

# iCloud

## STARTER GUIDE



Master Apple's Free Sync Service

# Contents

## Get Started

What Is iCloud? . . . . .	7
Set Up iCloud . . . . .	15
Storage in the Cloud. . . . .	24

## Work With iCloud

Sync Your Data and Documents . . . . .	32
Mobile Backup. . . . .	44
Location Awareness. . . . .	47
Purchase Management . . . . .	60

## Troubleshoot iCloud

Accounts . . . . .	67
Syncing . . . . .	71
Backups. . . . .	76
Location Services . . . . .	77
iTunes Match . . . . .	78

# Get Started



**SYNCED AND LOADED** iCloud keeps your data in sync across your iPhone, Mac, and any other iOS devices.

Over the past few years, users have become obsessed with the notion of having their documents and data instantly available wherever they are, on whichever device they happen to be using at the time. With iCloud, Apple has charged headfirst into the digital syncing sphere. A free iCloud account lets you sync your documents, data, accounts, photos, mobile backups, purchases, and so much more.

# What Is iCloud?

iCloud is a catchall phrase that covers Apple's suite of sync and backup services, which aim to keep your devices—iOS devices running iOS 5 or later and desktop computers running OS X Lion or later, or Windows Vista or later—on the same page, no matter which one you're using at any given moment. You can create an iCloud account for free on any device the service is compatible with.

These services cover four general areas: document and data sync, mobile backup, location awareness, and purchase management.

A free iCloud account provides 5GB of storage for data sync and mobile backup; you can purchase additional space for a yearly fee. Many things that your iCloud account syncs—your purchased content and your Photo Stream images, for example—do not count toward this limit. (For more information, see ["Storage in the Cloud"](#) later in this chapter.)

Unlike some third-party services, iCloud doesn't focus on preserving individual files or providing a central folder where you can upload documents to access across platforms. With iCloud, Apple wants you to stop worrying about where you've saved specific files, and instead focus on the information itself.

## Sync and Share

iCloud's behind-the-scenes sync features focus on keeping your data up-to-date, syncing documents and information between devices, and streaming your recently taken photos across devices. (For more on syncing, see ["Documents & Data"](#) in the "Work With iCloud" chapter.)

**EMAIL** iCloud offers users a free email account (in this case, using the format *name@icloud.com*) for sending and receiving email. This account uses the IMAP protocol, so it works with any standard email client (such as OS X's Mail), as well as the iOS Mail app and the iCloud Web app.

**DATA SYNC** iCloud lets you access, update, and sync your contacts, calendars, reminders, Safari bookmarks and tabs, notes, photos, and more across all of your devices and the Web.

iPhone, iPad, and iPod touch devices running iOS 5 or later can sync calendar, reminder, contacts, notes, Web browser data, and (for iPhone users running iOS 6) any Passbook tickets or coupons you may have picked up.

Macs running OS X 10.8 Mountain Lion can sync calendar, reminder, contact, and notes data using the Calendar, Reminders, Contacts, and Notes apps, respectively (iCal, Address Book, and Mail in OS X 10.7); Windows users can use Outlook 2007 or later. You can also choose to sync your Web browser's bookmarks.

All data syncing information counts toward your free 5GB storage limit.

**DOCUMENTS SYNC** Several of Apple's built-in OS X and iOS apps—along with many third-party apps available on the App Store—can store their documents to your iCloud account, allowing you to access those files from multiple devices. Like synced data, this information counts toward your free 5GB storage limit.

**PHOTO STREAM** iCloud's photo service allows you to snap a picture from any iOS device (or upload an image to a Photo Stream-compatible program or folder on your Mac or PC) and seamlessly share it to all your other devices and computers. Photo Stream stores the last 30 days' worth of images online; if you have a Mac or PC connected to Photo Stream, images automatically download to your computer, so they're instantly stored offline. Your iOS devices, in contrast, can only access the last 1000 Photo Stream items, and you have to download images manually.

iCloud also lets you create Shared Photo Streams so you can share images with family and friends. (For more on Photo Stream, see "[Photo Stream](#)" in the "Work With iCloud" chapter.)

## Back Up Files

In addition to syncing your files, purchases, and data to iCloud, you can back up your iOS devices to it. This counts toward your free 5GB storage limit. To back up your iPhone, iPod, or iPad, open its Settings app and navigate to *iCloud* > *Storage & Backup*.



**CLOUD BACKUP** You can back up to iCloud, which lets you restore from the cloud.

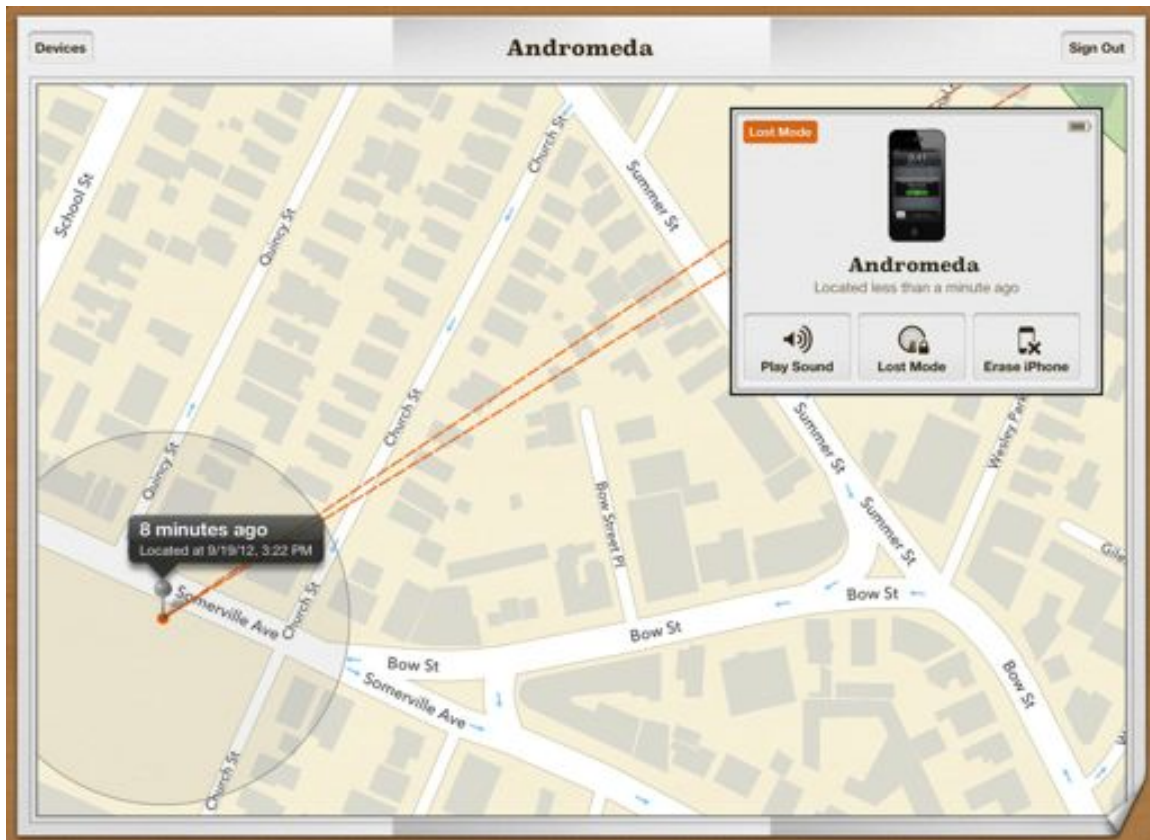
Enable the *iCloud Backup* option, and your device automatically backs up accounts, documents, settings, and the Camera Roll album to iCloud whenever the device is plugged into a power source, connected to Wi-Fi, and asleep (locked). You can also force an iCloud backup at any time by going to *Settings* > *iCloud* > *Storage & Backup* and tapping the *Back Up Now* button (which turns into *Cancel Backup* while a backup is occurring).

