties than its competitors and paying [big and indie labels equal royalty rates](#). Unfortunately, in practice, [Beats has only around 111,000 subscribers](#), meaning actual royalties paid to artists are quite low. Despite that, I appreciate that the company is trying harder to keep its artists fed than most streaming services, which [pay peanuts](#) (to be specific, Spotify pays an average of \$0.007 per play).

**The Personal Touch** — Something that has been missing from existing streaming services, and for the past several years of much mainstream terrestrial radio, is human curation. While most competing services depend on algorithms and social recommendations, Beats employees a [team of editors](#) to construct playlists and recommendations. It has

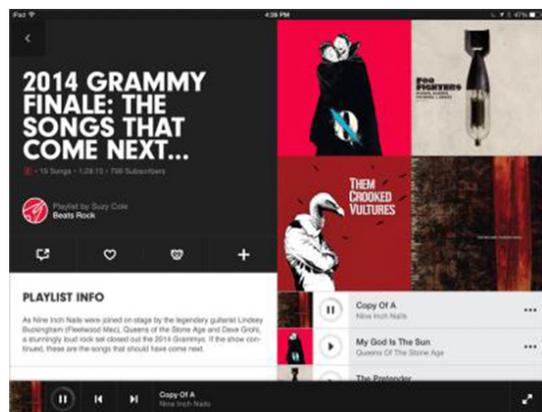
also partnered with a number of music publications to provide curated playlists.

In my opinion, this is the crown jewel of Beats Music. My problem with most streaming services is that I often don't have a clue what to listen to. Sure, they'll show me what's popular, but that's not necessarily where my tastes lie. Likewise, algorithmic recommendations tend to generate uninspiring mishmashes of songs. "Hey, we noticed that you like metal and country, so here's a playlist with Marilyn Manson, Toby Keith, Beck, and Nickelback!" Thanks, but no. I like strawberries, mustard, and eggs, but I wouldn't make a sandwich out of them.

The human touch does wonders for music discovery. One of my favorite things about Beats is that it has "Intro to" playlists for a number of artists. Let's say you've never heard St. Vincent, but want to know what she's all about — bring up the Intro to St. Vincent playlist, which features a sampling of her best and most popular tracks.



The Just for You Section presents albums and playlists Beats thinks you'll like. My tastes in music tend toward rock from the 1980s and 1990s, and that's why I've become a fan of radio veteran [Suzy Cole](#) and her Beats playlists, which dominate my recommendations. She cranks out a bunch of them, and they're all great — from Melancholy Hair Metal to Nirvana: Live. You might remember that Nine Inch Nails, Queens of the Stone Age, and Dave Grohl were brought out to close out the 2014 Grammys, but were abruptly cut off. In response, Suzy created a playlist called "2014 Grammy Finale: The Songs That Come Next," composed of tracks she thinks they would have performed if they had more time.



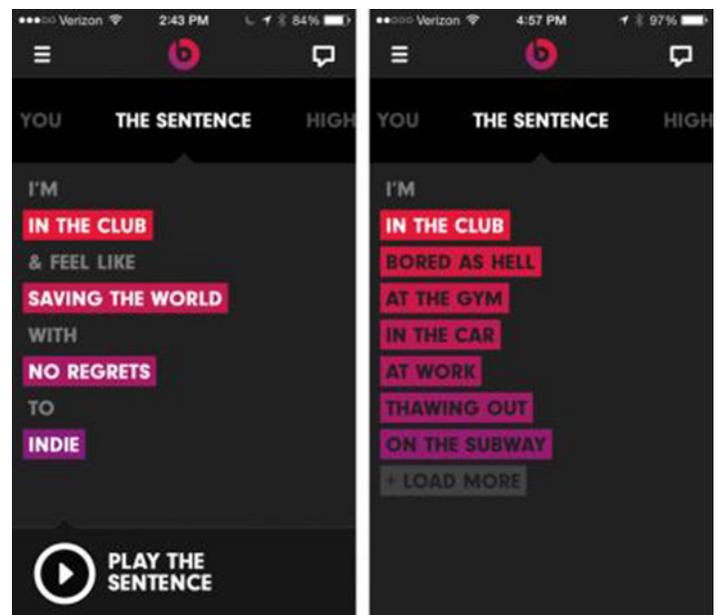
Another example of the kinds of cool things Beats does with playlists is that the editors often create playlists in response to recent events. When the surrealist artist H.R. Giger recently passed away (he was most famous for designing the creature in the Alien movies), Decibel Magazine created a playlist to memorialize him, with appropriately creepy tracks.

What I love about Beats' curation is that each playlist is based on a narrative. They feel less like random mishmashes of songs and more like magazine articles. The editors at Beats aren't tossing musical spaghetti at you, hoping it'll stick, but instead taking you on an auditory tour of discovery.

But that doesn't mean that Beats doesn't have computer-generated playlists. It just goes about them in a different way.

**The Sentence** — Perhaps the most distinctive feature of Beats Music is The Sentence, which is a unique way of constructing automated playlists.

