

# printout

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



## It's summer break time

Meet us at

**Bethany Village Retirement Center**

Education Room

5225 Wilson Lane, Mechanicsburg, PA 17055

**Tuesday, September 15, 2015 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 © 2015, Keystone MacCentral, 310 Somerset Drive, Shiresmanstown, PA 17011.

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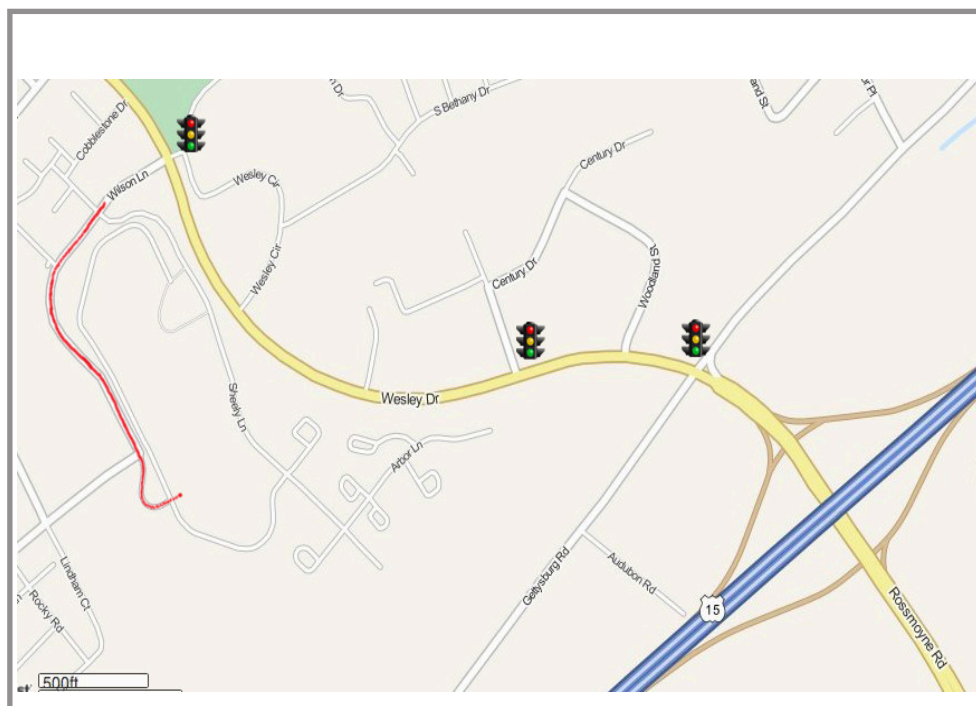
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# More Problems with iCloud Photo Library Uploads

The largely opaque combination of Photos and iCloud Photo Library is out of control. I can't guarantee these issues will apply to everyone, but consider yourself warned.

I recently wrote about how enabling iCloud Photo Library causes Photos to monopolize your Internet connection as it uploads your photos to iCloud, and I offered a way to mitigate the annoyance (see "[How to Throttle iCloud Photo Library Uploads](#)," 20 May 2015). It took over a week for my 27,000+ photos to upload, and that's using an Internet connection with 5 Mbps of upstream bandwidth, throttled to 3.5 Mbps.

Luckily, unlike many people, I don't have a data cap for my Time Warner Internet connection, so at least that wasn't a problem for me, as it might be for you. Where I did run into trouble is with my iPhone, on which I'm using the Optimize iPhone Storage option to reduce the amount of data transferred and stored. Tonya, Tristan, and I now share 2 GB of data on our family plan, and before last month, we had never come close to using that much, since we're still accustomed to having only 250 MB each. So you can imagine my surprise shortly after I enabled iCloud Photo Library when AT&T texted me to say that I was approaching my 2 GB limit. I looked through the cellular data usage screen in Settings > Cellular, and pored over the app-specific information in [Dataman Pro](#), but all I was able to determine was that lots of data had been used in the Documents & Sync category of System Services.

There are no settings to prevent iCloud Photo Library from working over cellular, and while I disabled cellular data for the Photos app, that made no difference. I could turn off cellular data in general (and I did once or twice, but that's a hard thing to remember every time you leave the house), but by the end of the billing period, AT&T had hit me with \$30 of overage charges for two \$15 blocks of 1 GB of additional data.

This is shockingly poor design on Apple's part, and I hope to see it fixed in iOS 9. The entire point of iCloud Photo Library is to transfer huge quantities of image data, and it's disrespectful for Apple not to provide a switch to prevent iCloud Photo Library from chewing through cellular data.

Nevertheless, I wrote the \$30 off as a one-time expense, figuring it would never happen again. But there is some concern that iCloud Photo Library could be a recurring expense, not to mention the time babysitting iCloud Photo Library uploads. Here's why.

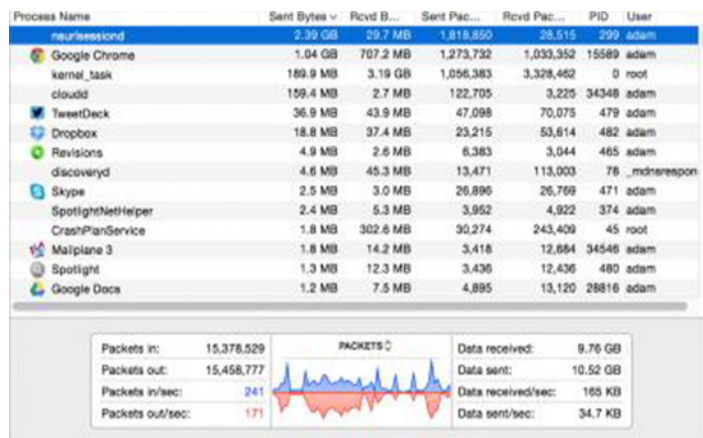
A question was recently posed on the discussion page for the iCloud chapter of Jason Snell's massively popular "[Photos for Mac: A Take Control Crash Course](#)," asking if

repairing the Photos library (by holding down Command-Option at launch) would force everything to be uploaded to iCloud Photo Library again.

I couldn't imagine that this would be the case, and said so initially in my reply while I was waiting for my test repair to finish. And when I looked at the iCloud pane of Photos' preferences window at first, there was no notable activity. A few minutes later, though, I looked back, and it said that it was uploading 27,552 items. Not good. However, some apps, like CrashPlan, report that they're doing more than they are, because they're actually analyzing the data, not uploading, and they eventually realize that no new data needs to be uploaded; I hoped briefly that this was the case here too.

Unfortunately, when I looked at the Network view in Activity Monitor, the nsurlsessiond process had clearly started sending a large quantity of data. And some spelunking in Console revealed this log entry:

6/19/15 11:06:56.470 AM cloudphotosd[29598]: Reset Sync Requested! Reason: Database was rebuilt



Although I was initially concerned that Photos would upload my entire library again, and that iCloud Photo Library would download it all to my iPhone again, potentially incurring additional overage charges, it appears now that the situation isn't that worrisome.

Over the course of several days, Photos counted down from the initial 27,552 items to upload. It did impact my Internet performance until I enabled Network Link Conditioner to throttle it, but even so, the upload process worked much faster than the initial seeding to iCloud Photo Library. In the end, the nsurlsessiond process sent 7.67 GB of data, and another process called cloudd also uploaded several gigabytes that might have been related, but that's nothing compared to the 111 GB size of my full



Photos library. Even better, as far as I can tell, my iPhone hasn't had to download any notable amount of data again. Hopefully, others will share my experience.

However, Spotlight (in the form of the mds process) has been going nuts on my Mac for many hours after the upload. There's no way to know exactly what it's doing, but a commenter on this article also noted that Photos uploaded a lot of data to iCloud Photo Library after he restored his Mac from a Time Machine backup. Spotlight indexing data

isn't backed up by Time Machine, so that points to iCloud Photo Library relying on Spotlight in some core fashion.

Regardless of what's happening behind the scenes, the takeaway message is that certain actions, like repairing a Photos library or restoring from backup, can trigger a significant, if not complete, iCloud Photo Library upload. Those actions often aren't optional, but beware that they have additional consequences when iCloud Photo Library is enabled. 🍷

by Randy B. Singer

## Scary Internet Scam Becoming Disturbingly Common

The mainstream technology press has claimed that there will be lots of viruses for the Macintosh "real soon now," ever since OS X was released over a decade ago. Combined with the fact that there are a seemingly infinite number of viruses for Windows, it's easy to see why Mac users would be somewhat paranoid about the possibility of malware.