If you ever need to restore your device, you can do so over the air, with the iCloud backup working in tandem with your iTunes and App Store purchases so you can get your device back to where it was. A note: You may not be able to restore certain purchases—for example, some movies and TV shows—internationally due to licensing restrictions; check your country's terms and conditions to be sure. (For more on iCloud backup, see “[Mobile Backup](#)” in the “Work With iCloud” chapter.)

### Find Your People, Places, and Things

Missing your iPhone or can't find your friends? Your iCloud account lets you track any iOS device that you've linked to it, with some assistance from the Find My iPhone app on iOS and on the Web. In addition, your account lets you use Apple's Find My Friends service to connect and meet up with your pals and family members. If you've linked your iCloud account with your Mac, you can also use its Back to My Mac service to remotely connect to your computer from afar. (For more information on these services, see “[Location Awareness](#)” in the “Work With iCloud” chapter.)

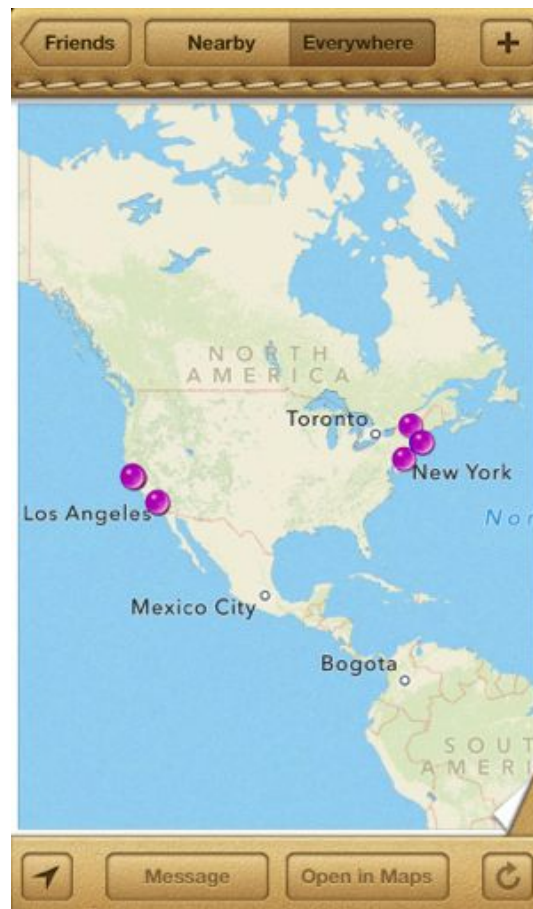
**IPHONE TRACKER** Lost your device? If you added your iCloud account to it, you can locate it easily using Find My iPhone. This app lets you track down any iOS device—or Mac—that has Apple's Find My *device* service enabled.



**TRACKING DEVICE** Lost your iPhone, iPad, iPod, or Mac? If you have it linked with iCloud, you can track it by logging in to the iCloud website.

If you've lost your device, you can log in to the [iCloud website](#) or the Find My iPhone app on a different iOS device to find it. From there, you can make the device emit a sound (even if it's in silent mode), enable Lost mode to track its location, and remotely lock (and optionally wipe) it. You can even choose to receive an email notification if your device is initially off but later returns online.

**FIND MY FRIENDS** This app allows you to broadcast your location temporarily or permanently to a select group of people, as well as locate those friends and family who have given you permission to locate them.



**FRIEND FINDER** The Find My Friends app lets you track down those friends who've given you permission to locate them.

You can turn your location on or off, create a Favorites list from your Find My Friends contacts, create a temporary event so that people not on your contacts list can find you during a specific outing, and restrict sharing with specialized controls. If you want to notify your friends when you enter or leave a specific place (or if you want to be notified about their movements), you can also set that up within the app. This app only works for iPad, iPhone, and iPod touch users.

**BACK TO MY MAC** You're on vacation and suddenly remember that you need to work on a project you left at home. What to do? If you have iCloud's Back to My Mac service enabled and a nearby Mac to use, you can remotely connect to your homebound computer even if it's miles away.



**SCREENS AWAY** With Back to My Mac, you can view your computer's screen from a distant location.

Back to My Mac lets you connect via file sharing or screen sharing, giving you the freedom to access your computer in multiple ways.

## iTunes in the Cloud

iCloud's purchase management focuses on three areas—past purchases, purchases in the cloud, and iTunes Match (a \$25 yearly add-on)—that collectively make up iTunes in the Cloud. (For more information, see [“Purchase Management”](#) in the “Work With iCloud” chapter.)

**PAST PURCHASES** The Purchased screen in the App Store, iTunes Store, and iBookstore on a Mac, PC, or iOS device allows you to view your purchase history for apps, music, videos, and books, and redownload any of them for free.





**CLASSY CATALOG** Redownload your previously purchased songs from the iTunes app at any time.

In addition, your Mac, PC, and iOS devices can automatically download any new purchases you make using your iCloud account. (A few caveats: Redownloading certain items, such as music and television shows, may be restricted by country. And if an item you've purchased is no longer available on the iTunes Store, you may not be able to redownload it.)

**PURCHASES IN THE CLOUD** As mentioned above, you can set your Mac, PC, iPhone, iPod touch, or iPad to automatically download any new music, apps, and books you buy from other devices, and you can also redownload any previously purchased content from the three stores.

The iBooks app takes this one step further: Any content you've previously purchased on the store shows up in your iBooks library with a little download icon in the top right corner. This allows you to quickly see your library, though the books themselves may not be on your device; to download one, just tap the book in question.



**CLOUDY PAGES** All your purchased books automatically show up in your iBooks library, though you can't read any of them until you tap one to download it.

This only applies to content you've purchased—iCloud won't sync books you've manually loaded onto your device from other places.

**iTUNES MATCH** Though you can redownload individual music tracks to your device using the Purchased feature, for an additional \$25 a year you can unlock iTunes Match, which lets you upload your Mac's or PC's iTunes library and access it from any device you're logged into.



**FOR A SONG** iTunes Match lets you stream or download any song you've uploaded from your Mac's or PC's library, whether you purchased it from the iTunes Store or elsewhere.

Once enabled, iTunes Match scans the songs in your music library and links them to the correct song in the iTunes catalog for easy downloading and streaming to your devices. If you didn't originally purchase your songs from iTunes but they're available in the catalog, you can download DRM-free 256-kbps AAC versions for free; iTunes uploads your unmatched songs to iCloud so that you can access them from multiple devices.