It works like Mad Libs. You're given a sentence, "I'M [BLANK] & FEEL LIKE [BLANK] WITH [BLANK] TO [BLANK]," which you then fill in by choosing from a list of answers. So you can create sentences like "I'M [ON A ROOFTOP] & FEEL LIKE [TAKING A SELFIE] WITH [MY THOUGHTS] TO [HAIR METAL]" or "I'M [IN THE CLUB] & FEEL LIKE [SAVING THE WORLD] WITH [NO REGRETS] TO [INDIE]."



Is this a better way to make playlists? I don't know, but it is fun, and it does a good job of letting me define my mood.

**Dropping the Beats** — With so many cool features, why does Beats have so few subscribers? I have a few theories.

- It has no native desktop applications, leaving only the unsatisfactory Web interface, which has no keyboard shortcuts or The Sentence. Worse, the Web interface tends to flake out and stop playing at random.

- Beats may be popular with teenagers, but adult geeks who are more likely to be inclined (and have the credit card) to sign up for a subscription service tend to have a negative view of the Beats brand, associating it with overpriced headphones.
- Beats was late to the race, and inertia is working against it. Spotify is free on the desktop and sufficient for many people. Other services have their fans as well, and they're probably not in a hurry to give up their custom playlists and favorites for a new service.

And it's too bad, because Beats Music is an interesting product. The human curation is magical and something I wish were more prevalent. If you're looking for new tunes, I recommend signing up for the 7-day free trial. If you're an [AT&T Wireless customer](#), you're eligible for a 3-month free trial.

After giving Beats Music a thorough spin, I can see more clearly why Apple might want to buy it. It's a service that aims to bring a human element to technology, with a killer mobile interface, and deep cultural connections to music, all of which are things Apple values. 🍏

by Geoff Duncan

## White House Report Recommends Requiring Warrants for Email

In the wake of mass surveillance revelations sparked by Edward Snowden and others, back in January President Obama ordered his Council of Advisors on Science and Technology to conduct a 90-day review of policies surrounding so-called "big data" and privacy. The council has been looking into everything from marketing analytics (those ads that seem to follow psychically you around the Internet), national security, and biometrics (face and speech recognition) to encryption, data mining, health care, education, automated sensors, and the "Internet of things."

The council [issued its report last week](#), and privacy advocates have lauded one of the recommendations: reform of the 1986 Electronic Communications Privacy Act (ECPA) to "ensure the standard of protection for online, digital content is consistent with that afforded in the physical world."

Why is that important? Among other things, ECPA enables law enforcement agencies to access email if it's left unread or kept online for more than six months with just a subpoena, which needs nothing more than a signature by a government agent. Conversely, search warrants require probable cause and approval by a judge. Subpoenas are a lot easier to get than warrants.

Take a moment to consider email you may have online in Gmail, iCloud, Hotmail, Facebook, your ISP, or any number of other places that's more than six months old. Now consider that in the last six months of 2013, Google says it [received more than 7,700 warrantless requests](#) for user data covering more than 13,500 accounts. Facebook says it got [about 5,400 such requests](#) in the same period. Both companies turned over data in the vast majority of the cases.

Clearly, law enforcement agencies are making use of their ability to subpoena email and other communications without a warrant.

**How We Got Here** — Nearly three decades ago, ECPA's six-month window on accessing email without a warrant

wasn't entirely unreasonable. Ronald Reagan was president, there was no public Internet, and there were no ISPs. Heck, in 1986, my entire online storage on ARPANET (what would eventually become today's Internet) was limited to a mere 512 KB (yes, kilobytes!), and I was way ahead of the curve. Considering email messages "abandoned" after 180 days was a generous definition at the time. After all, email was the province of big business and academia, and most users quickly deleted, downloaded, or (ack!) printed messages because they didn't have space to store them.

When Congress enacted ECPA, lawmakers envisioned that if the government wanted old email they would almost certainly need a search warrant for specific locations or devices — in 1986, "devices" meant "computers." Few could imagine everyday Internet users would routinely accumulate gigabytes' and years' worth of email online.

The technology industry has been urging ECPA reform for years — a recent example is [Digital Due Process](#), a coalition supported by everybody from Twitter and Apple to Intel and AOL (which, ironically, may hold some of the oldest consumer email on the planet). The essential thrust of the argument is that users' digital content — whether on their personal devices or stored on Internet-based services — should be subject to the same legal protections as a person's property. That means the government would need a search warrant before it could requires online data of any age.

Nonetheless, Congress has stalled ECPA reform for years. And, believe it or not, some are against reforming the statute. For instance, while criminal law enforcement agencies like the FBI might be able to obtain search warrants fairly easily, civil law enforcement agencies might have more trouble. The best example is the Securities and Exchange Commission (SEC) (which is primarily a law enforcement agency, in fact), but other examples could include the Federal Communications Commission (FCC) and even the Federal Aviation Administration (FAA). Reforming ECPA could hinder these agencies' ability to go after wrongdoers.