While the legions of Mac viruses still haven't appeared, there is a nasty out there that takes advantage of this paranoia. It isn't a virus, a Trojan Horse, or any other sort of actual malware. Instead, it's more like a phishing scam, using social engineering to get you to do something that the bad guys want you to do. It does it by scaring the willies out of you, and is becoming disturbingly common. Some call it "scareware" or "ransomware."

What happens is that you visit a Web site and seemingly have your browser maliciously frozen. You'll find that you can't quit, nor can you navigate away from the page by clicking the Back button.

Next, a page or pop-up appears telling you any of a number of stories (often tailored to your location), perhaps that your Mac has a problem or has illegal material on it, or that your data has been encrypted by some malevolent entity.

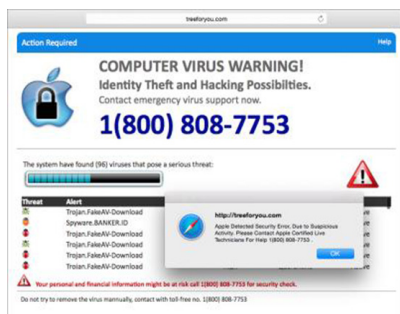
Many of these pop-ups give a phone number to call, often claiming it's for "tech support" or "the FBI." If you call the phone number, the people you talk to will ask you to allow them to connect to your computer via remote control software. It's likely that during this connection they will install spyware on your computer.

Alternatively, the pop-up may give instructions on how to send ransom money to the people who are responsible for causing your browser to freeze, along with a promise that they will unfreeze your browser and/or decrypt your data once they receive the ransom. (Although there are several pieces of malware for Windows — CryptoLocker and CryptoWall, notably — that actually do encrypt user data and decrypt it only after the user has paid a ransom in Bitcoin, none of these target Macs.)



First off, it's important to know that if you encounter this scary situation, your Mac hasn't really been infected with a virus or any other sort of malware and that your data hasn't been harmed. You should never call the given phone number and you should especially never ever give the people at the given phone number remote control access to your Mac. Also, never pay any ransom requested. You can deal with this situation easily on your own, and it's likely that if you give the bad guys remote control access to your Mac, they will do something nasty like infect it with spyware and/or steal valuable data.

If these dire-sounding warnings aren't the work of malware, what are they? What's actually happening is that a Web site — possibly an entirely innocent Web site that has been hacked, or that is displaying ads from a compromised ad

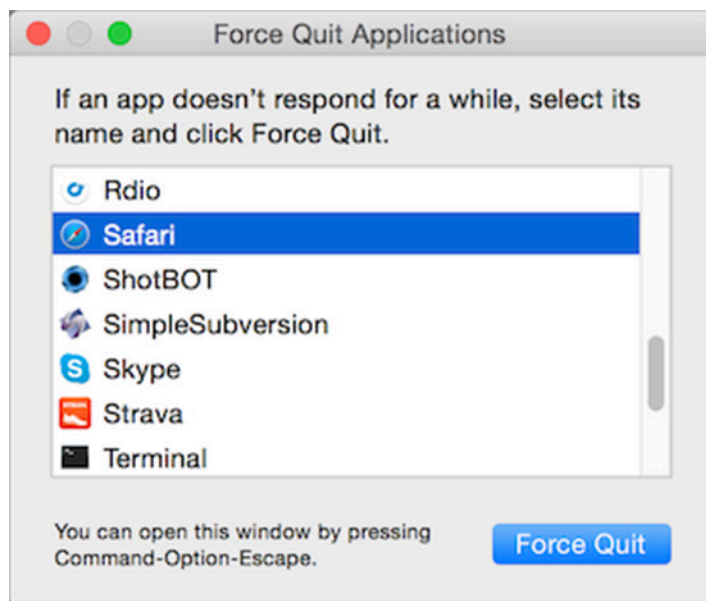


network — has been infected with a bit of JavaScript. That JavaScript prevents you from quitting the browser or using the Back button, and displays the page or dialog you see — it's not all that different from a pop-up advertisement, and by itself doesn't do anything actually harmful. It's just a phishing scam in that the bad guys are trying to use social engineering (scaring you) to get you to do something foolish (call the phone number in order to take advantage of you, or get you to send them money). Hence the "scareware" and "ransomware" names — I'll stick to calling it all scareware from now on.

Luckily, it's simple to escape from this scareware JavaScript trap. The easiest thing to do is to force-quit your Web browser. There are two main ways of doing this:

- Choose Force Quit from the Apple menu or press its shortcut, Command-Option-Escape.
- Control-Option-click on the Web browser's icon in the Dock, and choose Force Quit.

Unfortunately, I've found that scareware JavaScript often prevents the use of Command-Option-Escape, and the Apple menu sometimes isn't accessible from within your trapped browser. Either use the second approach, or switch to any other app. You can then choose Force Quit from the Apple menu, select your browser in the Force Quit Applications dialog, and click the Force Quit button.



You aren't quite done yet. Many browsers can be set to reload the previously displayed Web pages when they next launch, which could put you right back where you started. To prevent this in Safari, press the Shift key before clicking the Safari icon in the Dock or double-clicking the Safari icon in the Applications folder. In Firefox, hold down Option to launch it in Safe Mode, and then click Refresh Firefox in the Firefox Safe Mode dialog. In Chrome, before you force-quit, click the hamburger button to the right of the address field, choose Settings, and in the On Startup section of the Settings page, select "Open the New Tab

page." (Or, if you want to get fancy, try this [AppleScript trick](#) for opening Chrome in Incognito mode).

So, you are probably wondering at this point if there is a way to avoid scareware proactively. You could theoretically turn off JavaScript, but since most modern Web sites rely on JavaScript, that's not an acceptable solution. Since scareware isn't malware or advertising, anti-virus software won't help, nor will ad-blocking utilities. However, there is an extension that will block it for Safari: the free [ScamZapper](#).

ScamZapper automatically identifies instances of scareware and prevents them from loading. If you encounter a particular example that isn't in its database, ScamZapper has a feature called Troubleshoot Pop-up that takes you through a series of automated troubleshooting steps.

More generally, the real solution to the scareware problem has to come from Web browser makers. Luckily, they are working on it. Recent updates to Safari are supposed to prevent impossible-to-dismiss JavaScript alerts (see "[Safari 8.0.7, 7.1.7, and 6.2.7](#)," 30 June 2015). Even better, Google has developed [Safe Browsing](#) technology that puts up a warning when you attempt to visit Web sites that are known to be infected with scareware JavaScript, phishing sites, and sites that host other malicious content. Safe Browsing is in Google Chrome, as you'd expect, but it's also a public API that Apple and Mozilla have built into Safari and Firefox.

Google constantly pushes out updates to their warning list. As you would expect, Google continually scans its index for sites that might be compromised by malware, and uses statistical methods to identify potential phishing sites, but you can also report scareware sites manually. The company says that reported sites are checked, and if necessary, [added to the list within 30 minutes](#).

Those manual reports are key. If users diligently report sites that contain scareware, it shouldn't take long for any particular site to be neutralized. So, if you encounter a Web site that contains scareware, [please report the site](#)!

When reporting to Google, note that the Web address of the infected Web site isn't the one that's shown when your browser appears to be frozen. That's a spoofed address. Instead, it's the Web address of the Web site that you were trying to access just prior to encountering the scareware.

I hope that you now know enough not to be scared by scareware, and can thus both deny the bad guys any ill-gotten gains and help prevent others from encountering the same sites you hit. 🍷

# 11 Stupid Backup Strategies

Last month when Adam, Tonya, and I attended the ASMC (Apple Specialists Marketing Corporation) [Spring Conference](#) in San Francisco, one of the special activities was a field trip to the [DriveSavers](#) headquarters in Novato. DriveSavers is a data recovery company — they're the ones you call when you lose critical data from a hard drive or SSD and don't have a backup. They can disassemble your drive in a clean room, perform the electronic equivalent of brain surgery on it, and in most cases, recover your crucial missing data. (For more on DriveSavers, read Jeff Carlson's article "[DriveSavers to the Rescue](#)," 30 August 1999.) Needless to say, these recovery services come at a cost, but in truly critical situations, you can't put a price on this sort of magic.