## Set Up iCloud

Now that you have an idea of what constitutes iCloud, it's time to set up your very first account. (If you already have an iCloud account, congratulations! You're welcome to skip this section and jump to ["Storage in the Cloud,"](#) or read on to learn about how to set up your other devices.)



**READY TO ROLL** Creating an iCloud account and adding it to your other devices is easy.

A few notes before we begin: While it's free to sign up for iCloud, you can't do so just anywhere; you must create an account on either an iOS device running iOS 5 or later or a Mac running OS X 10.7.5 or later. Unfortunately, Windows users have to first create an account on one of these platforms before they can log in on their PC.

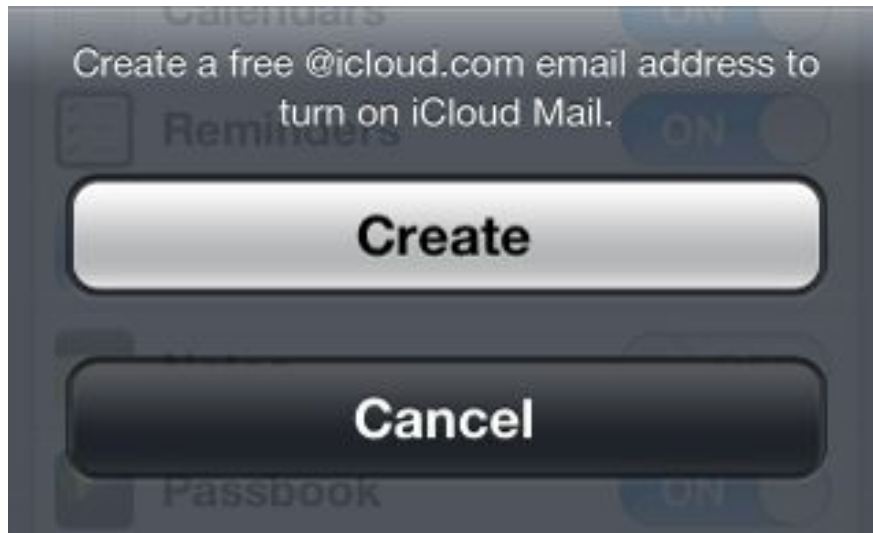
You're also limited to creating ten iCloud accounts per device. You should only need one or two, so you'll probably never run up against this limit. However, because this limit persists after full device wipes, there's a possibility you may encounter it if you have an older iOS device or Mac. If you do get an alert that prevents you from creating a new iCloud account, we suggest going to your nearest Apple Store for help.

### Do You Have an Apple ID?

If you've ever purchased anything from the iTunes Store, App Store, or iBookstore, you have an Apple ID. (Your username is probably the email address you used to sign up for iTunes.) If you've logged into the iTunes or App Store apps with this Apple ID, you should see the email address already filled out in the Apple ID section of the iCloud screen.

All iCloud accounts stem from Apple IDs, so it's very easy to convert your current Apple ID into an iCloud account. You'll still be able to use your Apple ID for everything you currently use it for, but you'll also get all of iCloud's features. And if other members of your family use this Apple ID, they'll still be able to use it for purchases without having access to all of your iCloud information. (For more on managing multiple Apple IDs and iCloud, see ["Accounts"](#) in the "Troubleshoot iCloud" chapter.)

To convert your Apple ID into an iCloud account, open the iCloud preference screen on your iOS device or Mac, then sign into iCloud with your current Apple ID and password. The screen will prompt you to agree to the iCloud terms and conditions; once you do, you're ready to begin using the service.



**NEW MAIL** If you want to add an iCloud email address to your old Apple ID, just turn on the Mail switch in *Settings > iCloud*.

Note: If you do convert an Apple ID into an iCloud account, you won't get an iCloud email address (@icloud.com) by default. If you want one, all you have to do is go to *Settings > iCloud* and toggle the Mail switch on (or, on a Mac or PC, click the checkbox). You'll then be prompted to create an iCloud email address to go along with your account.

### Starting From Scratch

Never used iTunes before? On an iOS device, go ahead and tap the *Get a Free Apple ID* button at the bottom of the iCloud settings screen. (On a Mac, click *Create an Apple ID*.) You'll be asked for your birthdate and name, and whether you'd like to use a current email address or create an iCloud.com email address for your Apple ID. Even if you choose to use your old email address, you can create a new iCloud.com address after setting up your account by going to *Settings > iCloud* and turning on the Mail switch (or by clicking the checkbox on a Mac or PC).



**STARTER KIT** You can choose to use a current email address or create a new one for your Apple ID.

From there, you'll enter either your current email address or what you'd like your new iCloud email address to be. The service also prompts you to enter a password and a security question for your account.

After that, all you need to do to finish up is choose whether you'd like to get email updates from Apple and agree to the terms and conditions. Now, you're ready to start using iCloud.

## Set Up an iOS Device

iCloud was first introduced as a sync mechanism for iOS devices, and consequently, iCloud signup is the most straightforward for your iPhone, iPad, or iPod. To sign up for iCloud, you'll need a device running iOS 5 or later; if your iPhone or iPod is still running iOS 4, you unfortunately won't be able to get in on the iCloud action. (If you want to try syncing certain elements of iCloud to a device running iOS 4, see "[Accounts](#)" in the "Troubleshoot iCloud" chapter.)

When you first set up your device, you should have seen a screen during the setup process asking you to sign in or sign up for an Apple ID and iCloud; even if you chose not to set this up when you first unboxed the device, it's simple to get an account.



**THE PORTAL** The iCloud settings screen lets you sign into the service or create an account for it.

On your device, open the Settings app and tap the *iCloud* entry. You'll see a space for logging in with an Apple ID and password, and a button at the bottom, labeled 'Get a Free Apple ID'.

**USING iCloud** Once you've set up iCloud on your iOS device, most of it gets to work automatically: It syncs your Mail (if you've set Mail up), along with any already created Contacts, Calendars, Reminders, Notes, Passbook passes (iPhone only), and Safari bookmarks, to its central online server. Photo Stream also starts uploading the last 1000 photos you've taken. All iCloud options are turned on by default; if you don't want iCloud to sync a specific item, just tap the toggle to turn it off.



**A FULL DECK iOS gives you access to almost all of iCloud's features.**

When you first add an iCloud account, you won't see any data or third-party documents associated with it until you start using apps that store this information in iCloud. When you open an iCloud-enabled app while logged into iCloud, the app may prompt you to switch to iCloud storage for its documents and data. Other apps may not switch your storage to iCloud unless you tell them to do so via their app preferences.

You can also start creating backups of your iOS devices by going to *Settings > iCloud > Storage & Backup > Back Up Now*.

## Set Up a Mac

The Mac setup process is very similar to setting up an iPad, iPhone, or iPod: You use the iCloud pane in your Mac's System Preferences.





**iCLOUDY GATES** The iCloud preference pane on a Mac lets you sign in with your Apple ID or create one on the spot.

To add or create an iCloud account, your computer needs to be running OS X 10.7.5; any earlier, and you won't have an iCloud preference pane to log into. (For ways to use parts of iCloud on older systems, see [“Syncing”](#) in the “Troubleshoot iCloud” chapter.)