**What Happens Now?** — The publication of the White House report on big data carries no legislative weight: it's just a document, and Congress is under no obligation to act upon it or even read it. (There is some small irony that the presidential counsel who headed up the paper — John Podesta — [co-authored ECPA](#) back in the day.) However, by adding its voice to the chorus calling for ECPA reform, the White House is at a minimum making a populist move in favor of online privacy that consumers (and voters) can easily understand. As the ramifications of the NSA mass surveillance continue to unfold, that may be smart politics.

Unfortunately, the likelihood that Congress will enact ECPA reform in the near future are slim to none. The Senate and House are now deadlocked on party lines on most major

issues, and Congress has just entered a holding pattern in anticipation of mid-term elections.

In theory, President Obama could issue an executive order mandating search warrants for disclosure of email and other electronic data. In some ways, it's a safe bet: only two executive orders have ever been overturned in the history of the U.S. presidency. However, unlike laws, executive orders can be undone at any time by the president, and who knows how the next administration will feel about ECPA?

For now, email, text messages, and other communications older than six months can be requested from Internet companies by law enforcement agencies at any time — and that's likely to remain the law of the land indefinitely. 🗑

by Geoff Duncan

## FCC Moves Ahead with Internet “Fast Lanes”

In a 3-to-2 vote along party lines, the Federal Communications Commission has decided to [proceed with a preliminary Open Internet proposal](#) that would permit ISPs to charge companies for faster access to their networks under “commercially reasonable” terms.

The proposed rules are the FCC's latest attempt to create a legally enforceable framework protecting net neutrality, wherein all lawful Internet traffic would be handled with equal, best-effort priority, regardless of origin. (See [“FCC Hopes Third Time Is the Charm for Net Neutrality Rules,”](#) 20 February 2014.) The new proposal will go through a four-month comment period, and the FCC hopes to have finalized rules in place by the end of 2014. Right now, no laws or regulations protect net neutrality principles in the United States.

Protecting net neutrality sounds good, right? Except for the seeming contradiction in the FCC proposal allowing ISPs to set up separate “paid prioritization” deals so deep-pocketed companies can get better, faster access to customers. Big companies would be able to pay to be more equal than others.

Examples might be Netflix's recent deals with [Comcast](#) and [Verizon](#) (which Netflix claims it has been [forced to make to work](#) around deliberate congestion), but anyone trying to deliver high bandwidth or low latency services to Internet subscribers might feel the pinch. Google, Facebook, Xbox Live, Amazon, Steam, Aereo, Hulu, Yahoo, PlayStation Network, security and health monitoring services... the potential list goes on and on.

FCC Chairman Tom Wheeler says the proposed rules are all about preserving net neutrality. However, in practice the proposed regulations are trying to walk a fine line

between net neutrality principles and the business concerns of American broadband providers. And while everyone seems to think net neutrality is a good idea — publicly, at least — almost everybody also seems to hope the FCC's latest effort will fail.

**Can an Open Internet Have Fast Lanes?** — Fundamentally, the idea behind net neutrality is that any Internet user should be able to access any legal content or service — using any legal device — in a non-discriminatory manner. That is, network operators shouldn't be able to block, degrade, or play favorites amongst content and services based on their own business interests or other factors. This essential equality — that traffic from multi-billion-dollar companies like Apple is treated with the same priority as a goofy snapshot from your kid sister — has been a major factor in making the Internet an economic and cultural force, not just in the United States but worldwide.

But “open” doesn't mean “free of charge.” The reality is that many parties set down serious cash to bring the Internet to consumers, including (but not limited to) Internet firms building data centers, backbone providers laying fiber and wireless links, middle-tier providers caching and distributing content, ISPs bringing copper, fiber, or wireless connections to homes, and end users who typically pay a monthly bill.

ISPs provide what's called the “last mile” of connectivity to consumers, although the largest (like Comcast, Verizon, Charter, Time Warner, CenturyLink, AT&T, etc.) also operate massive nationwide networks and have invested many millions (often many billions) of dollars building those networks. ISPs basically argue that if a service comes along and eats up a good portion of their network bandwidth — Netflix currently accounts for a whopping 34 percent of

North American Internet traffic, according to Canadian network services company Sandvine — ISPs shouldn't have to reach even deeper into their own pockets just to support that other company's business. Basically, they don't think they should be required to give that other company what they consider to be a "free lunch".

Pure network neutrality principles, on the other hand, say yes: ISPs must give companies like Netflix a "free lunch."

The FCC has worked in some wiggle room over the years. The FCC's 2010 Open Internet Order (which came after Comcast got the FCC's 2005 rules overturned) allowed for ISPs to discriminate against some traffic in the name of "reasonable network management." In other words, if an Internet service or company was degrading an ISP's network, the ISP could do something about it without getting in trouble with the FCC. However, the FCC also included a transparency requirement: ISPs had to disclose when they were blocking or degrading traffic so consumers could make informed decisions about service.

In essence, the FCC's current proposed net neutrality rules aim to strike a compromise between the two sides. ISPs must allow consumers to access any legal content or service using any legal device — the core of net neutrality — although ISPs can engage in network management so long as they're transparent about it. However, ISPs can also work out paid prioritization deals with content and service providers where it's "commercially reasonable" to do so — and they'd have to be transparent about those paid deals, too.