The DriveSavers facility was a geek paradise. The only time I've seen anything close to that amount of high-tech gear in one place was when I visited CERN's [Large Hadron Collider](#) in Geneva. I loved learning about every part of the data recovery process. From a technical point of view, it was utterly fascinating. It was also eye-opening to hear about some of the high-profile customers DriveSavers had helped. The walls were covered with autographed photos of celebrities for whom the company had recovered data (including, somewhat ironically, Brent Spiner, who played [Data](#) on "Star Trek: The Next Generation").

All throughout the tour, I had two conflicting feelings. One was: "Wow, it would be so cool to work here!" The other was: "My mission is to put them out of business!"

I say this, of course, not out of any malice toward the fine folks at DriveSavers, but because I've been beating the backups drum for years, and if everyone had adequate backups, one of the main reasons for DriveSavers' existence would disappear. (The company would be fine, in fact, because they also do lots of work for law enforcement and government agencies, and deal with plenty of situations in which backups wouldn't have been a factor.)

In my new book, "[Backing Up Your Mac: A Joe On Tech Guide](#)," I lay out a backup strategy that aims to be, shall we say, highly bullet-resistant. There are no guarantees when it comes to computers, and as Robert Heinlein once said, "It is impossible to make anything foolproof, because fools are so ingenious." That qualification aside, the system I use personally and explain in my book offers Mac users a simple way to achieve peace of mind. As I often say, even if a meteorite destroyed my house and all my equipment (while I wasn't at home, obviously), I have 100 percent confidence that I would lose absolutely no important data. (Nuclear war, a zombie apocalypse, or an asteroid strike might be too much, but then I'd have bigger things to worry about anyway.)

As I talk to people about my book, I frequently hear responses along the lines of, "Well, here's what I do to back up my Mac. What do you think of my system?" More often than not, I don't say what I think, which is "Wow, that is one of the stupidest strategies I've ever heard of."

The fact that your backup strategy is stupid does not imply that you are stupid. It only means you may not have given careful thought to what disasters could harm your data (theft, fire, hurricane, malware, software bugs, user error, and so on) or exactly what steps you would take if something did go wrong. I don't want you to have stupid backups; I want you to have such excellent backups that you're justifiably confident of being able to recover from any sort of data loss. In that spirit, here are 10 — wait, make that 11! — stupid backup strategies I urge you to avoid.

**1. Having no backups at all.** -- According to a recent [post on the Backblaze blog](#), an annual survey found that only 8 percent of respondents back up their computers every day (a figure that, worryingly, has dropped over the past couple of years), whereas 16 percent back up less frequently than once a year, and 25 percent never back up at all.

Doing nothing is of course the worst way to approach backups. You're trusting that everything will work perfectly no matter what you do (or what someone else does), and that's too much to ask of a computer. You will lose data at some point. Something is always better than nothing when it comes to backups.

**2. Depending on data recovery apps or services.** -- If you accidentally delete a file on your Mac, you might be able to undelete it using any of numerous data recovery apps. If that fails (as it would if the drive is electronically or mechanically damaged), a company like DriveSavers may be able to rescue your data. But assuming you'll be able to use one of these approaches if disaster occurs is unwise. Sometimes they fail, and if the cause of data loss is theft (or, you know, a meteorite that pulverized your Mac), there's no disk to work with anyway.

This might be an appropriate time to mention that if you work for a company that makes data recovery software, you can stop pitching me about reviewing it. I'm all about prevention, and I think my readers' money is far better spent on backups than on recovery tools.

**3. Wishful thinking.** -- A couple of weeks ago, a novelist acquaintance of mine complained on Facebook about having lost three scenes from a novel revision because she accidentally deleted the document. A friend helpfully suggested that, since she's a Mac user, she could retrieve the document using Time Machine. But no, she replied, she



never actually saved or even named the document, so there was nothing for Time Machine to back up.

Head. Desk.

It's true that some apps autosave your work, giving you a way to pick up where you left off even if you never name a new document. (BBEdit, which I'm using to write this article, is one such app.) But not all apps function this way, and even when they do, there are ways in which users might accidentally delete the autosaved files. Pretty much all backup systems assume users will take at least the basic, obvious step of naming their files and saving them once (after which regular autosaves often kick in, storing additional versions automatically).

**4. Doing manual backups.** -- I know people who back up their Macs (or at least, a subset of their files) occasionally — whenever it occurs to them — either by making a clone or by manually copying files to another drive. Well, as I said, something is better than nothing, but in my experience, the day you forget to back up something manually (or run out of time) is the day you lose data. Having backups run automatically is a far superior idea.

**5. Using *only* Time Machine.** -- I think it's fantastic that Time Machine exists, and is built into OS X. Apple was absolutely right to make backups as simple and convenient as possible (not to mention free). And, to be sure, using Time Machine is way better than nothing at all.

But I've had too many troubling experiences with Time Machine (and have heard about countless more) to rely on it as my sole backup software. For example, as I wrote in my Joe On Tech article [Why I Don't Rely on Time Machine](#), in the last month my wife and I both encountered unrecoverable Time Machine errors that required us to erase our backup drives and start over from scratch. The disks themselves were fine, but the backup data wasn't, and not even fancy disk-repair software could fix the problem. Time Machine might function perfectly for years, only to choke randomly like this. So although Time Machine is convenient (and totally fine as an additional backup), I wouldn't feel comfortable using or recommending it exclusively.

There's another downside about Time Machine, too, which is that if your entire disk dies, your only option is to reformat or replace the disk and then restore the whole thing from your backup — a process that can take many, many hours. During that time, you won't be able to use your Mac for anything else, which is why I strongly recommend a bootable duplicate (or "clone") as part of your backup plan. But that brings me to the next problem...

**6. Using *only* clones for backup.** -- Clones are great. They let you get back to work almost instantly if anything goes wrong (just reboot while holding down Option and select the clone). They also give you a way to downgrade to your previous version of OS X, should anything go wrong when upgrading to a new version. (By the way, if you're not giving your clones names like Sarah, Alison, Cosima, and Helena, you're Doing It Wrong.)

One problem with using only clones for backup is that they don't necessarily give you a way to retrieve accidentally deleted files, or earlier versions of files, if you discover you need them only after updating your clone. (Some cloning software does let you archive such items, but you have to know what you're doing.) Another problem is that if your clone is stored with your Mac, then anything that happens to the Mac (tornado, burglar, etc.) can also take out your only backup. This, in turn, leads us to...

**7. Having no offsite backups.** -- You know that metaphorical meteorite I keep going on about? It might take out my house in California, but it almost certainly won't also take out CrashPlan's data center in Minnesota, or any of several other places I store my data. Same goes for data loss due to thieves, burst pipes, or a fire, all of which are far more likely than meteorites. If your only backups are stored locally, your data is protected against only a limited subset of dangers. You can address this by making extra backups that you store at a friend's house, in a safe deposit box, or another safe location; or you can use a cloud service such as [CrashPlan](#), [Backblaze](#), or [DollyDrive](#). But however you do it, make sure you have an offsite copy of your data.

However, the reverse is also true...

**8. Having *only* online backups.** -- Online backups are great for many things, but if you should ever have to restore more than a few gigabytes from online storage (let alone an entire disk), you'll be in for a long wait, because you'll be constrained by your Internet provider's bandwidth. You may also run into data caps that prevent you from downloading all your backed-up data in a single month. Faced with such a problem, you might be able to pay the backup provider to send your data on a hard drive. But while you're waiting for your data to download (or for the FedEx truck to arrive), you won't have access to your data. Personally, I'd have a real problem with all that downtime, which is why local backups are part of the mix for me. (Of course, if you want to boot from a clone, it must be on a local hard drive.)

The next two stupid strategies are also related to online backups.

