

printout

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

Some Helpful Hints

At our meeting on January 17 we will have presentations by Dennis McMahon and Eric Adams. Included will be

1) Sharing reminder lists.

You can share a reminder list with other iCloud users. You might want to do this, for example, to keep all the members of a sports team apprised of what needs to be done for the next game. It also works great for a family grocery list that everyone in the family can add to. Participants in the shared reminder list can view and edit the list (mark items as complete, add items, and delete items), and see who else is sharing the list using these apps: iCloud Reminders, Reminders on an iOS device, Reminders on a Mac, and Microsoft Outlook on a Windows computer.

2) How to set up a Google Alert, and why you would want to

A Google Alerts is like a customized Google Search that is constantly searching the internet and delivering the search results to you automatically. It is a free online tool that lets you track keywords and phrases. Google Alerts can allow you to listen to conversations you may not be aware of. Conversations that involve you or your brand (and maybe even your competitors). You can set up any number of Alerts (up to 1000 per email address) to help you monitor online activity for the search terms of your choice. For example, you might want to know if other sites are linking to you, quoting you, supporting you, or complaining about you. 📧

Meet us at

Bethany Village Retirement Center

Education Room

5225 Wilson Lane, Mechanicsburg, PA 17055

Tuesday, January 17 2017 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 © 2017, Keystone MacCentral, 310 Somerset Drive, Shiresmanstown, PA 17011.

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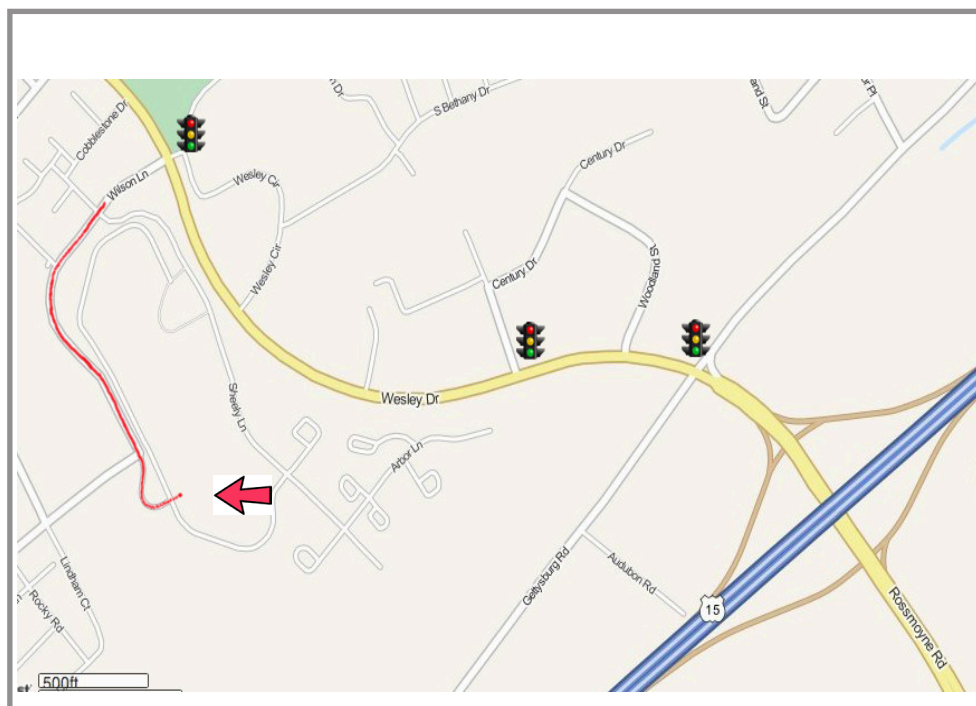
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Touch Screens, Touch Bars, and the Single Point of Focus

Let's take a trip on Mr. Peabody's [WABAC Machine](#) back to 1984 to look at the first Macintosh. The huge change it introduced to the early consumer computer market was the shift from a screen filled with text that you navigated with cursor keys to a graphical display that you navigated with a pointing device. At the time, many thought [the mouse was a gimmick](#).

It was a huge change, indeed: cursor keys and pointing devices are extremely different interface paradigms. However, both limit your interaction with what is on the screen to a single point of contact. For the text interface, it's the text cursor; for the graphical interface it's the mouse pointer. No matter what kind of data is on the screen, you can interact with it only at a single point.

That single point of contact, whether mouse or keyboard driven, has a significant drawback: travel time. When your cursor is at the bottom of a block of text and you have to hold down on the up arrow key to get it to the top line to fix a typo, or when you're drawing in the middle of the screen and you have to move your mouse to the menu bar at the top of the screen to pull down a menu, the travel time involved takes you away from the current task, possibly hurting creative momentum. This isn't a usability tragedy, but it is a drawback.

To mitigate the travel-time issue, engineers developed workarounds like the Page Up and Page Down keys, key combinations for traversing text, keyboard shortcuts for menu commands, and keyboards with function keys that could be programmed to perform various actions or multiple keystrokes. So-called "power users" (I'm looking at you, Adam!) adopted these workarounds quickly, and keyboard shortcuts remain in common use today.

Of course, such shortcuts have their own drawbacks: users must remember which function keys or key combinations do what. Even with some standards imposed (such as Command-X, Command-C, and Command-V always being assigned to the menu commands for Cut, Copy, and Paste on the Mac), users must still learn keyboard commands — they are not intrinsically intuitive.

There is one situation in which two points of focus have long existed on the Mac: text editing (and, by analogy, any editing situation that presents content in a linear sequence or timeline, such as audio or video editing). For example, you can select text, move the mouse pointer to a color setting palette to change the selection's color, and keep that palette focused under the mouse while, using the keyboard, you move the text cursor, select another range

of text, allowing you just to click to change that selection's color.

Nonetheless, travel time friction, and the related risk of momentarily losing your place in your content when you move your pointer to perform an action, is still a central part of the Mac experience.

A brief digression: what about multi-touch, Apple's mouse-less graphical interface introduced in iOS? Multi-touch can reduce travel time friction and it can give you multiple points of focus on the screen, but it isn't a panacea. For example, fingertips don't save you from losing your place in your content: unless you have transparent hands, the very act of pointing at something hides the thing at which you are pointing. Nor is the memory burden created by memorizing function key and shortcut keys eliminated: in a multi-touch interface users have to remember the differences between a single and double tap, what two-finger taps do, which apps and which objects in those apps respond to 3D Touch, and so on.