**Pros and Cons** — The FCC's latest net neutrality proposal does not lack for critics.

Net neutrality proponents argue that allowing ISPs to create "fast lanes" via paid prioritization means all other Internet traffic would necessarily be in a "slow lane." Moreover, once fast lanes exist, ISPs would have little to no financial incentive to upgrade their standard network performance. Letting the "slow lane" deteriorate and fail to meet consumer needs would only drive more companies to seek paid prioritization deals. There's also an innovation argument: having to pay for priority access to consumers could keep the next Amazon, Netflix, or Google from getting off the ground — and that empowers incumbents, stifles innovation, and hurts the U.S. and global economies. Some [venture capitalists are already backing away](#) from bandwidth-intensive startups due to the FCC proposal.

ISPs argue that if they aren't allowed to work out deals with content providers and services that dump extraordinary amount of data into their networks, they can't afford to support those services very well. Yes, it's ironic when nationwide ISPs and network operators plead poverty — many are quite profitable — but building out broadband networks to consumers is an expensive endeavor, and the companies have to justify that expense to banks and investors before they can even begin. Being able to generate additional revenue from data-intensive services means a

quicker return on investment, which means more broadband to more people more quickly. Just as most people agree net neutrality is a good idea, most people agree increasing broadband availability and capacity in the United States is also a good idea.

One factor complicating both perspectives is broadband competition — or, rather, the lack of it. According to data compiled by the FCC last December, fully one third of American households have only a [single choice for broadband Internet access, or no access](#) at all. If more Americans had realistic choices between broadband providers, competition could keep ISPs from engaging in predatory pricing practices and effectively holding their customers hostage.

ISPs, conversely, generally don't see a lack of competition, at least in major markets. Sure, many places might only have a single cable or DSL provider, but ISPs view competition from 3G and 4G mobile broadband services as a major threat everywhere they do business. After all, why would consumers pay for cable (or fiber, or DSL) if they're already paying for 4G Internet access on their cell phone bills?

Why are ISPs scared of mobile Internet — particularly when some of them are mobile operators themselves? Back with the 2010 Open Internet Order, the FCC explicitly excluded mobile Internet from net neutrality requirements, feeling that the emerging technology was too new to regulate. So, mobile operators can discriminate against any Internet app, content, or service they want at any time, so long as they disclose the action. The FCC's latest rule proposal also excludes mobile Internet from net neutrality requirements, although the FCC says it's open to reconsidering that.

**The Legal Foundation** — The FCC is basing its new proposed rules under authority in Section 706 of the Telecommunications Act of 1996, which gives the agency authority to regulate "advanced telecommunications capability." When Verizon got the 2010 Open Internet Order struck down at the beginning of 2014, the court noted the FCC could reformulate the rules under Section 706 authority — and that's exactly what the FCC has done. (The court also affirmed the FCC could reclassify ISPs as common carriers under Title II of the Communications Act — we'll get to that in a minute.)

Here's the thing: where the 2010 Open Internet Rules were struck down in court, Section 706 authority has survived a court challenge. Back in 2011 the FCC used Section 706 to mandate that mobile operators strike roaming deals with smaller carriers. Verizon challenged that requirement on grounds very similar to its arguments against the Open Internet Order — [and lost](#).

Does that mean net neutrality rules based on Section 706 authority are bulletproof in court? No. ISPs could make the same arguments they did with the 2010 Open Internet Order, saying that net neutrality requirements amount to

treating ISPs as common carriers without classifying them as such. Or ISPs could bide their time, pushing the envelope on what's "commercially reasonable" for paid prioritization deals, then take the FCC to court if the agency tries to declare a particular deal "unreasonable."

And what is "commercially reasonable?" Nobody really knows — and the FCC isn't spelling it out. The FCC says it would determine whether a practice is unreasonable based on a broad range of factors and the "totality of the circumstances." Legally, that's the best the FCC can do under the Section 706 authority that has been upheld in court. There would be no clear line defining what made a paid prioritization deal unreasonable, and ISPs could discriminate between (or against) customers, offering them different rates and terms so long as the deal wasn't somehow "commercially unreasonable." In other words, it would be a free-for-all until somebody stepped over an invisible line.

**What About Common Carriage?** If net neutrality advocates hate the FCC's proposed new rules so much — and ISPs aren't big fans either — why doesn't the FCC exercise its authority to reclassify ISPs as common carrier telecommunications services (like phone companies) and mandate they handle all lawful traffic without discrimination?

For one thing, it would kick up a political firestorm. Right now, the American political landscape is highly polarized, and Republicans have indicated they will vigorously oppose any effort to impose additional regulation on Internet providers. (Many are even opposed to reformulating net neutrality rules.) We'd not only have a regulatory battle over net neutrality: we'd have a political battle as well.