**9. Relying solely on Dropbox (or similar services).** -- Dropbox is wonderful; I use it every day to store files in the cloud and sync them across my devices. Many other cloud storage services (such as iCloud Drive, Box, Amazon Cloud Drive, Google Drive, and Microsoft OneDrive) offer roughly comparable features. And most of these even offer a limited, primitive, backup-like feature: the capability to restore older versions of files or deleted files — at least if they're less than a month old.

That's all good, and in fact, using a service like Dropbox can make data restoration quicker and easier in some situations. But because you can't count on these services to store all the data on your Mac, to keep it indefinitely, or to

make it easy to recover a lot of data at once, they're no substitute for proper backups.

**10. Assuming Web apps don't need backups.** -- Do you use Google Docs, Office 365, iWork for iCloud, or any of a zillion other such Web apps to create and collaborate on documents? Most of us do, at least occasionally. Fine, but do you also have a local copy of those documents? I'll bet you don't, and that's a bad idea.

It's not hard to find stories about people who opened Google Docs (or whatever) one day to find that a crucial document had vanished, for no apparent reason, and with no apparent recourse. These sorts of things don't happen often, but they do happen. You can't assume a cloud service will back up your data adequately — or that you'll be able to recover it yourself, even if it was backed up. (And, even if the data is there, an Internet outage or server problem could prevent you from accessing it at a crucial moment.) Word to the wise: make your own backups of documents created in the cloud or use a specialized utility like [CloudPull](#) (see "[Back Up Your Google Data with CloudPull](#)," 6 March 2012).

**11. Thinking of RAID as a backup.** -- A reader suggested this addition after I posted my original list, and I couldn't agree more. In fact, I discuss this explicitly in my book. A RAID uses multiple hard drives to function as a single logical volume. Among the many ways a RAID can be configured, mirrored RAID (RAID 1) is most often confused with backups, because they write every block to two different physical disks, providing 100 percent

redundancy. (RAID 5 and 6 also provide redundancy, but in a different way.) Well, isn't that basically the same as a clone, only better, since it's always up to date?

No. Indeed, the fact that it's always up to date is part of the problem. If you accidentally delete a file, for example, it's deleted instantly on both drives in your mirrored RAID. If you have directory damage, file corruption, malware, or any of numerous other problems, it affects both drives equally. And, of course, if the RAID is stolen or damaged, it doesn't help at all. The only thing a mirrored RAID protects you against is the hardware failure of a single drive. Fair enough; that happens. But it's not the same thing as a backup.

**Don't have stupid backups!** I hope you've spent this entire article rolling your eyes at these ridiculous excuses for a backup strategy, all the while reminding yourself that your own backup strategy is smart and doesn't suffer from any of these defects. If so, then I'm glad you've enjoyed this entertaining look at how the other 92 percent live.

However, if by any chance you found yourself wincing now and then because you recognized something in this list that you yourself do, don't feel ashamed. It's OK; we've all been there. Just don't stay there. Pick up a copy of "[Backing Up Your Mac: A Joe On Tech Guide](#)" and learn how to educate your backups. Then you and I can both have that meteorites-won't-destroy-my-data confidence, and we can turn our attention to more pressing tasks, like protecting ourselves from zombies. ☛

by Josh Centers

## Apple Improves Networking in OS X 10.10.4

If you've been plagued by networking problems since updating to OS X 10.10 Yosemite, your salvation may be at hand with the [OS X 10.10.4](#) update, which ditches the unreliable discoveryd service for the trusty old mDNSResponder. In plain English, that should mean the return of stable networking in OS X (see "[Apple's Networking Kerfuffle](#)," 7 May 2015).

You can install 10.10.4 via Software Update, or from Apple Software Downloads as [delta](#) (1.09 GB) and [combo](#) (2.02 GB) installers. As always, it's smart to wait a few days to see if any major issues crop up, but if you've been nagged by networking problems, an immediate upgrade may be advisable. Be sure to back up first!

In the world of Photos, we're hoping OS X 10.10.4 addresses the sync issues brought up by Adam Engst in "[How to Throttle iCloud Photo Library Uploads](#)" (20 May 2015) and "[More Problems with iCloud Photo Library Uploads](#)" (19 June 2015). Apple mentions fixes like "improves reliability when syncing photos and videos to iCloud Photo Library," and "improves the reliability of upgrading iPhoto and

Aperture libraries to Photos." Also, 10.10.4 fixes an issue that could cause Photos to crash after importing some Leica DNG files.

Additionally, OS X 10.10.4 improves the reliability of Migration Assistant and addresses an issue that prevented some external displays from functioning properly. There are also fixes for delayed outgoing messages in Mail and an issue that allowed Web sites to prevent users from navigating away in Safari by presenting repeating JavaScript alerts.

For enterprise customers, OS X 10.10.4 has a fix for an issue where Macs bound to directory services could stop responding under certain conditions. Also, the update grants the capability to create mobile accounts with the createmobileaccount command-line tool and fixes an issue in Profile Manager that could allow users to install pre-release software even when the setting was disabled.

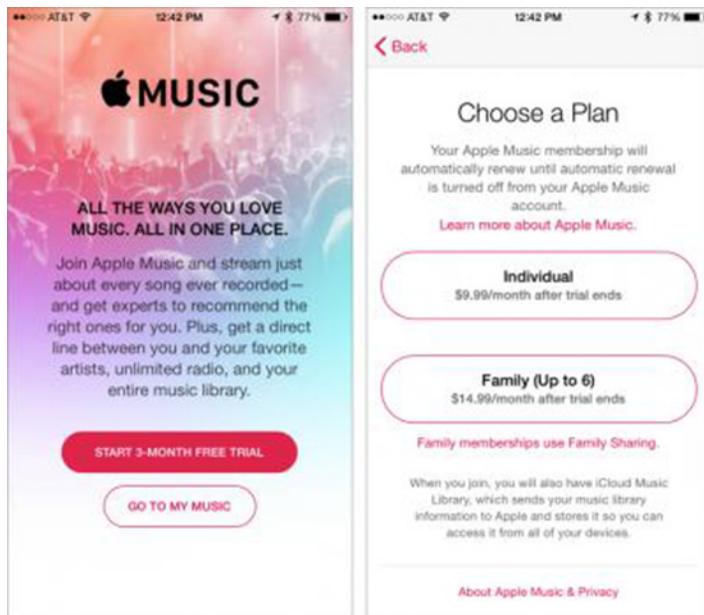
As always, OS X 10.10.4 also includes numerous security fixes. ☛



# A Tour of Apple Music

**Apple** Music has launched with much fanfare, giving iOS and Mac users access to streamed music from the iTunes Store, iCloud-based synchronization of your existing music library across multiple devices, the Beats 1 streaming radio station, and the Connect service for interacting with artists.

As soon as you open the Music app in iOS 8.4, you're invited to join the new music streaming service, with a free three-month trial as an enticement.



Naturally, I'm going to assume that you did just that, because hey, why not? For that reason, I'm not going to bore you with a detailed walkthrough and review, because much of it is obvious and you can easily decide for yourself if the service is for you.

However, not everything about Apple Music is obvious, and let's be honest, the company did a horrible job of describing it at the WWDC keynote (see "[Apple Announces Apple Music Service](#)," 8 June 2015), so I'd like to share a number of tips and observations so you'll get the most out of your three-month trial.

**Individual or Family?** — When you're signing up for Apple Music, you have to make a decision: do you want an individual membership for \$9.99 per month or a family membership for \$14.99 per month?

Here's what to consider. The family membership allows up to six people to share your Apple Music membership, all while maintaining their own profiles and preferences. But there's a catch: it can be shared only within your Family Sharing circle.

As we explained in "[iOS 8: TidBITS Answers Your Questions](#)," (17 September 2014), Family Sharing is a feature that lets you share App Store, iTunes Store, and iBooks Store purchases with up to five other people in your immediate family. But it doesn't include iTunes Match and has other drawbacks too, as [pointed out by Mac blogger David Sparks](#).

If you have more than one person in your household who will want Apple Music, the family membership is a no-brainer... unless you don't use or want to use Family Sharing. In that case, the calculus becomes more complex. Your family members could each choose to have individual plans, for \$9.99 per month, but that gets expensive fast.

You might think you could share an account if you and your spouse have similar tastes, for instance, but since the individual membership allows you to [stream to only one device at a time](#), it may be awkward if your desired play times (in different locations or on different devices) overlap.