**USING iCLOUD** Once set up, iCloud on your Mac automatically syncs your Mail (if you've set Mail up), along with any already created Contacts, Calendars, Reminders, Notes, and Safari bookmarks, to its central online server. Photo Stream also uploads the last 1000 photos you've taken. All iCloud options are turned on by default (except for the Mac-only Back to My Mac feature, which you must turn on manually), but you can just tap the toggle to turn any specific item off.



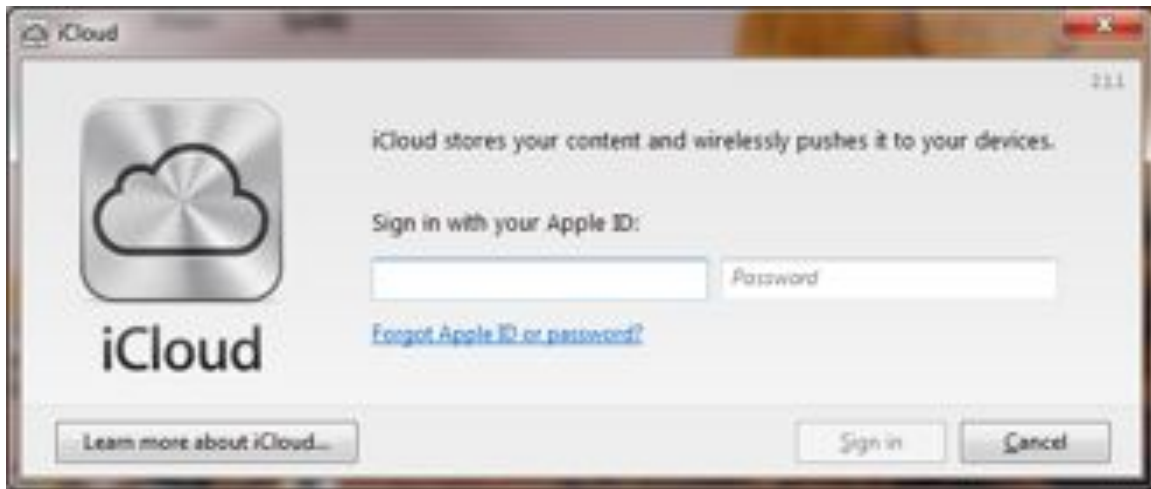
**CHECKBOXES, CHECKBOXES** Don't want to enable certain iCloud features? Just uncheck those checkboxes.

You can't create backups of your Mac as you can with iOS devices—partially because those backups would likely eat up all your iCloud storage space, given the size of most Mac hard drives. But your Mac does offer support for iCloud's data sync, allowing iCloud-compatible programs to store their documents and data there.

## Set Up a PC

Unlike iOS devices and Macs, your PC doesn't come with an iCloud preference pane preinstalled—you first have to download an iCloud control panel from [Apple's website](#). Your PC is also the only device you can't use to create an iCloud account, so you'll need to first set one up on a Mac or an iOS device.

Once the iCloud control panel finishes downloading, it asks you to sign in with your Apple ID and password.



**ENTER THE CLOUD** Log in to iCloud on your PC with your Apple ID and password.

When you sign in for the first time, you're asked if you want to send Apple diagnostic and usage information; this allows the company to automatically (and anonymously) collect data on any iCloud-related crashes you experience, and send that data back to its central servers to prevent similar crashes from happening in the future.

Your sync options for iCloud on the PC are dramatically limited in comparison to those on both iOS devices and the Mac: You can sync Mail (if you've created an iCloud.com account), Contacts, Calendars, and Tasks with Outlook; your Web browser bookmarks; and your Photo Stream. Unfortunately, the Windows operating system doesn't support syncing with additional services like Notes, iCloud data sync, Back to My Mac, or Find My Mac.



**SIMPLE SYNC** You don't get as many options for syncing iCloud information on Windows as you do on the Mac or on iOS.

If you need to change or see your Reminders and Notes, however, you can still access them online via [iCloud.com](http://iCloud.com).

## Set Up an Apple TV

While your Apple TV doesn't have access to iCloud's calendars, reminders, notes, or mail, you can still access iCloud features like Photo Stream and iTunes Match when you log in with the Apple ID tied to your iCloud account. To do so, go to the Settings screen of your Apple TV, click *iTunes Store*, and enter your account information.

## Storage in the Cloud

Your free iCloud account comes with 5GB of storage, which it uses to keep a variety of data accessible to you at all times. This data includes:

- Sync data: Your calendars, reminders, notes, contacts, mail, Web browser bookmarks, and Passbook passes.
- Document data: Any files or sync data from your iCloud-enabled apps.
- Mobile backup: Any backups you make of your iOS devices.

You can view everything iCloud is currently storing by visiting its settings screen on your Mac, PC, or iOS device. On a Mac, open System Preferences and select *iCloud > Manage*; on a PC, open the iCloud control panel and click *Manage*; and on an iOS device, go to *Settings > iCloud > Storage & Backup > Manage Storage*.



**MAXED OUT** Curious about what you have stored in iCloud? Take a peek in the Manage Storage section of your iCloud settings.

While iCloud manages other aspects of your devices, the following data does not count toward your data limit:

- Photo Streams: Shared Photo Streams or Photo Stream pictures exist outside your data pool.

- Music, Movies, TV Shows, Books, Apps, and iTunes Match data: As iTunes has to store the content you've purchased anyway—in order to sell it—it doesn't count toward your 5GB limit. Your uploaded iTunes Match tracks don't fill up your iCloud storage either, because you pay separately for that service.

If you find that you're running out of space—and if you have more than one device using iCloud, you may quickly run into this issue—you have two options: Buy more storage, or eliminate some data you're storing.

### Buy More Storage

Apple offers several tiers of storage for iCloud customers who need a bit more to cover all their devices. Each plan is a yearly charge: The cheapest starts at \$20 a year for 10GB. From there, you can add more storage at a rate of \$2 per gigabyte per year, in 20GB or 50GB increments (\$40 or \$100 per year, respectively).



**EXPAND THE BELT** Need more storage? You can easily purchase it right within your Settings app.

If you have one iOS device and one Mac, the free 5GB account should usually be sufficient. Start adding devices, though, and it may be prudent to pick up a 10GB or 20GB plan. You may also want to consider a 10GB or 20GB plan if you have a lot of apps that store their information in iCloud.

To purchase more storage, navigate to the Manage Storage screen on your Mac, PC, or iOS device as described above, and click or tap *Change Storage Plan*. If you've previously upgraded to a bigger storage plan and then

realized you don't need quite so much space, you can also downgrade your plan here for a prorated amount (based on how much of the year you've spent with a bigger plan).

### Free Up iCloud Storage

Maybe you're not interested in ponying up extra cash for iCloud storage, but you have a lot of iCloud-compatible apps or multiple iOS devices and you're finding that you're rapidly running through that free 5GB. Some users find they can't even back up more than one iOS device to iCloud, because they don't have enough room.

Does that mean you need to either pay for more storage or revert to old-fashioned iTunes backups? Not necessarily. Instead, you should exercise a little extra control over how you store items in iCloud for safekeeping and, more specifically, what you send to it.