The Touch Bar doesn't completely solve the travel-time and loss-of-context drawbacks inherent in the traditional Mac experience, but it does address some of the problems introduced by previous workarounds. Take function keys: the Touch Bar's dynamic context-driven display reduces the memory burden they present, assuming controls it presents are well-labeled.

More importantly, the Touch Bar essentially gives you a second point of focus for manipulating your content. It doesn't just offer you contextual function-key-like buttons, but dynamic controls like sliders. You can, like a pianist or guitarist, play your Mac with two hands. Professional video editor [Thomas Grove Harper describes the experience](#):

The first revelation for me was the potential of sliders. Gradual, precise and fast inputs. For years we've had single mouse inputs on a graphical user interface. Over time we've added more buttons and scroll wheels, trackpads with gestures. The Touch Bar takes this step further by allowing multiple inputs at the same time and combines well with the trackpad. The more I've used it the more I've replaced certain keyboard shortcuts. [...] It works, it's faster, and it's more productive.

Despite those glowing words, it is too early to come to any conclusions, pro or con. Developers are only gradually [adapting their apps to take advantage of the Touch Bar](#) and it will take time for developers to figure out all the ways in which they can exploit this new interface paradigm.

In terms of both its potential and usability, today's Touch Bar is roughly where the mouse interface was on the 128K Mac. In addition, Apple offers it only to those who buy a MacBook Pro. As such, anyone who calls the Touch Bar "revolutionary" is overreaching. For that to stand a chance

of happening, Apple needs to make it a standard part of the Mac experience for desktop Macs as well. Otherwise, it will remain a gimmick in the way that the 128K Mac's mouse did not. 🐉

by Adam C. Engst

Understanding Apple's Marginalization of the Mac

If you've been feeling as though Apple's heart isn't in moving the Mac forward these days, you're not alone. The new MacBook Pro models have taken widespread criticism, Apple has provided no roadmap for the future of its desktop Macs, and most recently, the [company eliminated the position of Product Manager of Automation Technologies](#), presumably seeing it as unnecessary. High-end creatives have despaired about Apple's lack of attention to their needs, and the mood among many of the consultants and support professionals at last week's MacTech Conference was downbeat.

So what could explain Apple's increasing marginalization of the Mac, particularly in the pro market? The culprit is clearly the iOS platform, and the iPhone in particular. But the reason why it's happening has more to do with a structural fact about the company that Apple will have to change if the Mac is to get the attention it needs to thrive.

For better and worse, Steve Jobs burned focus into Apple's DNA. When Jobs returned to Apple in 1996, he focused the entire company on the Mac, slashing projects like the Newton and eliminating the Mac clone licensing program. Famously, he limited the Mac line to just four core models: the iBook and iMac for consumers, and the PowerBook and Power Mac for professionals. That product matrix was simple, clean, and understandable, and it was probably the only reason that Apple survived that era. Focusing on one platform was essential.

Here's the problem: Despite the fact that it now employs 115,000 people and is the most valuable company in the world, Apple still thinks like a one-platform company. Now it's all about iOS, and everything Apple does is designed to serve the single goal of selling more iPhones and iPads. Sure, the Apple Watch and Apple TV might seem separate, but they're not. The Apple Watch is an iPhone accessory that makes the iPhone more attractive, and Apple TV apps generally have iOS counterparts. Heck, both watchOS and tvOS are basically custom versions of iOS. Apple's online services, from iCloud to the App Store to the iTunes Store, all support the shared ecosystem, which encourages platform lock-in.

How does the Mac fit into this new world order? It plays well with iCloud and the iTunes Store, and it increasingly

taps iCloud for added functionality. It's another link in the chain that keeps users buying iPhones and iPads because it's easier to have a computer that talks to your smartphone and tablet seamlessly. The Mac also remains essential to iOS as a development platform, and (through macOS Server) as an organization-wide caching server for iOS and app updates. In essence, the Mac is an accessory to the iOS platform.

But that's it. If you're an architect who relies on AutoCAD on the Mac to design buildings, or a video editor who spends your days in Adobe Premiere and After Effects, or a photographer who works in Photoshop and Lightroom, you care primarily about what the Mac enables you to do as a Mac, not as an adjunct to iOS. You might be a huge fan of your iPhone and iPad, but the Mac is what enables you to earn your bread and butter.

Before iOS, Apple's goals and the needs of professional Mac users were more aligned. Apple wanted to make the Macs — and versions of the Mac operating system — that would give users capabilities and efficiencies they couldn't get from PCs running Windows. That goal also informed Apple's relationship with developers, since Apple had a vested interest in supporting software companies whose apps made the Mac attractive to different professions.

Now that Apple's primary task is to sell more iPhones, the company has little incentive to improve the Mac past the point that iOS developers need to run Xcode and macOS Server's caching server effectively. Sure, the Mac business was worth \$22.8 billion in revenues in 2016, which is far from chump change, but it's nothing compared to the \$192.8 billion of revenues generated by iOS and associated services.

When you look at the notable changes in the Mac operating system in the last five or six years, many of them are more about making the Mac experience more like the iPhone and iPad experience. Consider Siri, Picture in Picture, Split View, and Launchpad. And then there are Photos, Contacts, Calendar, and Mail, all of which are nearly identical across platforms. Even the iWork apps like Pages, Keynote, and Numbers have changed not to become better Mac apps, but to work more like and in tandem with their iOS cousins. The entire point of Handoff, arguably, is to make the Mac more

of an accessory for iOS, handing off tasks to an iPhone so the user can leave the Mac or transferring something from the iPhone to the Mac to take advantage of a keyboard and large screen.

Plus, Apple has started to drop Mac accessories that it previously thought were important to the overall Mac experience. The 27-inch Thunderbolt Display fell by the wayside earlier this year (see [“Apple Discontinues Thunderbolt Display with No Replacement in Sight,”](#) 27 June 2016), and if the rumors are correct, [Apple has disbanded the AirPort division.](#)

Don’t misunderstand me. Apple’s focus on iOS has been insanely successful, generating unimaginable amounts of money and taking the company from the “critically acclaimed” category to “mainstream blockbuster.” I’m not criticizing that success, or the method that Apple used to get there.