**Turn Off Auto Renewal** -- With the three-month free trial, Apple is being generous, but also sort of sneaky, since by default, the company will begin charging you automatically once your trial is over. Here's how you can prevent that in iOS.

- Open the Music app and tap the head icon in the upper left.
- Tap View Apple ID.
- Enter your Apple ID password.
- Under Subscriptions, tap Manage.
- Tap Your Membership, which should show an Active status.
- Disable Automatic Renewal.

Or in iTunes:

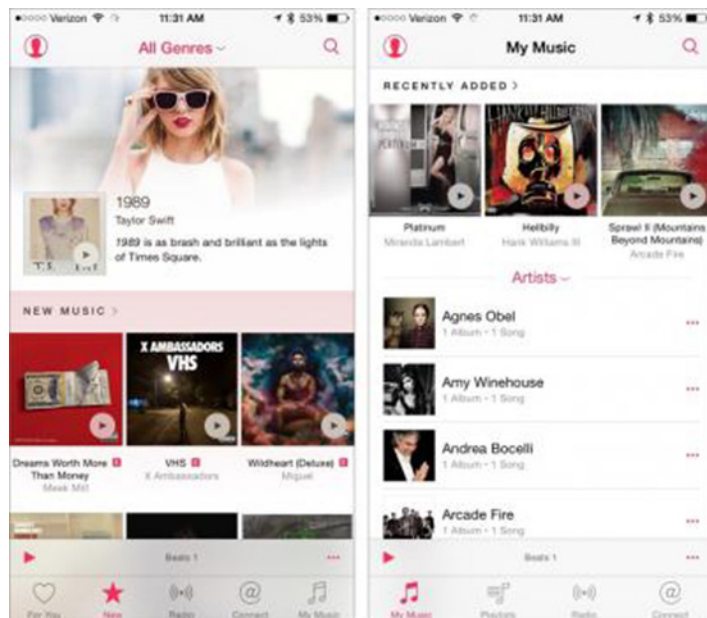
- Choose Account > View Account.
- Under Settings, find Subscriptions, and click the corresponding Manage link.
- Click Edit, to the right of Your Membership.
- Under Automatic Renewal, select Off.
- Click Done.

Whew, that was a surprising number of steps! Whatever happened to "no step three?"

Note that even if you do not decide to stick with Apple Music, Beats 1 and Connect are free, and will remain available.

**Behind the Music** -- In iOS, Settings > Music offers some settings that may interest you.

The first is Show Apple Music, which toggles the Apple Music interface in the Music app. As I mentioned in “[Apple Releases iOS 8.4 with Apple Music](#)” (30 June 2015), the Music app has two distinct interfaces, depending on whether or not Apple Music is enabled. So if for whatever reason, you want to revert to the “normal” Music interface, you can do so with this switch.



The second is iCloud Music Library, which you may have some trouble enabling, due to Apple’s server overload. If you’re persistent, it will eventually stick. But what does it do?

iCloud Music Library essentially replaces iTunes Match, although iTunes Match is still offered as a separate product. As the name suggests, iCloud Music Library is just like iCloud Photo Library, but for your music. Whatever songs and playlists you add to My Music on one device will be synced to the others, at least in theory. I’ve found that it works pretty well, uploading or matching all of my music, without clogging my Internet connection like iCloud Photo Library.

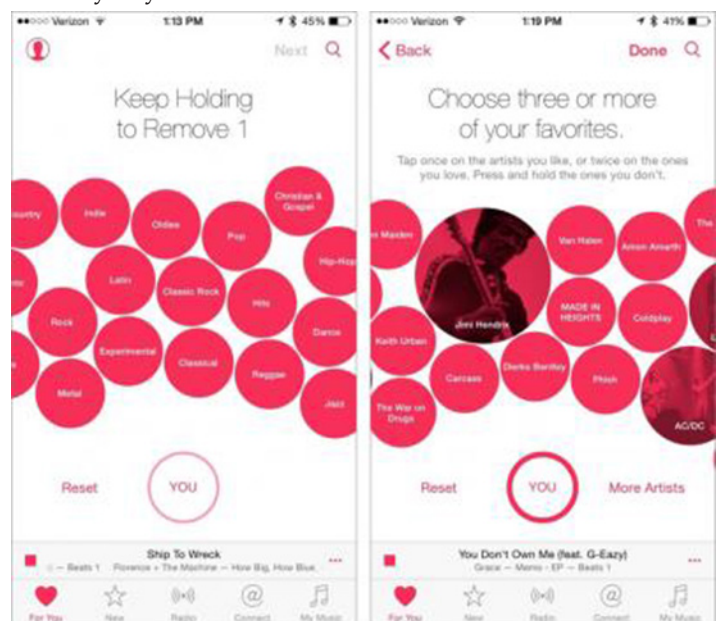
Although I let my iTunes Match subscription expire months ago, those tracks were apparently still stored in iCloud, as iCloud Music Library synced those to the iPhone hours before the iTunes update arrived.

But there is a major catch, and a reason why iTunes Match still exists: when iCloud Music Library syncs your tracks, those new files are **encumbered by DRM**, and will vanish when your Apple Music membership expires. So, if you upload your music library, delete it for some reason, and then cancel Apple Music, you will suddenly find yourself with no music library at all. Or, even if you don’t cancel Apple Music, if you delete your main music library, the tracks you’d get from iCloud Music Library would all have DRM on them. In other words, don’t delete your main music library, and don’t assume that iCloud Music Library is a backup, since it’s not.

The good news with iCloud Music Library is that the service is offered to everyone in your Family Sharing circle, so it solves the aforementioned problem of iTunes Match not being included in Family Sharing.

**Customize, Customize** -- The For You view suggests albums and playlists tailored to your tastes. To get started, tell Apple Music which genres you like and don’t like by tapping the buttons. If you’re familiar with Apple Music’s ancestor, Beats Music, this screen will look familiar. Tap a genre bubble once to indicate that you like it, and watch the bubble grow. Tap it again to indicate that you love it, and watch it grow even larger. To delete a genre entirely on iOS, press and hold a bubble; a countdown appears, after which the bubble vanishes. In iTunes, just click the “x” on the button. If you make a mistake, you can tap Reset to start over.

Next, you’ll be prompted to voice your preference on specific artists, using the same bubble interface. I found this part frustrating, as the selection of artists was limited, and mostly outside of those I listen to. Yes, I love Jimi Hendrix and like Van Halen, but they’re not artists I listen to every day.



Thankfully, Apple Music is smarter than it seemed. It figured out that if I like Hendrix and country, then I’d probably also like Johnny Cash and Willie Nelson. Some of its other suggestions are more perplexing, and I hope it will improve over time. Others, such as designer Khoi Vinh, have had **less than stellar results**; he’s unimpressed that Apple couldn’t do better out of the gate, given how much data the company has available about our musical preferences.

If your tastes change over time, you can rejigger them, at least in Music on iOS. Tap the head icon in the upper left, and tap Choose Artists For You to change your preferences.

You can also tailor your preferences on the fly. Tap the heart on a song or a playlist to tell Apple Music that you like it. That heart is now a prominent icon across all of



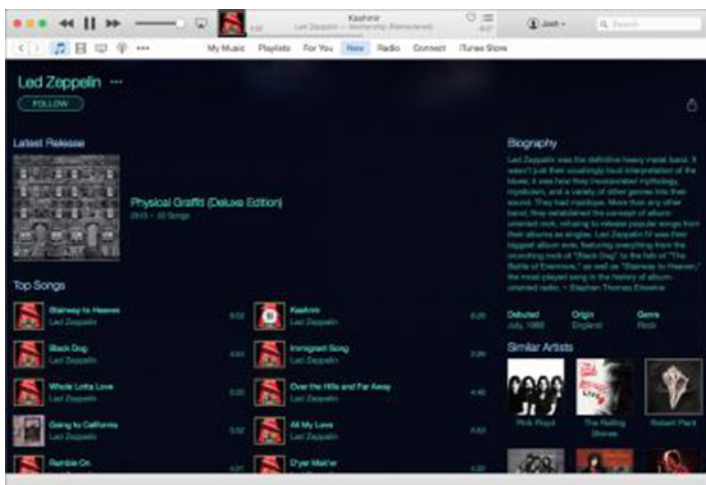
Apple's music platforms, including iTunes and even the Now Playing glance on the Apple Watch.