To start, on your iOS device, go to *Settings > iCloud > Storage & Backup*. On the screen that appears, you'll see the total amount of storage space you have on iCloud (5GB if you haven't upgraded), along with the amount of unused space. Beneath that is a Manage Storage button. Select it.

At the top of the subsequent Manage Storage screen, you'll see a list of all the iOS devices you're backing up to iCloud, including the one you're currently using. Examine the list closely. If it claims that you're storing, say, an old iPhone 3GS you haven't used in a few years, you'll want to delete its backup so that it stops gobbling up your precious storage space. Tap the unneeded device's name, and then tap the red *Delete Backup* button that appears.

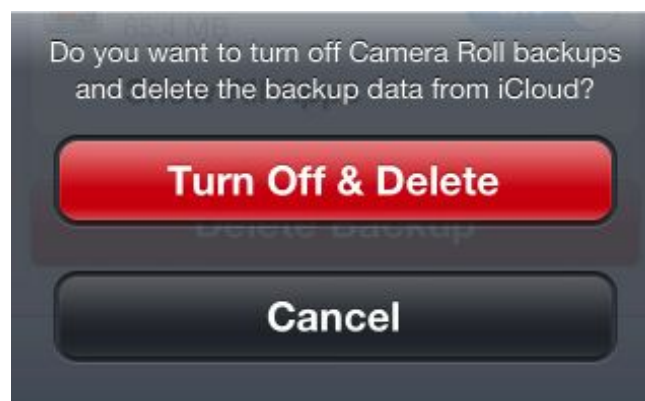


**TOO MANY BACKUPS** If iCloud is still storing backups from devices you no longer own, you can easily get rid of them.

If you tap the name of the device you're currently using, you reach a screen offering fine control over each item and category you're backing up for that device. On this screen, you'll see the current size of your device's backup, along with an estimate of how large your next backup will be. Below that, you'll see a list of apps that can back up their data to iCloud.

**ROLL BACK THE CAMERA ROLL** With one exception, the list appears ordered by how much space each app requires to back up its data in iCloud, with the largest amount at the top. The one exception: Camera Roll is always first, even if it isn't the biggest item on the list (though it often is—one *Macworld* contributor's iPhone Camera Roll accounted for 1.1GB of a 1.7GB backup).

By default, iCloud backs up the Camera Roll on each of your iOS devices. That way, if your iPhone croaks, chokes, or otherwise gives up the ghost, you can restore from iCloud and get all your photos and videos back. Tapping to turn off the Camera Roll, however, brings up an intimidating question: 'Do you want to turn off Camera Roll backups and delete the backup data from iCloud?'



**EXCISE IMAGES** Though this warning seems a bit scary, if you have Photo Stream, you can probably turn off Camera Roll backups.

If you choose *Turn Off & Delete*, you aren't deleting those visual memories from your device. You're simply freeing up the iCloud backup space they consume, and removing the ability to restore those photos from iCloud should disaster strike your iOS device.

That isn't necessarily as risky a move as it sounds. Whenever you connect your iOS device to your Mac, you can back up its saved photos and videos to iPhoto. But even if you rarely—or never—sync your iOS devices over USB, you probably don't need iCloud to back up your photos, thanks to Photo Stream, which keeps the last 1000 photos you snapped over the past 30 days. Since the iCloud Camera Roll backup is really there only in case of emergency, and you're likely to notice a major emergency involving your iOS device in fewer than 30 days, you can generally trust that your photos are safe even if you're not backing them up to iCloud directly. (Photo Stream photos don't count against your 5GB iCloud quota.)



Merely turning off the Camera Roll backup will shave off a significant chunk of your iOS device backups, and it may be enough to allow you to back up all of your iOS devices without busting the 5GB cap. But other options can also free up your storage space.

**TRIM THE APP FAT** Depending on how you use your iOS device, you'll likely want to continue allowing some apps to back up their data to iCloud. If you frequently create documents in an iOS text editor or compose songs in GarageBand, and you don't regularly back those up or export them, you should use iCloud backup for those apps.



**ELIMINATE APPS** You can cut down on the size of your backups by telling iCloud to not back up certain apps.

But you probably don't need to use iCloud to back up data from every app you use. Even if most of those apps account for only a few megabytes per backup, they can add up to a significant chunk of storage. For example, you might disable iBooks' iCloud backup, since you can always restore your iBooks purchases within the iBookstore (or from iTunes on your computer).

You also likely don't need to back up your data for games if you don't care about in-game progress or customizations. And backup might be unnecessary for apps that sync and back up their data on the Web, such as Instapaper.

Careful, though: Don't turn things off willy-nilly. For example, you might think, "Hey, I don't need to back up my data from the Cards app!" And you may well be right. But you'd be crushed to learn after an iCloud restore that all your old photo cards are now but a memory.

**DOCUMENTS & DATA, MAIL** On the main Manage Storage screen, past the list of your devices, you'll see two other sections: Documents & Data, and Mail.



**TRIM TRAPPINGS** Storing iCloud data for apps you no longer use? Remove it here.

The Documents & Data section refers to all those bits of data that iCloud syncs between your devices. This data counts against your iCloud storage allotment.

In addition, this section lists synced data from iCloud-leveraging apps and games. On one *Macworld* editor's iPhone, that list includes Apple's [Pages](#), [Passbook](#), and [Keynote](#), and Big Bucket Software's [The Incident](#). Certain apps make the cut because they don't use much data; *The Incident*, for instance, consumes a single kilobyte. Other apps, like [Pages](#), may take up many megabytes (or more); you can tap an app to get a list of all its documents saved in Cloud, along with the amount of space they're taking up. If you notice files you no longer need, clean them out.

You can't delete your Mail storage the same way you can delete apps and backups, unfortunately. But you can manually prune mail from your iCloud account. If you don't regularly archive email offline, prune attachments, and delete junk and spam, Mail may gobble up an increasingly large percentage of your iCloud quota.

# Work With iCloud



**GET TO WORK** iCloud offers a bevy of delightful features to help you sync, share, back up, and groove to great tunes.

iCloud is chock-full of features for syncing, sharing photos, listening to music, reading, backing up your devices, hanging out with friends, and more. We offered a brief overview of the service's various bells and whistles in the first chapter; in this one, we get down to business. Learn how to master iCloud's syncing components; perform a perfect iOS backup; discover the ins and outs of Find My iPhone, Find My Friends, and Back to My Mac; and listen to iTunes in the Cloud.

## Sync Your Data and Documents

Once you have iCloud set up on your devices, you can take advantage of the service's syncing and storage capabilities. Whenever you make a change within an iCloud-supported application, your data is seamlessly pushed across all of your devices; you won't actively have to choose when you want to sync your device or what you want to sync. Instead, your data is automatically stored in iCloud, and your iOS devices sync to and pull information from this central server on a regular basis, keeping everything up to date.

### How Does Syncing Work?

Don't panic: This book doesn't go into nitty-gritty explanations about online storage and push servers. Instead, we'll outline the basics of how Apple's iCloud sync process works. It's a fairly simple and (usually) seamless process.

Step 1. You add or change a reminder on your iPhone.

Step 2. If your iPhone has a network connection, that change goes up to the central iCloud server. (If, for whatever reason, you don't have a network connection when you first make an edit, your iPhone stores the change locally until it can sync with iCloud again.)