However, I am troubled by what it means for the future of the Mac as a general purpose, user-focused computer. The relative success of the iPad Pro, with its Smart Keyboard and Apple Pencil, suggests that Apple wants to push iOS toward the productivity market. Even app development is moving in that direction — the Swift Playgrounds app for learning to program exists only on the iPad (see [“Playing Around with Swift on the iPad,”](#) 13 June 2016). The writing would appear to be on the wall for the Mac — I can’t see Apple killing it off anytime soon, but benign neglect will have the same effect in professional markets, as developers weigh their options and direct more effort toward Windows. And that in turn will cause Mac sales to drop and Apple to be even less interested.

Steve Jobs said, “If you don’t cannibalize yourself, someone else will.” That was appropriate when killing off the iPod with the iPhone, but assuming that the iPad can supplant the Mac would be a mistake, I believe. Unlike the iPod,

which was a subset of the iPhone, there are many things we can accomplish on a Mac that would be difficult or completely impossible on any iOS device. Apple seems to be under the incorrect impression that, for whatever you might want to do, there’s an iOS app for that.

The future doesn’t have to play out this way. In fact, Apple has shown that it’s capable of breaking free of the focus on a single product in the past. That’s where the iPod came from, and without the iPod, it’s unclear if Apple would have come up with the iPad and iPhone. Focus is good, but it can be taken too far, and that’s what I’d argue is happening at Apple right now.

Instead, Apple could take FileMaker Inc. as a model. FileMaker, which emerged from the ashes of Claris, is a wholly owned subsidiary, but since the needs of the database development market differ significantly from those of Apple’s other markets, it has presumably made sense to give FileMaker more autonomy than other apps. Even if FileMaker’s independence is a historical accident — I don’t know what sets it apart from Final Cut Pro or Logic Pro, which Apple has kept in-house — the point remains: Apple could give the Mac division its head rather than tying it to the iOS wagon.

Lots of corporate giants have divisions or subsidiaries that run largely independently, and I see no inherent reason why Apple couldn’t spin the Mac out just far enough that it could focus on the needs of Mac users, rather than merely trying to be supportive of iOS. That would apply to both Mac hardware and macOS, and yes, it would require significant coordination to ensure that Apple’s famed integration didn’t suffer in the process.

Hard though it might be, letting the Mac team pursue its own goals could result in a Mac that would once again indisputably be the computer of choice for creative professionals. 🍷

by Adam C. Engst

How to Turn Off Sierra’s Optimized Storage

When first introducing macOS 10.12 Sierra, Apple made much of Optimized Storage, a marketing term that encompasses various settings and cloud-related technologies for moving data from a Mac’s space-constrained local drive to the cloud. In [“Explaining Sierra’s Optimized Storage”](#) (19 September 2016), I tried to lay out what Optimized Storage covers, explain the Storage Management window interface, and give suggestions about what you should or should not enable manually. Since Optimized Storage deletes data from your local drive such that it may not exist in your backups, you should be aware of the implications of turning it on.

Unfortunately, because Sierra prompts you to enable Desktop and Documents folder syncing during installation

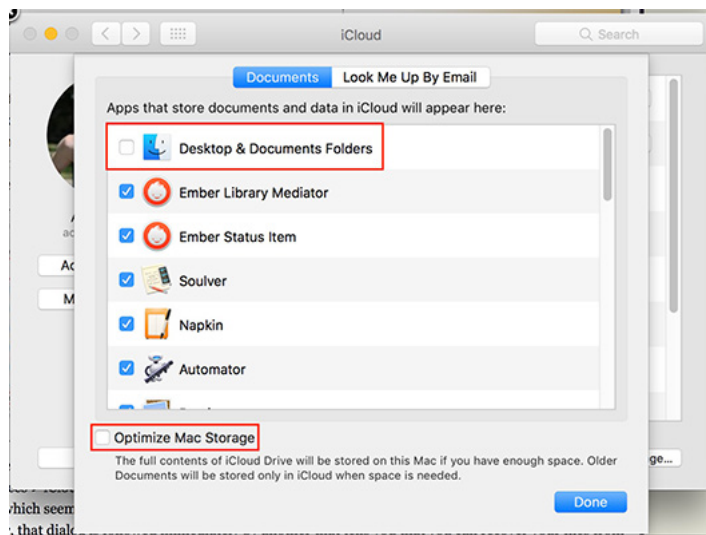
and may enable the associated Optimize Mac Storage checkbox by default as well, many Mac users are unwittingly enrolling important data in Optimized Storage. Worse, reports have started circulating that [Sierra may have enabled some previously disabled Optimized Storage features](#) during the 10.12.1 update. That’s not OK.

For the record, I don’t believe that Optimized Storage is inherently evil. Some of its options, such as deleting the local copies of watched movies and TV shows purchased from the iTunes Store, have few downsides. However, many people wish to maintain complete control over local storage, so I’ll explain how to disable all of Optimized Storage’s options in this article.

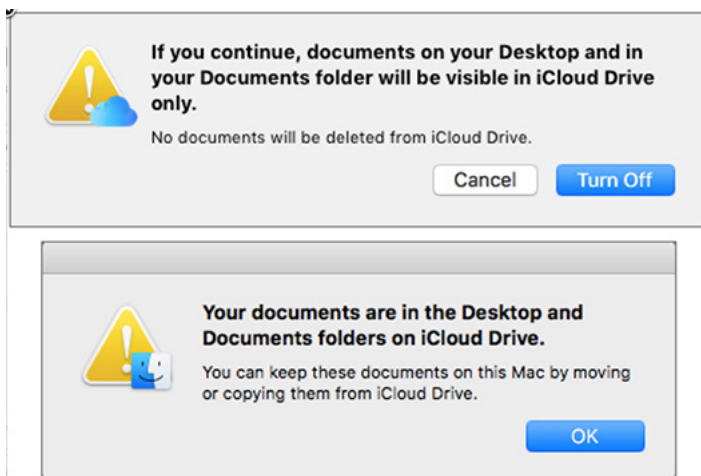
iCloud Drive & Desktop and Documents Folder

Syncing — Technically speaking, Desktop and Documents folder syncing isn't part of Optimized Storage. Its goal is to store your documents in iCloud Drive so you can access them from any of your Apple devices.