For another thing, ISPs argue that reclassifying their businesses as common carriers would introduce new costs and stifle their ability to create new services, since they'd have to ask for government permission in many cases. They also argue that Title II reclassification would [make them less attractive to banks and investors](#), costing jobs and hurting the economy. Although others have noted that

ISPs actually [did pretty well](#) before 2005 when they were regulated under Title II provisions, it's certain the FCC doesn't want to give ISPs any reason to reduce investments in their networks, or discourage newcomers like Google Fiber from trying to disrupt the ISP market. That's no way to improve the poor state of broadband competition in the United States. So Chairman Wheeler looks at reclassifying under Title II as a last resort — although he's quick to mention the FCC's Title II authority if this attempt to create enforceable Open Internet rules fails.

**What Can You Do?** The FCC will be [taking comments on the proposed rules until mid-September 2014](#) in two phases: in the first phase, anyone can chime in, and the second phase allows for responses to the first. The FCC will then roll through the comments — as well as input it gathers at public meetings and other sources — and decide what changes, if any, it wants to make. Public comments can lead to changes in proposed FCC rules (although they might be subtle), but it's rare for the agency to scrap proposed rules entirely and start over. However, the process is fully public — the FCC publishes all formal comments — and anyone can participate. You can also call Chairman Wheeler's office directly (1-202-418-1000), and of course contact members of your congressional delegation to express your opinions.

It's probably fair to say that the FCC's new proposed open Internet rules represent Chairman Wheeler's last, best hope to preserve the open Internet without the regulatory, judicial, and even legislative battles that would come from reclassifying ISPs as Title II telecommunications services. If only everyone would act in good faith, Wheeler hopes stakeholders can agree on a reasonable set of regulations that ensure the Internet remains an open, vibrant medium for commerce, culture, and communication, but also enable network operators to extend and enhance broadband Internet in the United States.

That seems to be what everyone wants. But it's still looking like a long, uphill battle. 🍷

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by Christopher Breen

## Mac 911

### *Slim down your SSD with symbolic links*

*Late last year you wrote about speeding up an old Mac with an SSD. I followed your advice by replacing the media drive in my MacBook Pro with an SSD, leaving the original hard drive for other things. The problem I face now is that my SSD fills up quickly. Is there a way I can better manage its storage so files are stored by default on the old hard drive rather than the SSD?*

Absolutely. There are a couple of ways you can go about this. If you find that a lot of the storage is being used by iPhoto and iTunes, you can simply shift their files over to

the old hard drive and then point the apps to look there for their resources.

For iPhoto, copy the iPhoto Library archive from youruserfolder/Pictures to the old hard drive (where you copy it isn't important). Then launch iPhoto while holding down the Option key. An iPhoto window will appear that lists any iPhoto Library archives you have as well as the path to the currently selected archive. Select the archive you moved and click Choose. (If you don't see it in the list, click Other Library, navigate to it, and click Open.) You can now delete the original iPhoto Library archive. Whenever

you work with iPhoto it will load and save images using this iPhoto Library archive.

Working with iTunes is less straightforward as you have to additionally adjust some settings within its preferences. I'll let Apple show you the way.

The other thing you might consider is moving some folders within your user folder to the old hard drive and creating symbolic links to them. The idea is that any app that wants access to folders such as Documents, Movies, Pictures, and Downloads will be directed to copies you've created on the old hard drive. This can't happen until you create links that tell the operating system "Look over there for the folders you want." Doing so requires some folder copying and the tiniest bit of Terminal work. Like so:

First, consider which folders you want to place on the old hard drive. The advantage of an SSD is that it accesses files very quickly and so you want to keep those files most often accessed on the faster drive. For this reason I'd suggest moving folders that contain large files that aren't used all that often—in my case the Pictures, Music, and Downloads folders. I would very definitely keep the hidden Library folder on the SSD as it contains lots of little files that the OS touches constantly.

Copy the folders you want to move to the old hard drive. You needn't put them in any particular place. I've created a folder at the root level of my old hard drive, named it My Home Folders, and then moved the folders into it. Now, to Terminal.

Within Terminal enter `cd` and enter the location of your home folder on the SSD drive. The easy way to do this is to type `cd`, followed by a space, and then drag your home folder into the Terminal window. Press Return and Terminal will list the name of your home folder followed by a prompt—`chris$`, in my case).

Now type `sudo rm -rf`, a space, and then the name of the folder you want to delete. So, to delete the Downloads folder you'd enter `rm -rf Downloads` and then press Return. Enter your password when prompted, press Return again, and the folder will be deleted. Repeat this for each folder you wish to delete (again, after making sure that you've made copies on the old hard drive).

You must now create links to the folders you moved to your hard drive. You can do this by typing `ln -s`, entering a space, and then dragging in the folder on your old hard drive that you want to create the link to. In our example I would type `ln -s` and then drag into the Terminal window the Downloads folder from the My Home Folders folder I created on my old hard drive. When I press Return the link to the folder is created within the home folder on the SSD.

Worth noting is that when you delete those folders from the SSD's home folder they'll also disappear from Finder windows' sidebars. You can put them back (minus the custom icon, which you also lose) by navigating to the original folders on the old hard drive and dragging those

copies into the sidebar. (If you drag the links from the SSD's home folder into the sidebar the links will simply disappear from the home folder.)