Step 3. iCloud confirms that this is the newest change or addition made to that reminder list.

Step 4. The server makes the change to iCloud.com, and then sends that change down to all of your other iCloud-connected devices.

This all takes place behind the scenes and within seconds of your initial change.

"But what if," you might ask, "I'm changing the same reminder on both my computer *and* my phone?" While it's not the best idea to do that, iCloud tries to handle near-simultaneous changes by syncing them in the order in which it gets them, with the most recent change synced last. For example, if you add 'Milk' to your grocery list on your computer, and then immediately add 'Eggs' to your iPhone list before iCloud has had a chance to sync, iCloud will add first 'Milk' and then 'Eggs' to your list on iCloud.com. Next, it will add 'Milk' to your iPhone list above the 'Eggs' item. Finally, it will add 'Eggs' to your Mac's grocery list.



**GROCERY JUMBLE** iCloud tries to sync your items in the order in which it receives them, but it can goof up if you try making too many nearly simultaneous changes on various devices.

That said, *any* sync service—iCloud included—can get tetchy if you try changing multiple records or the same record in multiple places. iCloud will try its best to reconcile your wishes, but you might occasionally end up with duplicate list entries, events, or notes. (See “[Syncing](#)” in the “Troubleshoot iCloud” chapter for more information.)

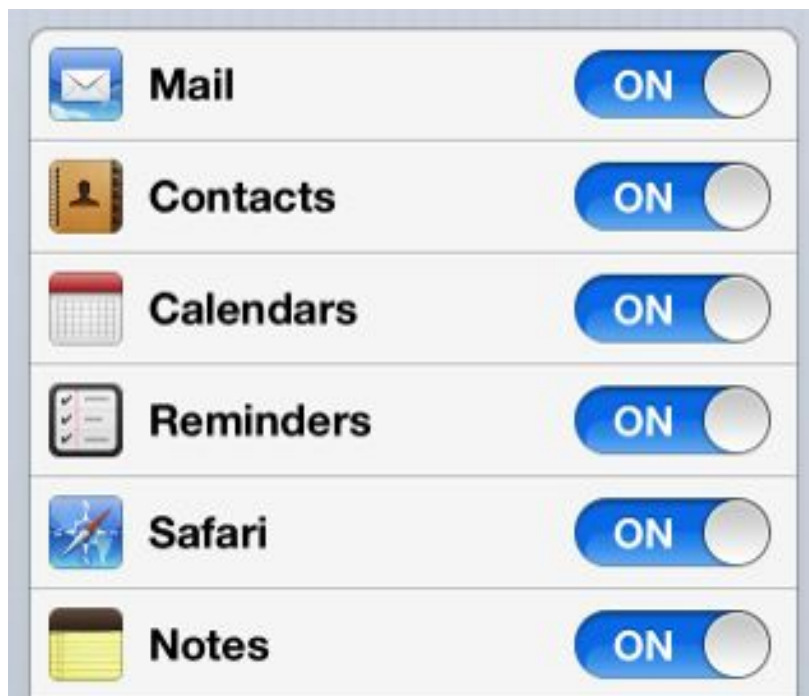
### What Can I Sync?

As mentioned in “[Sync and Share](#)” in the “Get Started” chapter, iCloud’s document and data sync makes up a large portion of the service. You receive full sync support across all devices (Mac, PC, and iOS) for your iCloud.com email, contacts, calendars, reminders, and notes, and that data also appears when you log in to iCloud.com. Depending on your device, you can also sync Safari bookmarks and open tabs, Passbook passes, and app documents and data.

Each feature your device supports is listed in the iCloud preference screen; from there, you get to choose what items you want the service to store. For instance, if you enable contacts sync for your iPhone, whenever you enter a new contact there, it automatically gets pushed to iCloud.com and any other devices you have set up to allow contact syncing.

**MAIL, CALENDARS, CONTACTS, REMINDERS, AND NOTES** These five areas are part of iCloud’s core sync program; they are the only ones that can be synced across all iCloud-supported platforms and thus the only ones viewable on iCloud.com.

On the Mac and iOS, these areas sync to the programs of the same name—your email syncs to Mail, calendars to Calendar, contacts to the Contacts app, and so on. On a PC, iCloud syncs with Outlook 2007 or later.



**SWITCHED ON** Most of your iCloud features are enabled by default, though you can turn them off at any time.

When you first set up your iCloud account, these features are on by default; that means when you check off a reminder on your iPhone, that reminder will also show up as completed on your Mac (assuming you've set up the service on both Mac and iPhone). All of this stored data counts toward your 5GB storage limit (see [“Storage in the Cloud”](#) in “Get Started” for more information).

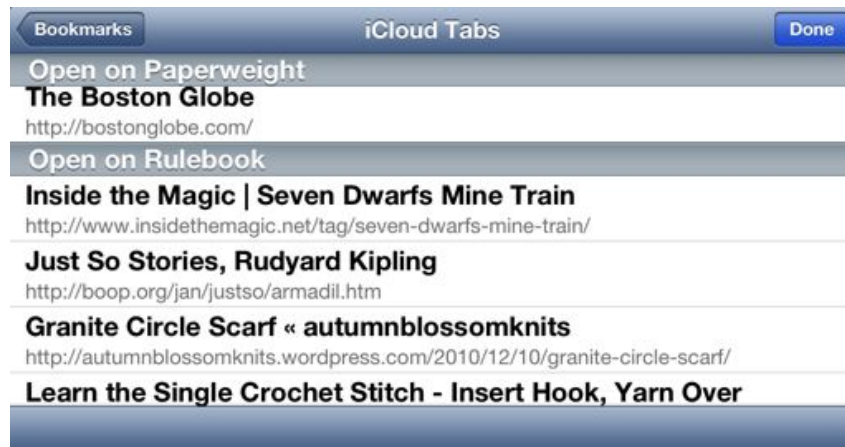
If for any reason you don't want to sync certain data—your contacts, or your calendars—you can turn off syncing by going to *System Preferences > iCloud* (on your Mac) or *Settings > iCloud* (on iOS) and unchecking the boxes or turning off the toggles for the appropriate selections.

**SAFARI BOOKMARKS, READING LIST, AND iCloud TABS** Available for iOS and Mac users only, the Safari option lets you sync bookmarks, your Reading List, and open tabs and windows (which Apple refers to as iCloud tabs). This data doesn't go to iCloud.com; instead, it gets synced directly between devices.

Bookmarks and Reading List are fairly straightforward: Add a new bookmark to your browser, or an article to your Reading List, and that change gets pushed to all your other devices within moments.

If you've ever found yourself viewing a webpage in Safari on your iPhone and wanting to instead view it on the

larger screen of your iPad or Mac—or, conversely, reading an article on your Mac and wanting to transfer it to your iPhone as you walk out the door—iCloud Tabs is for you. Instead of emailing URLs to yourself, you can just tap the iCloud Tabs button and grab the URL from your other device.



**TAB SYNC** iCloud Tabs automatically syncs tabs between all your iCloud-enabled devices and computers.

iCloud syncs any tabs or windows open on any of your devices—assuming they have Internet access. On your iPhone or iPad, you access synced tabs by tapping Safari’s *Bookmarks* button, and then tapping *iCloud Tabs*. (If you’re already in a sublist in the Bookmarks list, tap the left-facing arrow until you get to the top level, titled Bookmarks.) Tabs are grouped by device, and each tab’s entry shows the name of the webpage and its URL; tap any item in the list to open that webpage on your device.