However, Optimized Storage can apply to all iCloud Drive-based documents and data, including the Desktop and Documents folders if they're being synced through iCloud. If Optimized Storage does decide to start deleting local files to free up space, those files are most likely to come from your Documents folder. To keep your Desktop and Documents folders out of iCloud, and to ensure that data that is in iCloud is always mirrored locally, open System Preferences > iCloud > iCloud Drive > Options, and deselect both Desktop & Documents Folders at the top of the list and the Optimize Mac Storage checkbox at the bottom.



Be aware that turning off Desktop and Documents folder syncing is stressful. When you do so, in System Preferences > iCloud > iCloud Drive > Options, Sierra tells you that all your files will be available only in iCloud, which seems wrong: if you're turning off syncing, you're doing so because you want them locally. However, that dialog is followed immediately by another that tells you that you can recover your files from iCloud Drive.

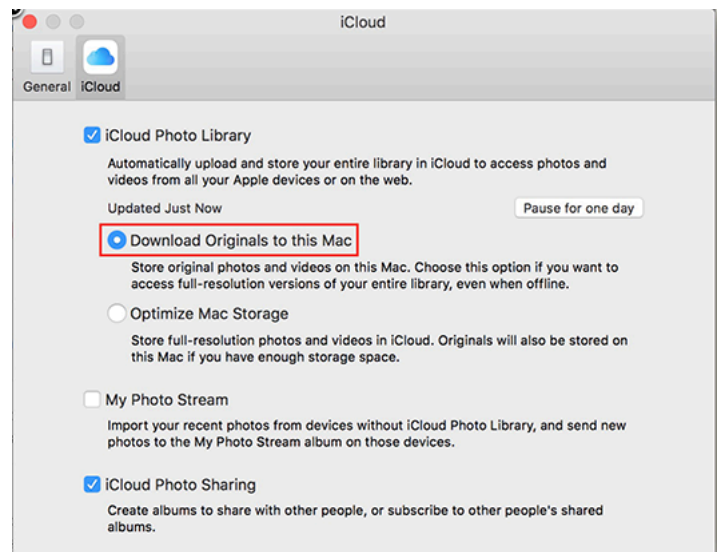


In fact, what happens when you turn off that feature is that Sierra recreates empty Desktop and Documents folders in your home folder. You can't replace those folders, so it's not possible to drag the old Desktop and Documents folders from iCloud Drive to your home folder. Instead, you must open each folder in iCloud Drive and move (Command-drag) its contents to the new local Desktop and Documents folders in your home folder. You can try to delete the now-empty Desktop and Documents folders from iCloud Drive, but in my experience, iCloud keeps recreating at least the Desktop folder.

Photos — Given the ease of taking and storing photos and videos, your Photos library may occupy more space than anything else — I'm not a prolific photographer and mine is still over 110 GB. If you have multiple Apple devices, using iCloud Photo Library lets you access, edit, and manage your photos from any device, which is great, even if it almost always requires that you pay for additional iCloud Drive space.

iCloud Photo Library was one of the first places where Apple dipped its toes into optimizing storage because many Photos libraries are far too large to fit on iOS devices. Plus, it's not uncommon for someone to have an iMac at home but want to play with photos on a space-constrained MacBook Air while on vacation.

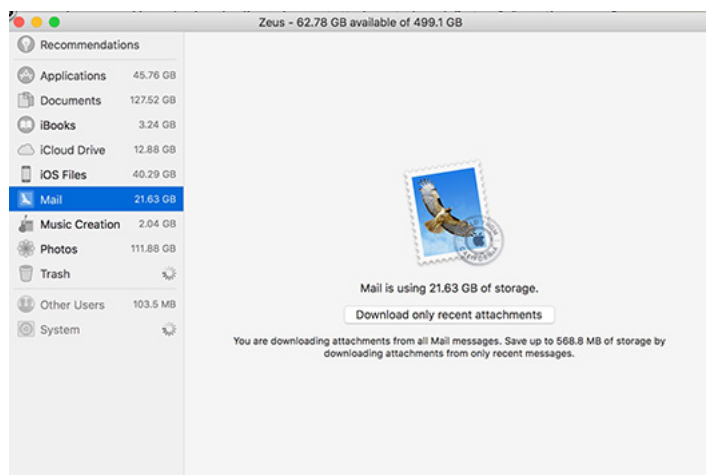
My recommendation is to keep Optimized Storage enabled for all iOS devices and secondary Mac notebooks where space is at a premium, but to turn it off on your main Mac so your photos are always included in your backups. To do this, open Photos > Preferences > iCloud, and select "Download Originals to this Mac."



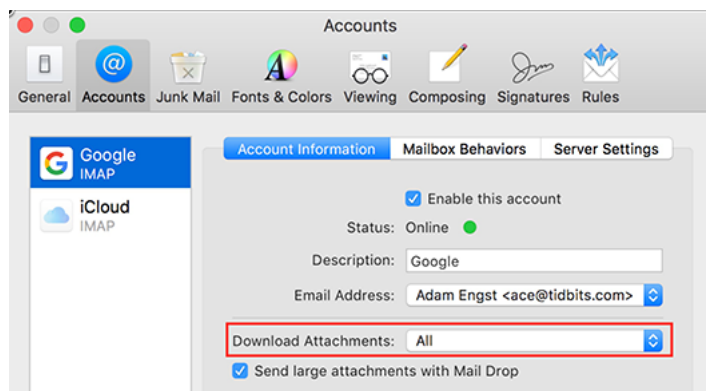
Mail — If you work with people who send around presentations or videos on a regular basis, Mail is likely consuming a significant amount of drive space. Email messages themselves are small, so there's no win in deleting them, but attachments are another story.

In previous versions of Mail, you could either download all attachments or leave them all on your IMAP server. Sierra's

version of Mail adds a third option to download only recent email attachments. When you open a message whose attachment hasn't been downloaded, you can click a button to get it. If you want to see how much space you'd save by downloading only recent attachments, launch System Information, choose Window > Storage Management, and click Mail in the sidebar.