Unfortunately, there is no list of favorited songs and playlists. To add a song to your music collection, you either need to tap the + button or tap the ... button and choose Add to My Music. I think Apple should have combined these two buttons, because if I like a song, why wouldn't I want it in my collection?

**35 Million Songs and Nothing to Listen to --** You might recall from "[A Visit to Pandoland, Where Silicon Valley Meets Music City](#)," (20 June 2015), Marc Ruxin of Rdio pointed out that the biggest challenge that music streaming services face is "35 million songs and nothing to listen to" — meaning that users are often left to their own devices to discover music they might like.

Like Rdio, Spotify, and similar music streaming services, once you subscribe to Apple Music you're free to listen to whatever you want, with some limitations. Apple has been cagey about just how many tracks Apple Music offers (it's not the full iTunes Store catalog), but I've found the selection to be as good as, if not better than, any of its competitors. Apple Music already has a few exclusives, such as Dr. Dre's "[The Chronic](#)" and Taylor Swift's "1989" that you won't find on any other streaming service. It also has [Led Zeppelin](#), which was previously available only on Spotify. However, it doesn't yet have The Beatles.

When you find an artist, like Beats Music before it, Apple Music gives you a detailed artist bio and recommends similar artists.



But Apple Music goes even further in trying to find stuff for you to listen to, and here's where its roots in Beats Music shine. There's the aforementioned For You section with personalized recommendations. There's the New section, with a smorgasbord of newly added content. iTunes Radio is still sort of there, as well, though it has been somewhat neutered (see Missing Features below).

The human-curated playlists of Beats Music are still around, so there's stuff like "[Intro to Taylor Swift](#)" that gives you an overview of an artist's work. There are thousands of available playlists, some incredibly specific, like

"[Somethin' 'Bout a Truck: Country Pickup Truck Songs](#)" and "[Workout Anthems — Rock](#)." Dig around enough, and you're sure to find a playlist you'll love.

And there's also Beats 1, Apple's live, worldwide radio station with human curated content.

**Beats 1 Killed the Video Star --** Of all the features in Apple Music, Beats 1 might be the most fascinating, despite being an old idea: a live radio station manned by human DJs.

Many online commentators have rolled their eyes at Beats 1, making the joke that Apple has now "invented" FM radio. As someone with an analog Sony pocket radio on his desk, I say these snarky commenters are missing the point.

Chances are, outside of college radio, it has probably been decades since you listened to a radio station where the DJs actually picked the music. As radio stations consolidated, music selection was ripped from the DJs' hands, decided instead by computer algorithms and the marketing departments of record labels. You'll rarely be surprised by what's played on the radio. Here in the Nashville broadcast area, some of the country stations are so pre-planned that you can literally set your watch to them.

What Beats 1 brings is the unexpected. I happened to catch Zane Lowe's Beats 1 kickoff. Lowe gave a brief rundown of the philosophy of Beats 1 before playing the first song. "It's not about fanfare, that's fireworks and a hangover the next day. It's about quality and consistency," he said before kicking off Beats 1 with "City" by Spring King.

It was a surprising choice, and one that I think few listeners had previously heard. He followed it up with the new Beck single, "Dreams," then later brought out AC/DC's "For Those About to Rock." Throughout the first day, I kept tuning into Beats 1, never knowing what I'd hear next. Sometimes it was hip-hop, sometimes electronica. I never heard country, jazz, or classical, but I wouldn't be surprised if they were slipped into the mix at some point.

I've also heard some folks say, "Beats 1 doesn't play anything I like." To me, that's the equivalent of asking, "Where's my parade?" You're not going to like every song played on Beats 1, and that's kind of the point (though, of course, those who find they dislike most of what Beats 1 plays are unlikely to tune in more than once). Beats 1 exists to expose you to stuff you otherwise wouldn't know exists. If you have highly specific tastes in music, Apple Music offers plenty of other options for you.

What makes Beats 1 exciting is personality. Like any great media venture, its beginnings feel rough around the edges. The playlists are haphazard, the DJs say crazy, off-the-cuff things like, "I'm going to take your kids away and give you a headphone moment," and in true Apple fashion, there was an outage on the first day. It doesn't feel like a media venture from the world's biggest company, but instead like a pirate radio station down the street. In a word, it's fun.



The other great thing is the social factor. Beats 1 provides a single, shared experience, so you can go on Twitter and Facebook and have a conversation about the thing you're listening to. In today's fragmented media world, Apple might be one of the few companies that can provide a shared experience for millions of people.

I've also found that Beats 1 acts as a home base for Apple Music. It's what I turn to when I can't think of anything to play.

Some have said that Beats 1 is very unlike Apple, but I disagree. It perfectly mixes technology and humanity, and isn't that Apple's very core?

Like any other radio station, you can request a song. Apple World Today has compiled a list of [all the ways to request a song](#), including a Twitter hashtag, iMessage, and even old-fashioned phone lines.

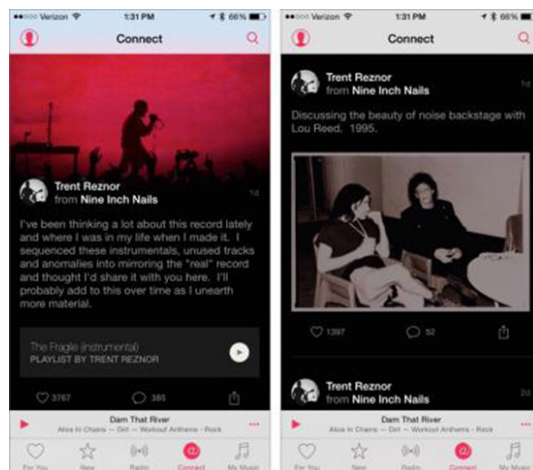
Another neat feature of Beats 1 is a weekly show, hosted by singer St. Vincent, where she creates a custom playlist for a random lucky fan. How's that for personalization?

Note that Beats 1 censors explicit content from the songs it plays. Some have complained about that, but it's a smart move. Parents can play Beats 1 with their kids in the car, and businesses can play Beats 1 without fear of offending customers. If you want to hear explicit content, you can find the uncensored songs on Apple Music.

**Hello Connect, My Old Ping --** The last major component of Apple Music is Connect, a social network where you can follow your favorite artists. You might remember its first incarnation, Ping.

Ping lived a short, unhappy life, and to this day, it's still the butt of jokes. But Ping wasn't a terrible concept, it was just executed terribly. It added clutter to iTunes without much value. As much as we like each other, my wife and I have very different musical tastes, so even we seldom care about what the other is listening to.

Connect is more subdued than Ping. First of all, it lives in its own pane, out of the way. Second, while there isn't much there yet, what's there is actually interesting. For example, Trent Reznor of Nine Inch Nails, one of the brains behind Apple Music, has posted instrumental versions of some of his albums, a concert video, and a backstage picture of himself with Lou Reed. Nothing earth-shattering, but hardcore Nine Inch Nails fans were thrilled.



Out of the gate, Connect automatically follows every artist it can find in your iTunes library. To change who you follow on iOS, tap the head icon in the upper left and tap Following. Then you can choose to stop following artists automatically, find more artists and curators, and unfollow artists.

Happily, if you don't care about Connect, you can disable it entirely in Settings > General > Restrictions > Apple Music Connect. You will have to enable restrictions, but that in itself doesn't do anything other than allowing you to enable individual restrictions. Disabling Apple Music Connect replaces the Connect tab with a more useful Playlists tab.

**Missing Features --** Apple Music is essentially the love child of iTunes and Beats Music, so it was inevitable that the kid wouldn't have all of the features of both of its parents.

One of Beats Music's unique features, The Sentence, is absent in Apple Music. As you may recall from "[FunBITS: What Sets Beats Music Apart](#)" (16 May 2014), The Sentence let you create custom playlists by filling in the blanks in a Mad Libs-style interface. So you could create a sentence like "I'm in the club and feel like saving the world with no regrets to indie." I can see why Apple dropped it, as it was as baffling as it was novel, but I'm still sad to see it go. I hope Apple eventually brings it back in some form, with Siri support.