On your Mac, you access synced tabs by clicking the *iCloud Tabs* button—which looks like a cloud—in Safari’s toolbar. Tabs are similarly grouped by device, although on the Mac they only display the website’s title instead of both its title and its URL.

**PASSBOOK** Designed for the iPhone and iPod touch, Apple’s mobile wallet app stores boarding passes, event tickets, customer loyalty cards, coupons, movie tickets, and other assorted passes and cards in one location. Whenever you pick up a pass, ticket, or coupon, your iCloud account automatically uploads these to the service’s central server.





**PASSED UP** Your Passbook passes are stored in iCloud and can sync with your iPhone and iPod touch.

While you can technically sync Passbook with other devices, the only ones available are the iPhone and iPod touch—which means that as an iPhone owner, you'd need to also own an iPod touch (or two iPhones) to take advantage of this. But if you're giving your daughter movie tickets, for example, the sync feature might be useful.

At the least, you'll have all your Passbook information stored in iCloud, so you won't lose it should something go awry with your phone.

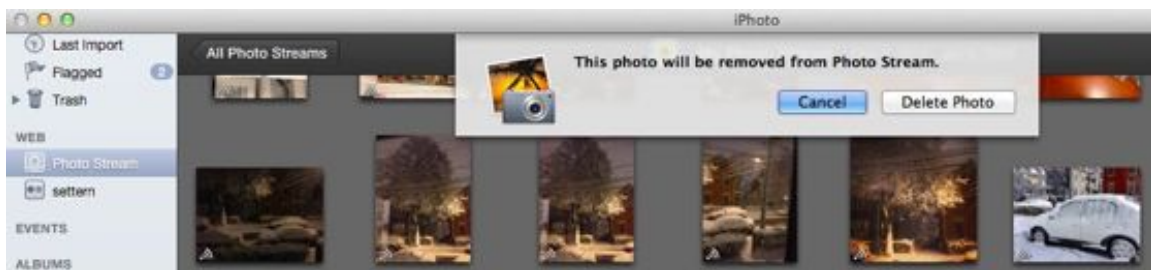
**PHOTO STREAM** With Photo Stream, you can snap a picture from any iOS device—or upload a photo to your Mac or PC—and have it pushed to all your other devices and computers. You can also create Shared Photo Streams, which allow you to collect and send albums of images to your friends and family.

On iOS devices, iCloud syncs your Photo Stream to the Photos app, under the Photo Stream tab; on a Mac, you use iPhoto or Aperture; and on a PC, you must choose a folder on your hard drive to use as your Picture Library. The Apple TV can view your Photo Stream, but you can't upload images to it from the device (as there's no actual way to add photos to the Apple TV).

As mentioned in “[Sync and Share](#)” in the “Get Started” chapter, Photo Stream keeps a copy of the last 1000 photos snapped on your iOS device or uploaded to your Mac or PC; these photos are stored on iCloud’s central servers for 30 days. Your computer automatically downloads any new synced photos to your chosen photography program, or to your designated photo library folder. In iPhoto, the photos appear under Events, with a default name that includes the month and year, along with Photo Stream. You can, however, change the event name, or reorganize those images and put them elsewhere.

iOS devices, in contrast, won’t automatically download full-quality Photo Stream images to your phone—they’re only available for viewing. If you want to edit an image or save a hard copy of it, you must first download it by going to *Photos > Photo Stream*, selecting the appropriate photo, and then tapping *Share > Save to Camera Roll*.

You can delete individual Photo Stream images from iCloud via your iOS device: Just go to *Photos > Photo Stream*, tap the image in question, and tap the *Trash* button. You can also delete multiple images by going to *Photos > Photo Stream*, tapping the *Edit* button, and then selecting the images you wish to delete. You can delete Photo Stream images from iCloud via your Mac by opening iPhoto and selecting *Photo Stream*, and then choosing the photo(s) you wish to delete.



**DELETE! DELETE! If you have an image you don’t want stored on iCloud and pushed to your other devices, you can delete it from your Photo Stream.**

You can’t delete individual Photo Stream images from a PC, though you can clear your entire Photo Stream online by logging in to [iCloud.com](https://www.icloud.com), clicking your name in the top right corner to bring up your Account preferences, selecting *Advanced*, and then clicking *Reset Photo Stream*.

If you want to share images in your library with friends—whether you’ve added them to Photo Stream or not—you can create a Shared Photo Stream on your Mac or iOS device (from iPhoto or the Photos app, respectively).

On your Mac, select the images you want to share, click the *Share* button, and then click *Photo Stream*. From here, you can create a new Shared Photo Stream, or add it to a Shared Photo Stream you’ve already created.

Create a new stream, and you’ll need to choose whom to send it to and whether you want to make the images available on the Web. Friends who have iCloud will see the shared stream pop up in the Photo Stream section of iPhoto or the Photos app on iOS; those without an iCloud account can view the images on the Web.



**SHARE THE STREAM** You can create a new Shared Photo Stream from iPhoto or from the Photos app on your iOS device.

You can also easily create a Shared Photo Stream on your iPhone, iPod touch, or iPad by selecting the images you want, and then tapping *Share > Photo Stream*.

After you make a Shared Photo Stream, your recipients can comment on or like your photo, and even save it to their own computer or iOS device.

**DOCUMENTS & DATA** This toggle controls the wireless sync and storage of all iCloud-enabled apps. Sometimes referred to by Apple as Documents in the Cloud, Documents & Data keeps your app information ubiquitous across all your iOS devices and computers, allowing you to create a document on one device, save it, and pick up where you left off somewhere else.

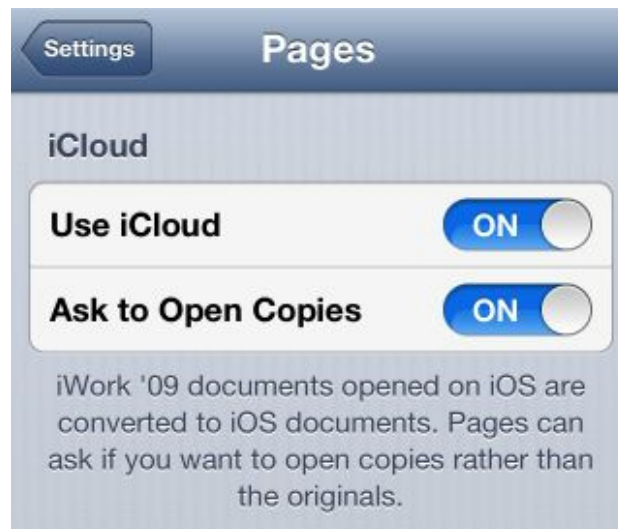
Accessing documents between iOS devices is seamless. Say you started a Numbers spreadsheet on your iPad; you could start entering information, save that spreadsheet, and open it up later on your iPhone to do some tweaking. You can access your projects across all your iOS devices (and, if the app in question supports OS X, the Mac), so it's not necessary to file share or email copies to yourself. Documents & Data will automatically sync your documents through iCloud, so you can access them on all of your iOS devices.