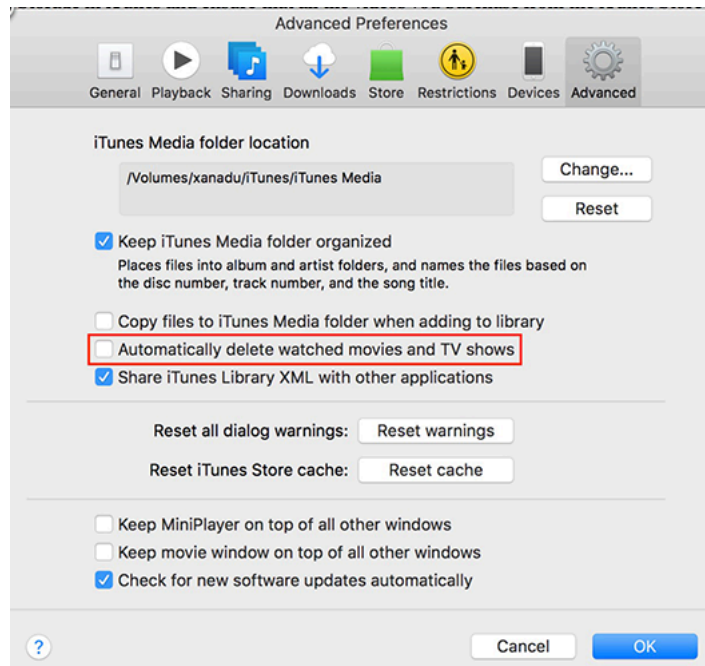


Apple has bundled these features into Optimized Storage, so if you want to make sure that your local mail archive always contains both messages and attachments, so in Mail, go to Mail > Preferences > Accounts > accountName > Account Information and choose All from the Download Attachments pop-up menu. Make sure to do this for each of your accounts!



iTunes — Video can consume massive amounts of drive space, but it's also slow to download. If you regularly purchase movies and TV shows from the iTunes Store, you can use Optimized Storage to remove watched videos from iTunes automatically. But what if you're buying content for a child who wants to watch things multiple times, or you want to ensure you can watch anything again without having to download again over a slow Internet connection?

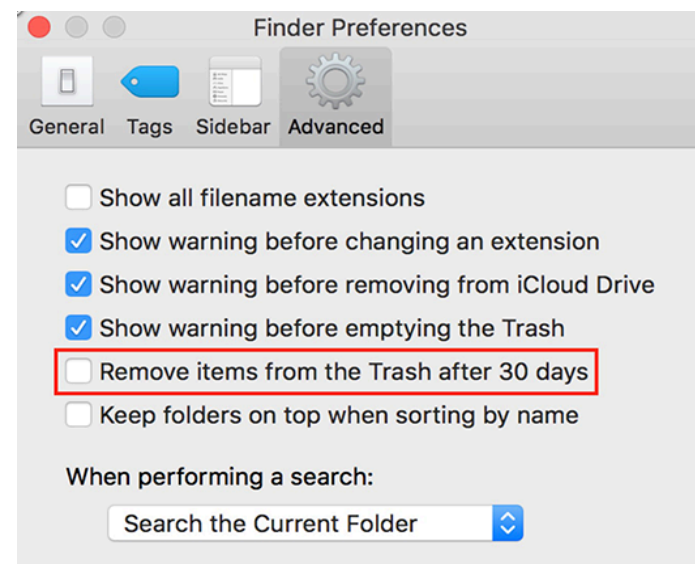
To turn off Optimized Storage in iTunes and ensure that all the videos you purchase from the iTunes Store stick around even after you've watched them, navigate to iTunes > Preferences > Advanced and deselect the "Automatically delete watched movies and TV shows" checkbox.



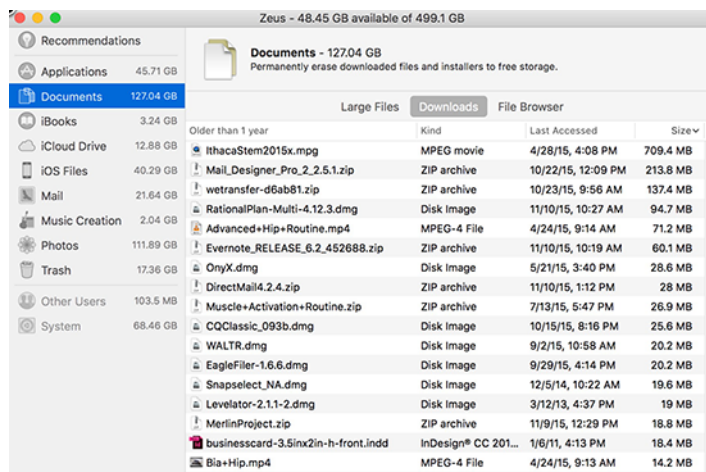
Empty Trash Automatically — All the previously mentioned features of Optimized Storage involve deleting the local copy of a file under the assumption that it can be retrieved from the cloud if necessary. The final aspect of Optimized Storage that you might want to turn off is different — it's an option in the Finder that automatically deletes files in the Trash after they have been there for 30 days.

Frankly, there should be no downside to enabling this option. You should never depend on being able to go into the Trash to bring back a file that you deleted more than a month before. Just don't delete any file that you might want again.

That said, if you want more control over when your Trash is emptied, go to Finder > Preferences > Advanced and deselect "Remove items from the Trash after 30 days."



Manage Storage Manually — If you're uncomfortable with Optimized Storage but are still running out of space on your Mac's drive, you can use the new Storage Management window to identify and delete large files. Open the System Information app, choose Window > Storage Management, and look at all the sidebar categories underneath Recommendations.



Zeus - 48.45 GB available of 499.1 GB

Recommendations

Documents - 127.04 GB
Permanently erase downloaded files and installers to free storage.