Another Beats Music innovation I miss is the circular scrubber around the play/pause button for rewinding and fast-forwarding. Again, I see why Apple dropped it for something more familiar, but I liked it, as it reminded me a bit of the iPod click wheel.

There's one last missing feature that grinds my gears. Remember iTunes Radio, Apple's Pandora clone that would play music related to a particular song or artist? It still exists, but is barely recognizable. Previously, you could start adding a new station, specify an artist or song you like, and then create your station, but now it's not as obvious. Don't worry, though; your existing stations are still there.

You can still create a custom station, but you do so by searching for an album, artist, genre, or song, scrolling

There's another way to create a custom station on the fly: Siri. Just tell Siri something like "play AC/DC radio." In fact, one of the best things about Apple Music is its Siri integration, which makes possible commands like "play Beats 1" or "play 1989" (where Siri guessed at Taylor Swift's new album correctly, despite the ambiguous name).

To make things confusing, Apple has also added human-curated stations, like Pure Pop and The Mixtape, which cannot be customized.

Going back to missing features, as I write this, Apple Music isn't yet appearing on the Apple TV. On the upside, you can still customize your iTunes Radio stations there. Poor Apple TV, why has Apple forsaken thee? Apple Music support is surprisingly spotty on the Apple Watch. You can control playback and favorite songs from the watch, but you can't directly access any content not specifically added to My Music, including Beats 1.

Many assumed that there was some snafu at Apple's end, but I think it was a deliberate decision. While Apple Music in iOS is a pretty good experience, it is a train wreck on the desktop. And I stop at "train wreck" only because TidBITS is a family friendly publication.

The screenshot shows the iTunes interface. At the top, the title bar reads "Spin the Black Circle" with standard macOS window controls. Below the title bar, a navigation bar contains links: "My Music", "Playlists", "For You", "New", "Radio", "Connect", and "iTunes Store". The main content area features a large "b1" logo with a play button icon inside the 'b', set against a black background with red audio waveforms. A red "Listen Now" button is positioned below the logo. The "Recently Played" section displays five album covers in a row: "Workout Anthems - Rock" (a red bottle with a black cap), "Beats 1" (a black cover with the "b1" logo), "Rock" (a black cover with a white guitar silhouette), "Country" (a gold cover with the word "COUNTRY" in white), and "AC/DC Radio" (a black cover with white silhouettes of the band members).

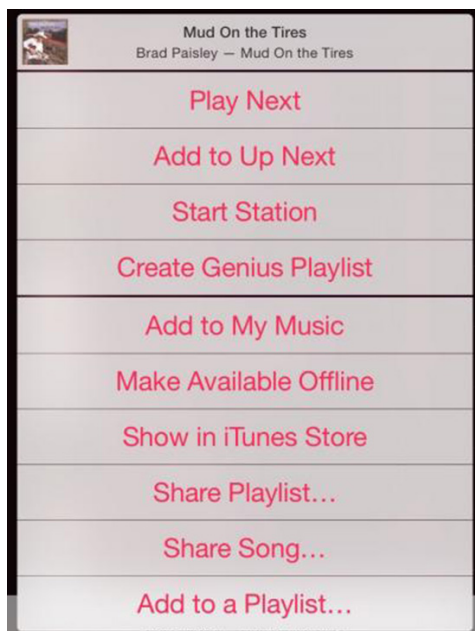
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Apple, this is sloppy work at best. It would have been better to hold off on releasing Apple Music on the desktop than to release it like this. Perhaps the problem is iTunes, which needs to be rethought completely. It's a program that was originally designed for ripping, sorting, and playing MP3s that has since had grafted onto it a music store, a video player, a video store, a podcast player, an app store, iOS device management capabilities, and now a subscription music service. If iTunes were a car, it would be a Model T with stability control, GPS navigation, and a front-end loader tacked on, marketed as "new for 2015."

**The Beats Goes On --** Despite my reservations, I've found Apple Music more compelling than any other music service I've tried. It's great to see Beats Music's curated playlist and recommendation engine reaching a broader audience. On paper, it hits everything I want in a music service: a broad track selection, multiple "jump-off" points for discovering new music, integration with my existing music library, and clients for both the Mac and iOS.

But my reservations are pretty major. I hate how it applies vhas done to iTunes Radio. The iTunes interface is awful, though usable. These are all things that Apple could fix, but I doubt it will, at least any time soon.

Even in iOS, Apple Music is the most complex streaming service I've used. For instance, just the sheer number of options presented when you tap the ... button is overwhelming. It seems as though there are hidden options and settings scattered everywhere, so I never feel like I have a grasp on the interface.



I've also noted a disturbing trend in Apple Music. With Beats 1, Apple is seeking to direct musical taste. With iCloud Music Library, Apple is applying DRM control to music you already own. And Apple has also inexplicably removed most user control over algorithmic radio stations. Even the innocent-looking Connect has the undertone of Apple mediating the relationship between artists and fans. Everywhere I look, I see Apple trying to take control of music itself.

That seems like an outlandish claim, but think about it for a minute. Every aspect of Apple Music gives Apple a way to control the music market. Many unsuspecting trial users will find themselves locked in, and I'm willing to bet, so will artists and labels. With Apple even publicly negotiating with major artists now, some are wondering how long will it be until Apple cuts the labels out entirely?

In the here and now, Apple Music is a potentially great product with some major kinks to work out. Let's hope Apple can fix them inside the three-month trial. And that we're not somehow handing the company the keys to our musical kingdom. 🗑️





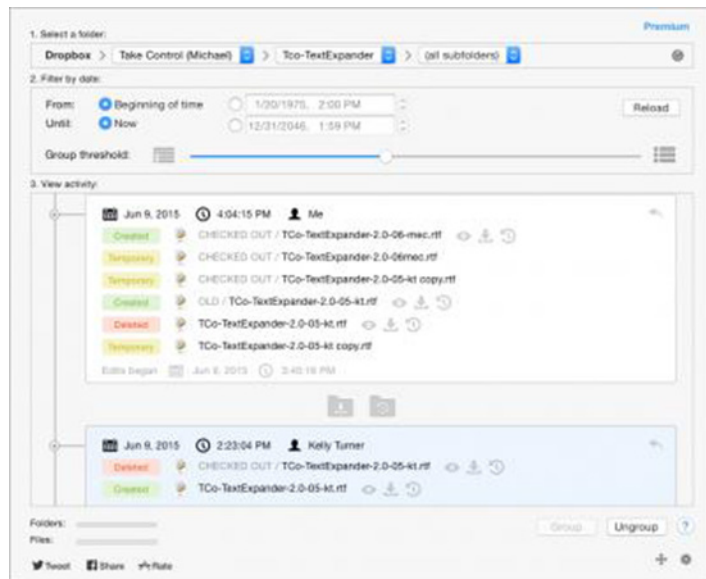
# Software Review

## Revisions Wrangles Your Dropbox Files

by Michael E. Cohen

Raise your hand if you use the cloud-based file-sharing service, Dropbox. Keep your hand up if you know that Dropbox saves versions of all the files you store in it so you can recover both deleted files and older versions of modified files. Now keep it raised if you have ever recovered a file using Dropbox's Web service. If, when I asked any of these questions, you had your hand up, you might be interested in [Revisions](#) from Bayesbits Ltd.

Revisions is a Mac utility that watches your Dropbox folder and keeps track of what is going on in it. Click its menu bar icon and you can see a timeline showing all the activity that has taken place in Dropbox, starting with the most recent. Use the menus in the Select a Folder section at the top of the window to view changes within a particular Dropbox folder and its subfolders. You can set the span of time that the timeline covers with the controls in the Filter by Date section, just below Select a Folder.

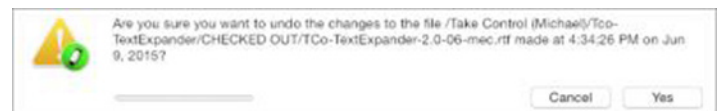


The timeline itself is presented in the third section from the top: View Activity. Each individual item in the timeline represents a single change, called an “edit,” to a file in your Dropbox. By default, Revisions collects edits into temporal chunks, called “groups,” for convenience. You use the Group Threshold slider above the timeline to set the time covered by a group, ranging from no groups at all to groups that collect edits over 5-day spans; the mid-point on the slider creates groups that cover 10-minute spans of activity.