### *How to sync bookmarks with two iCloud accounts*

*Reader Shannon Riley believes two iCloud accounts are better than one. He writes:*

*I've set up two iCloud accounts on the iPad Air that my girlfriend and I share—one for her iCloud ID and another for mine. The problem is that I see only my account's bookmarks in Safari. What do I need to do to have her bookmarks appear as well?*

If, on the iPad, you travel to Settings > Mail, Contacts, Calendars and take a long look at those two iCloud entries, you'll find that one has more options listed in fine print beneath it than the other. Specifically, one will list Mail, Contacts, Calendars, Reminders, Safari, Notes, Keychain, Photos, Documents & Data, and Find My iPad. The other includes just Mail, Contacts, Calendars, Reminders, and Notes.

Why? Tap on the second account and in just-as-fine-print you'll see the words "Only your main account can use Bookmarks, Photo Stream, Documents & Data, Backup, and Find My iPad."

And—asking myself yet another question—what makes one account "main" and the other less so? The main account is the first one you created. Regrettably there's no option for designating one as main and the other secondary after you've set them up. In order to change the status of their dominance you must delete both accounts on the iPad and create them again, with the main account created first (so no, deleting the main account will not add these missing options to the once-secondary account).

Now, about those bookmarks. While the answer may not thrill you, I'd suggest you go about it this way: On the computer your girlfriend uses, either you or your girlfriend launch Safari, and choose Bookmarks > Add Bookmarks Folder. This will cause Safari's Bookmarks pane to appear. To this folder add all the bookmarks that your partner would like to use on the iPad. (If it helps with organization, you can create folders within this folder and then organize bookmarks by subject or theme.) Once you've added all the bookmarks desired and you've organized them to your liking, drag the folder to the desktop. It will appear there in its foldered form, complete with any bookmarks and folders you've added to it.

Transfer this folder to the Mac or account that the iPad's main iCloud account syncs with. Add it to Safari on that Mac (I'd put it in the Favorites bar). As long as you've configured the Mac to sync bookmarks via iCloud, it shouldn't be too long before that folder full of bookmarks appears in Safari on the iPad. Once it does, your girlfriend can access her bookmarks simply by tapping on that folder in the Favorites bar within the iPad's copy of Safari.

*Create a reminder on your Mac in an instant*

Reader Robin Lee wants a bit more convenience from the Finder. She writes:

*I'm accustomed to creating quick reminders on my iPhone by using Siri. Obviously Siri isn't on my Mac but is there an easy way to quickly create a reminder without having to launch the Reminders app?*

My colleague Kirk McElhearn covered something like this in *Create Reminders When You Aren't in Reminders*, where the key to success was Automator. I too have an Automator solution, but one that requires a single action.

Launch Automator and in the workflow template that appears, choose Service. At the top of the workflow configure the popup menus to read Service receives no input in any application. Select the Calendar library in the left-most pane and from the Actions pane to the right drag the New Reminders Item into the workflow area. Click on Options in the action and enable Show this action when the workflow runs. Save and name your workflow—Quick Reminder has a nice ring to it.

Launch System Preferences, select Keyboard, click on the Shortcuts tab, and choose Services in the pane on the left

side of the window. Locate your Quick Reminder entry near the bottom of the list of services, click to the right of its name, and enter a keyboard shortcut—I've used Command-Control-R.

Now when you want to create a new reminder without opening the app of nearly-the-same name, just press this keyboard shortcut. A New Reminders Item window will appear that contains Title, Add to, Priority, and Due date entries. Fill out the reminder in a way that makes sense to you (you can add an alarm if you've enabled the Due date option) and click the Continue button. The reminder will be added to the Reminders app.

[Macworld Senior Editor Christopher Breen is the author of "Secrets of the iPod and iTunes (6th edition)," and "The iPod and iTunes Pocket Guide(4th edition)" both from Peachpit Press and "Mac OS X 10.5 Leopard Essential Training (video)" from lynda.com

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## June Software Review

### Hider 2 Promises File Privacy for the Masses

by Nick Mediati

When it comes to encrypting files on OS X to keep them safe from prying eyes, you have a couple of built-in options. You could use FileVault 2, but that's more to protect your data in case of theft, since it unlocks the data as soon as you log in. What if you want to keep some files private from a spouse, roommate, or child whom you allow to use your Mac and account?

The historical solution is to create an encrypted disk image and store the files on it so only those with the password can mount the disk image and read the files, but that gets messy. While the process itself isn't too difficult, it's not something I'd expect my non-tech-savvy mother to master. After all, the concept of a disk image isn't entirely obvious. ("Let me get this straight, dear. It looks and acts like a disk... but it isn't a disk?") Besides, you'll probably end up with a collection of encrypted disk images scattered haphazardly around your disk.

MacPaw's **Hider 2** (\$19.99) takes a different approach. Instead of relying on an encrypted disk image, it stores all your encrypted files in an encrypted "vault," and lets you organize and group them within the vault as you please. The vault is a hidden folder containing encrypted files; "hiding" a file with Hider essentially copies it to the vault and securely deletes the file from its original location.