Applications 45.71 GB
Documents 127.04 GB
iBooks 3.24 GB
iCloud Drive 12.88 GB
iOS Files 40.29 GB
Mail 21.64 GB
Music Creation 2.04 GB
Photos 111.89 GB
Trash 17.36 GB
Other Users 103.5 MB
System 68.46 GB

Large Files Downloads File Browser

Older than 1 year	Kind	Last Accessed	Size
ithacaStem2015x.mpg	MPEG movie	4/28/15, 4:08 PM	709.4 MB
Mail_Designer_Pro_2.2.5.1.zip	ZIP archive	10/22/15, 12:09 PM	213.8 MB
wetransfer-d6ab81.zip	ZIP archive	10/23/15, 9:56 AM	137.4 MB
RationalPlan-Multi-4.12.3.dmg	Disk Image	11/10/15, 10:27 AM	94.7 MB
Advanced+Hip+Routine.mp4	MPEG-4 File	4/24/15, 9:14 AM	71.2 MB
Evernote_RELEASE.6.2.452688.zip	ZIP archive	11/10/15, 10:19 AM	60.1 MB
OnyxX.dmg	Disk Image	5/21/15, 3:40 PM	28.6 MB
DirectMail4.2.4.zip	ZIP archive	11/10/15, 1:12 PM	28 MB
Muscle+Activation+Routine.zip	ZIP archive	7/13/15, 5:47 PM	26.9 MB
CQClassic_093b.dmg	Disk Image	10/15/15, 8:16 PM	25.6 MB
WALTR.dmg	Disk Image	9/2/15, 10:58 AM	20.2 MB
EagleFiller-1.6.6.dmg	Disk Image	9/29/15, 4:14 PM	20.2 MB
Snapselect_NA.dmg	Disk Image	12/5/14, 10:22 AM	19.6 MB
Levelator-2.1.1-2.dmg	Disk Image	3/12/13, 4:37 PM	19 MB
MerlinProject.zip	ZIP archive	11/9/15, 12:29 PM	18.8 MB
businesscard-3.5inx2in-h-front.indd	InDesign® CC 201...	1/6/11, 4:13 PM	18.4 MB
Bla+Hip.mp4	MPEG-4 File	4/24/15, 9:13 AM	14.2 MB

With a little attention paid to the old versions of apps, unnecessary downloads, and unexpectedly large documents scattered around your drive, you can often clear a surprising amount of space in just a few minutes while retaining complete control over your local storage. 🗑️



by Josh Centers

Four Reasons Why Apple Should Bid on Time Warner

Telecom giant AT&T is seeking to purchase content giant Time Warner (which is no longer affiliated with Time Warner Cable, see [“AT&T Aims to Buy Time Warner for \\$84.5 Billion,”](#) 24 October 2016). However, the deal could run into regulatory obstacles, with politicians on both sides of the aisle questioning the merger. It also doesn't help that the [Department of Justice is suing AT&T subsidiary DirectTV](#).

There might be an opportunity for Apple to swoop in and outbid AT&T, which is something I've been [shouting from the social media rooftops](#) since it became clear that Apple's new TV app wouldn't support Netflix or Amazon Prime Video (see [“Apple's TV App Seeks to Unify the Apple TV Experience,”](#) 27 October 2016).

I'm not alone: Goldman Sachs is reportedly [pushing Apple to make a competing bid for Time Warner](#), but Apple is resisting. However, I think Apple should consider the possibility. Here are four reasons why:

Content Is a Unique Form of Currency — If Apple wants to play in the content arena, and it does, the company has to own content that it can use as a negotiating chip with other content providers to expand its library.

You'd be right to ask: “Apple has nearly \$238 billion in cash. Can't it afford to license or create any content it wants?” Yes... in theory, but it's not that simple.

Let's say Apple wants to sell new episodes of Amazon's award-winning show “Transparent” in iTunes. You can buy the first season there, but the second season is still exclusive to Amazon Prime Video.

If Apple really wanted to get access to those new episodes as they drop, it might be able to pay Amazon for that privilege, but not necessarily, because “Transparent” is more to Amazon than merely a popular, award-winning TV show. “Transparent” sells Amazon Prime memberships, Fire TV boxes, and helps reward partners who fit into Amazon's overall strategy, like Sony, whose video players usually offer an Amazon Prime Video app. It doesn't matter how much money you have if the other party doesn't want to sell.

With most goods, negotiations come down to money, but content is special, because it's impossible to predict. For instance, the recent movie [“Inferno” was a flop](#), despite being directed by Ron Howard, starring Tom Hanks, and being based on a Dan Brown story — on paper, “Inferno” should have been a huge hit. Meanwhile, one of the biggest hits of the year has been “Deadpool,” a low-budget superhero movie helmed by an inexperienced director and starring Ryan Reynolds, who, despite good looks, charisma, and talent, spent years starring in flops. Content is unique.

Because you can't just buy good content, content has become a form of currency. Since no company can make all the

content it wants to provide to customers, the best way to get content can be to trade.

An example: Right now, one of Amazon Prime Video's biggest selling points is that it streams HBO shows for free. Time Warner owns HBO, and if Apple bought Time Warner, Apple would own HBO, which might encourage Amazon to create an Amazon Prime Video app for the Apple TV. Likewise, Time Warner owns "Arrow" and "The Flash," which are popular Netflix exclusives (Time Warner owns DC Comics, which originated the characters and Time Warner owns half of the CW network that airs those shows). If Netflix wanted to keep those exclusives, it might be more inclined to support Apple's new TV app.

So why shouldn't Apple buy Netflix, as [analyst Ben Thompson recommends](#)?

Buying Netflix Would Be Dangerous — Thompson correctly points out that owning content would give Apple a seat at the table it wouldn't otherwise have, but I fear that owning Netflix would only make the problem worse.

Netflix's catalog has [shrunk by half](#) in the past four years, for the simple reason that Netflix scares the hell out of Hollywood. The studios don't want to be beholden to Netflix, so they're seeking deals with Netflix competitors like Hulu to make their content available to streamers, which limits piracy while reducing Netflix's power.

Apple engenders the same sort of fear in Hollywood, which still holds [Apple responsible for ruining the music business](#). That's nonsense — if anything, Apple saved the music industry — but TV and movie studios are desperate to avoid becoming dependent on Apple. Companies like Amazon and Sony can cut deals that Apple can't because Apple frightens content owners. Apple disrupts existing business models, and the last thing these companies want is disruption.

Hollywood's nightmare is that Netflix becomes the next Apple, and if Apple buys Netflix, that fear comes true in spades.

"But Netflix makes its own content," you might counter, and that's true. Netflix makes a lot of great content, but you only ever see it on Netflix. Netflix hasn't been willing or able to share its content as a negotiating chip. Instead, it's a way to make sure Netflix is relevant even if some content owners abandon it entirely. Apple could potentially turn Netflix's content into bargaining chips, but there hasn't been much precedence for that, and Time Warner offers better chips anyway.