The edits listed in a group fall into four categories: created, modified, deleted, and temporary. For all but temporary edits you can click icons following the file name to view the file as it existed at that time, download it, undo the change represented by the edit, and, for modified files, compare it with the next version of it saved in Dropbox. In case you can't remember what an icon does, hover your pointer over one to see a help tag that describes its function. By the way, the light gray appearance of the icons may lead you to think they are disabled in compliance with the long-standing Mac convention, but that is not the case — they are gray simply to be less distracting; if the function that an icon represents is disabled, the icon simply doesn't appear in the Revisions timeline.

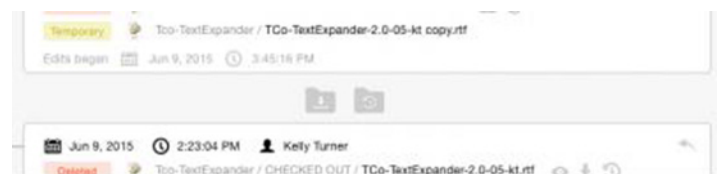


In addition to individual edit actions, each group has an undo icon in its top-right corner: click that to undo all the changes contained in the group at once. Don't be afraid that you might accidentally click it and mess things up: all changes, whether to an individual edit or an entire group, produce dialogs telling you what is about to happen and asking you to confirm the changes.



What about temporary edits? They represent modifications to files that have taken place within the time that the group represents and are purely informational: no icons follow the file name in the timeline for temporary edits. If, however, you need to act upon one of these intermediate edits, select the group and click Ungroup to see each edit individually in the timeline, at which point you can act on one of them.

When you move your pointer between two adjacent groups, the timeline opens up to show two more icons. One allows you to download the currently displayed Dropbox folder and its subfolder to your Mac in the state that it was in before the edits began in the most recent group of changes (that is, the group above the icons); the other restores the currently selected folder to its state just prior to the edits shown in the group above.



The free version of Revisions can do everything I've just described. If, however, you purchase the \$9.99 in-app upgrade to the Premium version, you get some additional functionality. Premium provides the capability to filter

files shown in the timeline by name; for example, you can choose to show edits involving .html files only, or just edits involving files that contain “TextExpander” as part of their names. If you use shared folders (and, boy, do we use the heck out of shared folders at [Take Control Books!](#)), Premium shows you who among the users who share a folder has performed a particular edit.

Of course, you can undo file changes and recover previous versions simply by going to the Dropbox site and performing your [file recovery actions](#) there. However, Revisions provides a far more navigable interface for such activities, with more information about individual edits. There is no magic involved: Revisions works from the very information that Dropbox maintains so that it can provide its capabilities; the app just displays the information provided by Dropbox in a more flexible and useful fashion.

If you regularly use Dropbox and want an easy way to revert file changes or even just to see what you’ve been doing in Dropbox, the free version of Revisions may be just what you want. And if you use shared Dropbox folders and need to know who has been doing what in them, the in-app upgrade to the Premium version is just a click away.

## Apple Updates

### Mac mini EFI Firmware Update 1.8

**Jul 15, 2015 – 4.8 MB**

#### System Requirements

- OS X Mountain Lion v10.8.5
- OS X Mavericks v10.9.5
- OS X Yosemite v10.10.4 and later

This update is recommended for Mac mini (late 2012) models. This update addresses an issue that may prevent a USB keyboard from being recognized after the system wakes from sleep.

### iTunes 12.2.1

**Jul 13, 2015 – XX MB**

#### System Requirements

- OS X version 10.7.5 or later
- 400MB of available disk space
- iTunes in the Cloud, iTunes Match, and iTunes Radio availability may vary by – iTunes Extras require OS X version 10.10.3 or later

#### What’s new in iTunes

This update addresses the following problems when using iTunes Match or Apple Music:

- Fixes an issue for iTunes Match users where iTunes incorrectly changed some songs from Matched to Apple Music.
- Provides a way to correct a library problem affecting former iTunes Match subscribers.

- Includes minor bug fixes and improvements for Beats 1.

Apple Music includes a revolutionary music service, the all-new Beats 1 live radio station, and an exciting new way for fans to connect with their favorite artists. Become a member to play from millions of songs in the Apple Music catalog, or keep them offline for playback later. Join now — your first three months are free. This update includes:

**For You.** Get playlist and album recommendations you’ll love, selected just for you based on your musical tastes. The more you listen, the better For You gets.

**New.** Discover the best new music, handpicked by our music editors. Explore mixes created just for activities like exercising, or find great handcrafted playlists in a wide variety of genres. With Apple Music, you’ll always have the perfect soundtrack for any occasion.

**Connect.** A single place to connect with your favorite artists. See thoughts, photos, music, and videos shared from your favorite artists. You can comment on or love anything an artist has posted, and the artist can respond to you directly.

**Beats 1.** Tune in to Beats 1, broadcast live from cities around the globe. Enjoy music, interviews, exclusive radio shows, and the best of what’s going on in the world of music. Beats 1 — worldwide and always on.

**Apple Music Radio.** Radio has been completely redesigned. Play from Featured Stations, where our music experts hand select every song you hear. Or, start a new station from any artist or song. In addition, it’s now easy to quickly return to your favorite stations with Recently Played.

**My Music.** Find all your music in one place, including iTunes purchases, music you’ve imported from CD, and now songs from Apple Music.

**iTunes Store.** The iTunes Store is still the best place to buy your favorite music — one song or album at a time.

Availability and features may vary by country

### Digital Camera RAW Compatibility 6.05

**Jul 9, 2015 – 7.8 MB**

#### System Requirements

- OS X 10.10 or later

This update adds RAW image compatibility for the following cameras to OS X Yosemite:

- Canon EOS M3
- Fujifilm X-T10
- Fujifilm XQ1
- Fujifilm XQ2
- Leica M Monochrom (Typ 246)
- Nikon 1 J5
- Nikon D810A
- Olympus STYLUS SH-2
- Olympus STYLUS TG-4 Tough
- Panasonic LUMIX DMC-G7

## OS X Yosemite 10.10.4 Update

**Jun 30, 2015 – 1.09 GB**

System Requirements

- OS X Yosemite 10.10.3

## OS X Yosemite 10.10.4 Combo Update

**Jun 30, 2015 – 2.02 GB**

System Requirements

- OS X Yosemite 10.10

The OS X Yosemite 10.10.4 update improves the stability, compatibility, and security of your Mac, and is recommended for all users.

This update:

- Improves networking reliability
- Improves Migration Assistant reliability
- Addresses an issue that prevented certain external monitors from functioning properly

- Improves the reliability of upgrading iPhoto and Aperture libraries to Photos

- Improves reliability when syncing photos and videos to iCloud Photo Library

- Addresses an issue that caused Photos to quit unexpectedly after importing some Leica DNG files

- Resolves an issue that could delay outgoing email messages in Mail

- Fixes an issue where a website could prevent the user from navigating away by presenting repeated JavaScript alerts in Safari

## Security Update 2015-005 Mavericks

**Jun 30, 2015 – 168.1 MB**

System Requirements

- OS X Mavericks 10.9

Security Update 2015-005 is recommended for all users and improves the security of OS X. 

## Share Keystone MacCentral with other MACaholics

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_ Zip \_\_\_\_\_

Home Phone \_\_\_\_\_ Day Phone \_\_\_\_\_

E-mail Address \_\_\_\_\_

Date \_\_\_\_\_ Is this ☐ Renewal or ☐ New?

How did you hear about us? \_\_\_\_\_

Dues for one person are ☐ \$20/yr. Family or Corporate dues are ☐ \$30/yr.

To join Keystone MacCentral, mail this form with your membership dues (payable to Keystone MacCentral) to:

**Keystone MacCentral  
Membership Chair  
310 Somerset Drive  
Shiresmanstown, PA 17011**

Keystone MacCentral meetings are held at 6:30 p.m. on the 3rd Tuesday of the month at Bethany Village Retirement Center, 5225 Wilson Lane, Mechanicsburg, PA 17055