[Editor's Note: As of Hider 2.0.3, the delete is only a single-pass deletion, as discussed in the comments. MacPaw plans to add a more sophisticated approach to preventing data retrieval in a future update. We apologize for any confusion. -Adam]

Hider is best thought of as a fireproof safe for your important files and information — complete with a safe-themed login screen. The combination lock wheel even rotates as you enter your Hider password, as though you were trying to unlock a physical safe. Although over-the-top skeuomorphism can get in the way, this little touch doesn't detract from Hider's usability. It isn't particularly functional, but it gives you a clear sense of the app's purpose, and makes Hider more approachable. It sends the message, "Hey, you can trust me with your important stuff," and it is, dare I say, kind of fun.



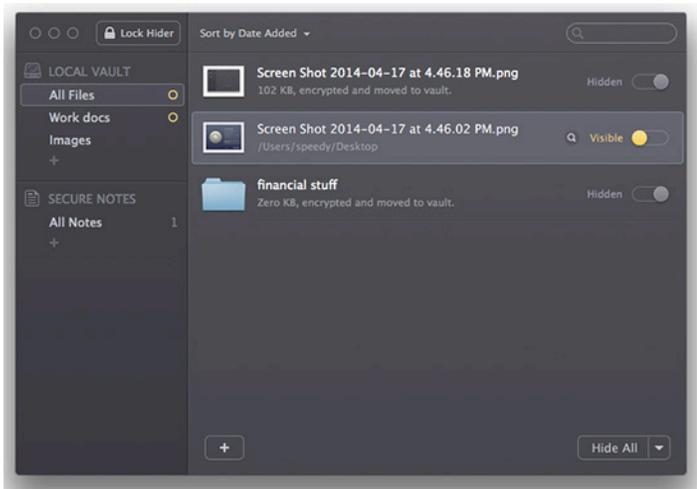
Adding a file to your encrypted Hider vault is as simple as dragging it into the Hider window, although Hider is over-sensitive about whether documents may still be open — every time you hide a file that you have previously opened and whose app is running, you're prompted to verify that the document is not currently open. Although you can disable these warnings, Hider should be smarter about identifying open documents. You can also click the + button in the lower left corner of the vault pane to choose files from a dialog.

When you hide a file or folder, Hider copies it to your vault then encrypts it using the [AES-256 encryption standard](#), and then securely erases the original on the drive so no one can recover it later. When you make the file or folder visible again, Hider decrypts it and copies it back to its original location.

MacPaw says that Hider always maintains one instance of every file — either encrypted or decrypted — at all times so there's no worry about data being lost in transit. As the saying about putting all your eggs in one basket goes, don't worry, since you can back up Hider's vault. Just be careful to back up your user account's Library folder. The vault itself is located in a hidden folder deep within `~/Library/Containers/com.macpaw.Hider2`.

Your password should be strong and memorable, and although you can back it up in Mac OS X's keychain, anyone who knows your keychain password (which is usually your login password) will then have full access to your Hider vault.

The main Hider window uses a familiar two-column view with a source list along the left and the main content pane — which lists your files — to the right.



In the source list, click the + button to create groups that contain files. The groups are more like Finder folders than iTunes playlists in that a file can exist in only one group.

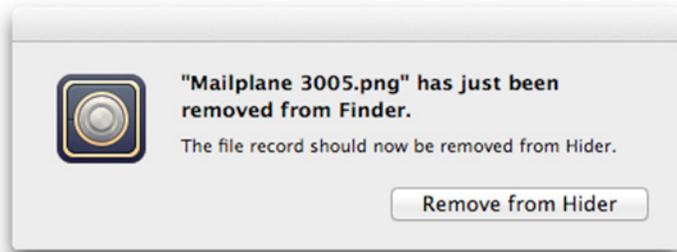
MacPaw says this was a conscious design decision and that the company sees it as a more convenient approach to file management, but I'd like to see the app give you the option of using the more flexible playlist-like organization mechanism in a future version.

When you try to hide a file or folder from an external drive, Hider alerts you that it must create a vault on that drive and asks you to grant access. Additional vaults appear in Hider's sidebar, but only when the associated drive is mounted. It would be better if those files remained visible within Hider's interface and Hider attempted to mount the external drive, prompting you to attach if it necessary. Vaults on external drives aren't hidden away as they are on your main drive; they're just normal packages at the top level of the drive.