Despite owning some tasty Marvel franchises like "Daredevil" and "Jessica Jones," Netflix has nothing to compare with Time Warner's catalog, which includes the likes of Batman, Superman, Harry Potter, and Game of Thrones. Time Warner is a much, much bigger player than Netflix, owning Adult Swim, CNN, Cartoon Network, DC Comics, HBO, 10 percent of Hulu (more leverage), Looney Tunes, NBA TV, TBS, the CW, and TNT. Again, I'm just scratching the

surface. The full list of stuff owned by Time Warner is staggering.

Time Warner has a lot to offer, and Apple is in a position where it can afford it.

It's Time to Spend that Money, Apple — AT&T is offering \$84.5 billion in cash and stock for Time Warner. Apple has \$238 billion in cash. Apple could easily outbid AT&T with plenty of money to spare.

But is that a good deal? On paper, maybe not. [Time Warner's market cap is only about \\$68 billion](#), less than even AT&T's bid. But, since content is a form of currency, measuring in terms of cash value is tricky.

Besides, Time Warner is a healthy business. It saw a [profit of \\$1.5 billion](#) in its most recent quarter, which, while dwarfed by [Apple's Q4 \\$9 billion in profits](#), isn't chump change.

However, Apple may not be able to spend its money freely, given that much of it is held offshore. But even those opposed to the deal, such as Mashable's Kerry Flynn, agree that [money isn't the problem](#).

Many have speculated over the years that Apple clings to its cash out of a sort of survivor's trauma after it nearly closed its doors in the 1990s. But content is going to be key to Apple's long-term prospects.

Time Warner is a profitable business with a wealth of content to offer Apple, but most importantly...

Time Warner Can Take Care of Itself — One of the more compelling arguments against Apple acquiring Time Warner is that there would be a culture clash between the companies.

But here's the thing: Time Warner can take care of itself. It's a profitable, growing business that doesn't need a babysitter. Tim Cook wouldn't have to run that show — Time Warner CEO Jeff Bewkes seems to be doing a fine job — nor would he have to be on the set of "Game of Thrones" every day (though that might be tempting for other Apple executives, who shall remain nameless).

Another counter argument is that owning a movie studio and a record label doesn't seem to be doing Sony any favors. It's true: the hardware and content divisions of Sony are [notoriously hostile](#). One of the reasons Sony lost the music player market is because Sony Music objected to the adoption of MP3 for Sony's music players.

However, Apple isn't Sony, and more importantly, Apple and Sony are from countries with very different corporate cultures.

Japan's business culture places a [heavy emphasis on consensus](#) — that is, not making a decision until all parties are in agreement. This is often smart, but it backfired in Sony's case because some of Sony's units had conflicting goals.

When Sony got into the music and movie businesses in the late 1980s, it did so to feed its core hardware business. But at some point, the company lost sight of that goal, so content became the tail wagging the dog.

I can't see Apple suffering a similar fate. Apple has never been a consensus-based company, but rather a benevolent dictatorship. Cook might rely more on his lieutenants than Jobs did, but there's no question about who's in charge.

The key to success in an Apple/Time Warner merger would be maintaining a firewall between the two businesses, with Apple leaving Time Warner alone unless it needed a content deal.

However, that's not to say there wouldn't be risks involved with Apple purchasing Time Warner...

Potential Dangers – The biggest risk for Apple would be competing with and thus alienating long-time ally Disney. That would be a tricky relationship to maintain.

Some have asked why Apple just doesn't buy Disney. I think that would be an [ideal scenario](#), but who's to say that Disney is even for sale?

Bidding on Time Warner might also tick off AT&T, which hopes to have Time Warner for itself. AT&T might respond

by trying to find ways to undercut the iPhone. But AT&T isn't the only cellular carrier, and Apple now offers its own iPhone installment program, so it's unclear how much leverage AT&T would have.

But here's the bottom line: Apple wants to be in the content business. Apple needs to be in the content business if it hopes to grow its increasingly important Services category. And there are only two ways to achieve that goal:

- Create content, such as Apple is doing with its upcoming "Planet of the Apps" and "Carpool Karaoke" shows. But this is a difficult, risky business with no guarantee of success, and it won't make Apple any friends either.
- Buy existing content that is known to have an audience.

Apple is currently just dabbling in the content-creation business, but the major content companies are watching it with an eagle eye. If Apple appears to be encroaching on their turf, they'll be quick to put pressure on Apple to back off. Apple's best hope for content is a quick move that would make it a major player overnight, and buying Time Warner is currently the best path toward that. Or at least the most dramatic. 🍷

Software Review

Apple Updates

AirPort Base Station Firmware Update 7.6.8 Information Dec 20, 2016

System Requirements

- AirPort Extreme, AirPort Time Capsule, and AirPort Express base stations with 802.11n.

Firmware update 7.6.8 is recommended for all Apple 802.11n Wi-Fi base stations including AirPort Express, AirPort Extreme and AirPort Time Capsule. This update addresses an issue that may prevent users from accessing their AirPort base station using Back to My Mac.

AirPort Base Station Firmware Update 7.7.8 Information Dec 20, 2016

System Requirements

- AirPort Extreme, AirPort Time Capsule, and AirPort Express base stations with 802.11n.

Firmware update 7.7.8 is recommended for all AirPort Extreme and AirPort Time Capsule base stations with 802.11ac. This update addresses an issue that may prevent AirPort base stations from appearing in AirPort Utility when Back to My Mac is enabled.

Security Update 2016-003 (10.11.6)

Dec 13, 2016 – 717 MB

System Requirements

- OS X El Capitan 10.11.6

Security Update 2016-003 is recommended for all users and improves the security of OS X.

macOS Sierra 10.12.2 Combo Update

Dec 13, 2016 – 2.05 GB

System Requirements

- macOS Sierra 10.12

The macOS Sierra 10.12.2 update improves the stability, compatibility, and security of your Mac, and is recommended for all users.

This update:

- Improves setup and reliability of Auto Unlock
- Allows addition of a Chinese Trackpad Handwriting button to the Touch Bar Control Strip
- Adds support for taking screenshots of the Touch Bar using the Grab app or Cmd-Shift-6 shortcut
- Fixes an issue that caused the Touch Bar emoji picker to appear on the display
- Resolves graphics issues on MacBook Pro (October 2016) computers

- Fixes an issue where System Integrity Protection was disabled on some MacBook Pro (October 2016) computers
- Improves setup and opt-out experience for iCloud Desktop and Documents
- Fixes an issue with the delivery of Optimized Storage alerts
- Improves audio quality when using Siri and FaceTime with Bluetooth headphones
- Improves the stability of Photos when creating and ordering books
- Fixes an issue where incoming Mail messages did not appear when using a Microsoft Exchange account
- Fixes an issue that prevented installation of Safari Extensions downloaded outside the Safari Extensions Gallery
- Adds support for new installations of Windows 8 and Windows 7 using Boot Camp on supported Macs

macOS Sierra 10.12.2 Update

Dec 13, 2016 – 1.94 GB

System Requirements

- macOS Sierra 10.12.1

The macOS Sierra 10.12.2 update improves the stability, compatibility, and security of your Mac, and is recommended for all users.

This update:

- Improves setup and reliability of Auto Unlock
- Allows addition of a Chinese Trackpad Handwriting button to the Touch Bar Control Strip
- Adds support for taking screenshots of the Touch Bar using the Grab app or Cmd-Shift-6 shortcut
- Fixes an issue that caused the Touch Bar emoji picker to appear on the display
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- Fixes an issue where incoming Mail messages did not appear when using a Microsoft Exchange account
- Fixes an issue that prevented installation of Safari Extensions downloaded outside the Safari Extensions Gallery
- Adds support for new installations of Windows 8 and Windows 7 using Boot Camp on supported Macs

Security Update 2016-007 (10.10.5)

Dec 13, 2016 – 498.1 MB

System Requirements

- OS X Yosemite 10.10.5

Security Update 2016-007 is recommended for all users and improves the security of OS X.

iOS 10.0 - iOS 10.2 Information

Dec 12, 2016

System Requirements

- iPhone 5 or newer
- iPad 4th generation or newer
- iPad mini 2 or newer
- iPod touch (6th generation)

iOS 10.2 introduces new features including the TV app (US Only), a new and unified experience for accessing your TV shows and movies across multiple video apps. Emoji have been beautifully redesigned to reveal even more detail and over 100 new emoji have been added including new faces, food, animals, sports, and professions. This update also includes stability improvements and bug fixes.

Available via OTA and iTunes

TV

- Use Up Next to see the movies and shows you're currently watching and pick up where you left off
- Get recommendations for new movies and TV shows in Watch Now
- Discover new apps and the latest iTunes releases in the Store
- Access the Library for your iTunes purchases and rentals

Emoji

- Beautifully redesigned emoji that reveal even more detail
- Over 100 new emoji including new faces, food, animals, sports, and professions

Photos

- Improves stabilization and delivers faster frame rate for Live Photos
- Improves accuracy of groupings of similar photos of the same person in the People album
- Fixes an issue where Memories might generate a memory from photos of screenshots, whiteboards or receipts
- Fixes an issue where the camera would stay zoomed in after switching back from the Camera Roll on iPhone 7 Plus
- Additional support for RAW digital cameras

Messages

- Adds new love and celebration full screen effects in Messages
- Fixes an issue that sometimes prevented the keyboard from displaying in Messages

Music

- Swipe up the Now Playing screen to more easily access Shuffle, Repeat and Up Next
- Choose how to sort Playlists, Albums, and Songs in Library

News

- Stories you've saved for later now appear in the new Saved section
- The best paid stories from channels you subscribe to will now appear in a dedicated section in For You
- It's now easier than ever to get to the next story, just swipe left or tap Next Story while reading

Mail

- Fixes an issue that caused the Move sheet to persist after filing a Mail message
- Addresses an issue with long press activating copy and paste in Mail
- Fixes an issue in which the wrong message would be selected after deleting a Mail conversation

Accessibility

- Adds BraillePen14 support to VoiceOver
- Fixes an issue where the braille table could switch unexpectedly with VoiceOver
- Fixes an issue where sometimes Siri enhanced voices were unavailable to VoiceOver
- Fixes an issue where VoiceOver users could not re-order items in lists
- Fixes an issue where Switch Control was sometimes unable to delete Voicemails

Other improvements and fixes

- Adds notification support for HomeKit accessories including window coverings, occupancy, motion, door/window, smoke, carbon monoxide, and water leak sensors
- Adds notification support for HomeKit accessories when software updates are available to HomeKit accessories
- Improves Bluetooth performance and connectivity with 3rd party accessories
- Fixes an issue that could cause FaceTime participants to appear out of focus
- Fixes an issue that could cause FaceTime calls to appear with incorrect aspect ratio and orientation
- Fixes an issue that prevented some Visual Voicemail from completing playback

- Fixes a Safari Reader issue that could cause articles to open as empty pages
- Fixes an issue that could cause Safari to quit unexpectedly after marking an item as read in Reading List

iTunes 12.5.4

Dec 12, 2016

System Requirements

- 400MB of available disk space
- iTunes in the Cloud, iTunes Match, and iTunes Radio availability may vary by country
- iTunes Extras require OS X version 10.10.3 or later
- Apple Music requires OS X version 10.9.5 or later

This update adds support for the new TV app on iPhone, iPad, iPod touch, and Apple TV. And with Touch Bar on the new MacBook Pro, use the scrubber to easily go to different parts of songs, movies, TV shows, and more.

It also includes minor app and performance improvements.

watchOS 3.0 -3.1.1 Information

Dec 12, 2016

System Requirements

- iPhone 5 or later
- Available via OTA through the Apple Watch app

This update includes improvements and bug fixes.

- Fixes an issue that could prevent contact names from appearing in the Messages app and notifications
- Fixes an issue that could impact ability to respond to notifications
- Resolves an issue where the Stocks complication may not update on the watch face
- Fixes an issue that may prevent the Activity rings from displaying on the Activity watch faces
- Fixes an issue that prevented the dials on an analog watch face from appearing after changing the temperature unit in the Weather app
- Resolves an issue that could cause the Maps app to stay launched after navigation has ended 🗺

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