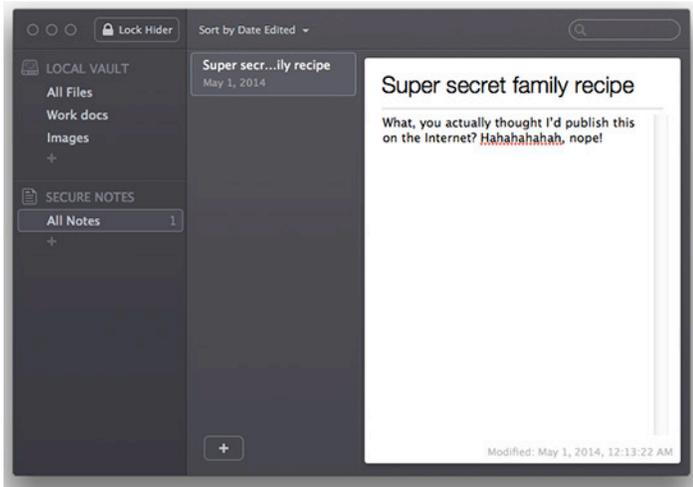
Although Hider's vault displays a list of your hidden files, you can't open a file from within Hider. Instead, you must unhide it, and then open it from the Finder. The same goes for folders that you add to your Hider vault. I'd like to see Hider handle this more smoothly — perhaps have the app automatically unhide and open a file when you double-click it? (Double-clicking a file in Hider currently does nothing.) This small change would make using Hider that much smoother and more seamless. In the meantime, Hider can optionally reveal a file in the Finder when you unhide it, and you can click the magnifying glass next to a visible file's name in Hider to view that file in the Finder.

Unhiding and opening files may be a little clumsy, but what if you want to edit the file once you make it visible? That's more problematic, since Hider is essentially juggling two copies of the file: the encrypted copy within the vault and the unencrypted copy in the Finder. If you make a change to the unencrypted copy and save, Hider notices and displays a confusing dialog; in essence, it's saying that you have to hide the file (add it to the vault) manually again. I'd like to see Hider at least offer the user the option of re-hiding the file automatically.

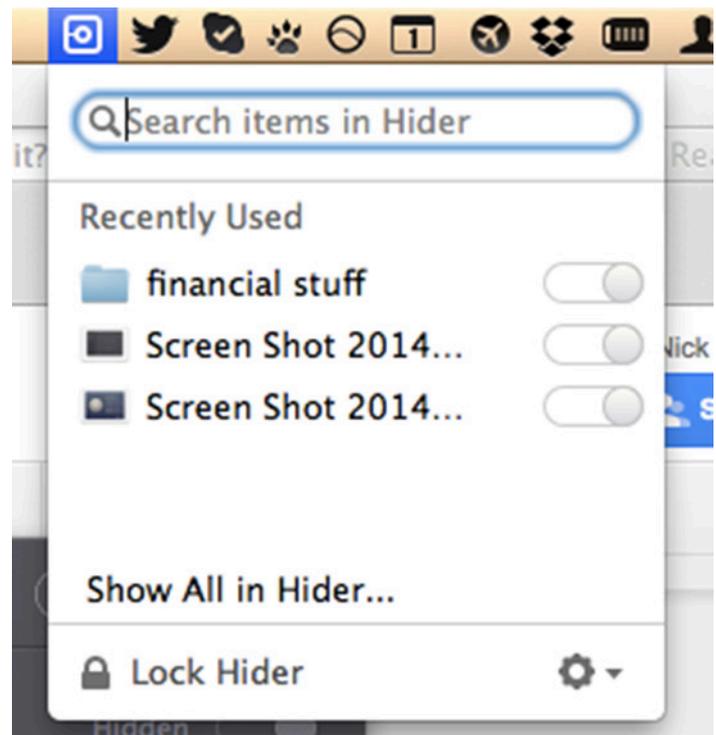


In addition to files, you can also store secure notes within Hider's vault. These notes can be just about anything: Swiss bank account numbers, phone numbers for your undercover sources, incriminating email messages, or even the selfies the White House doesn't want leaked to the press (though the images don't scale to fit the window nicely). You can save as many of these as you like, and you can organize them into groups, just as you can with files.

Hider's secure notes work as advertised, but they are stuck in Hider. You can't export them or turn them into files in the Finder; all you can do is copy and paste them into a separate document.



Hider includes a couple of ways to access its features quickly. First, a pair of global keyboard shortcuts let you lock Hider or hide all visible items. Press Command-Control-H to hide all visible files; Command-Control-L locks Hider. Second, a menu bar item provides fast access to existing vault files without opening Hider, although you must still enter your password if Hider is locked (which can happen automatically after a specified amount of time).



The menu bar item is turned off by default, but you can easily switch it on in Hider's Preferences window. However, while you can hide and unhide files already stored in your Hider vault through the menu bar icon, it doesn't allow you to add anything to the vault — you must still open Hider's main window for that. Also, you can't view secure notes via the menu bar assistant, though that makes sense, since it would become unwieldy if it took on too much functionality.

Although I didn't encounter any noteworthy problems with Hider in the time I've used it, some App Store reviewers report losing data.

According to MacPaw, data loss resulted from two issues, one of which was a custom permissions problem that was fixed in the Hider 2.0.2 update. The other is an underlying issue with the way Hider stores large amounts of data: MacPaw says it has "partially fixed" this problem in Hider 2, but that it's working to further improve its data storage system. You might not want to put gigabytes of data into Hider just yet, but as long as you have a good versioned backup, you should be able to recover Hider's vault at previous points in time, before any corruption occurred.

In all, though, Hider 2 seems to be a polished, solid encryption tool for those who want to keep some files confidential without messing around with encrypted disk images. Hider is simple enough to understand and use, but I'd love to see MacPaw address the rough edges surrounding unhiding files, editing files, and working with external disks in a future update. 🗑️