Apple's own App Store apps (such as the \$10 [Pages](#), [Keynote](#), [Numbers](#), and \$5 [iPhoto](#), among others) use this functionality, as do third-party apps like AgileBits' \$18 [1Password](#), Tabots' \$3 [Tweetbot](#), and Autodesk's \$5 [SketchBook Pro](#). Using iCloud in apps that support it is simple as can be: Just flip the Documents & Data switch on in iCloud settings. Then, when you download an iCloud-enabled app, it should prompt you to use the service to store documents or data. (If the app doesn't ask you about iCloud functionality automatically, you may need to turn on a setting in its preferences.)

If you ever want to delete an app's iCloud information, on an iOS device, select *Storage & Backup > Manage Storage > Documents & Data*; on a Mac or PC, go to the iCloud preference pane or control panel and click the *Manage* button. (For more information about managing storage, see "[Storage in the Cloud](#)" in the "Get Started" chapter.)

### Use Documents & Data Sync With iWork for iOS

As mentioned in the previous section, Apple uses Documents & Data sync for its iWork productivity suite (Pages, Numbers, and Keynote) on iOS and on the Mac. The process is very similar in all three iWork apps, though we'll use Pages on iOS as an example.



**TURN IT ON AGAIN** To turn iCloud sync on and off, visit the *Pages* preference screen in the Settings app.

If it's your first time launching Pages, or your first time launching the app after updating to the latest version, you may see a prompt asking if you'd like to use iCloud. Follow the setup instructions, and you can connect to your iCloud account in just a couple of taps. If you don't get that prompt—or if you selected Later the first time you saw it—it's not immediately obvious how to start saving documents to iCloud; it doesn't appear as an option anywhere within the app.

In fact, the only way to enable iCloud if you previously dismissed that prompt is to head over to the Settings app. Scroll down and tap *Pages* from the list of apps. Once there, slide the *Use iCloud* switch from Off to On. It's an all-or-nothing approach: You either sync all of your documents with iCloud, or none of them.

Switch back to *Pages*, and you may briefly see arrows superimposed upon your document icons—they indicate documents that have yet to sync to iCloud. Progress bars appear over individual document icons as the files upload to the cloud. (Note that each app's Getting Started primer document won't sync to iCloud, but you'll notice a Restore option under the iWork app's preferences, which lets you restore the document on that device if you want to.)

Once you've enabled iCloud for a given iWork app on your device, you don't have to think about it again. Your iPhone saves changes to iCloud automatically as you work, quickly and seamlessly—as long as you're online.

If you're working offline—perhaps you're using the iPhone to work on your novel while you're in a plane at 30,000 feet—make sure to relaunch *Pages* once the iPhone can go online again. Close your current document by tapping the *Documents* button at the upper left, and you'll see thumbnail icons for all your files. Give it a few seconds, and the now-familiar arrow appears, indicating that your file is syncing; when it (and any progress bar) vanishes, you'll know you've updated the iCloud copy.

The only other major hitch to working with iCloud and iWork apps occurs if you try something you should really avoid: editing your document on multiple devices at once. iCloud informs you if your copy of a document becomes out of date, and you see a notification if anyone makes updates to a document as you're reading it. But if you make simultaneous edits on your iPad and iPhone, iCloud doesn't know which changes it should sync.

## Use Documents & Data Sync With the Mac

On the Mac, many of OS X's built-in apps do support iCloud, including Preview, TextEdit, the iWork suite ([Pages](#), [Numbers](#), and [Keynote](#); \$20 each), and [GarageBand](#) (\$15).

Third-party apps that store documents in the cloud include text editors such as Information Architects' \$5 [iA Writer](#), Metaclassy's \$10 [Byword](#), and Peter Borg Apps' \$5 [Smultron](#); SmileOnMyMac's \$60 PDF editor, [PDFpen](#); the \$15 graphics editor [Pixelmator](#); and some others. Some iCloud-enabled programs can produce files in Microsoft Office formats, but Microsoft Office itself doesn't support iCloud.

Note that Apple only lets apps sold through the Mac App Store store documents in iCloud. If you can only get your favorite productivity app directly from the developer, you're out of luck.

**GET USED TO LIVING INSIDE ONE APP** iCloud is a great place to store files that you need to access on multiple Macs. However, there are limits to its functionality—some of which may be deal-breakers.



**INSIDE THE BOX** When you add or move a file to an app's iCloud storage space, it resides there. You can only open it in another app by dragging the file to that app.

The main problem is you can only access files in iCloud via the applications that created them. If you create a file with TextEdit, for example, you can save that file in a number of formats, such as RTF and .doc, the Microsoft Word format. It's not like storing files in the Finder, however: To access an app's iCloud document pane, you have to open the app first. That means if you want to open a .doc file stored in the TextEdit document pane in Word, you must first launch TextEdit, and then open its iCloud document pane and drag the file onto Microsoft Word's app icon to launch it. (You can also move or copy files to your desktop, as explained later in this section.)

**CREATE AND SAVE DOCUMENTS** If you're using an application that can save documents in the cloud, doing so is fairly simple. Say you're using TextEdit. After you've created a new document, press <Command>-S and make sure you choose iCloud as the save location. Name the file and click *Save*, and you've stored the document with the iCloud service.

Once you've saved a file to the cloud, you can access it from multiple devices. Say you have a desktop Mac and a laptop: You can save files in iCloud on your desktop Mac, and then access them from your laptop while you're on the go—as long as you use the same app.

**OPEN DOCUMENTS** To open files you've saved to iCloud, press <Command>-O in an iCloud-savvy application, and then click the *iCloud* button. A dialog box appears that lets you choose from files saved in the application's iCloud storage space.

(You can also create folders in this storage space: Just drag one file on top of another, as you would with icons on an iPhone or iPad. Name the folder, and it'll be saved to iCloud.)

**MOVE EXISTING FILES TO ICLOUD** You may have a number of files on your Mac that you'd like to put in iCloud. This is fairly straightforward: Open the application you want to store your document in, choose *File > Move To*, and then choose *Where > iCloud*. If you want to move a file from the cloud to your Mac, click the *Where* menu and find the folder where you want to place the file. If the folder isn't in the menu, choose *Other* from the bottom of the menu and navigate to the location you want.

## Share Events and Tasks With Others

Syncing your calendars, reminders, and notes helps you stay coordinated across devices. But what if you want to share your items with others? If you have an iCloud account, it's easy to open up your schedule to other members of your household and family friends.

You can enable sharing for any iCloud calendar or reminder list by going to iCloud.com on your computer or by using the Calendar or Reminders app on your Mac. There are two kinds of options: private and public sharing.

When you add people to a private reminders list or calendar, they receive an email with a link that allows them to subscribe to it. That item will then sync with their iCloud account and their Calendar and Reminders apps.

A public item, in contrast, is only available for calendars and offers a read-only version that anyone can subscribe to. If you're publishing practice times for your sports group, or passing around a lunch schedule for food trucks, this might be the better option.

**Share Events From the Calendar** On iCloud.com, log in and click the *Calendar* Web app; on your Mac, open the Calendar app. Your calendars should appear on the left side of the screen; to share a specific calendar, click the *Share* button to the right of its name.

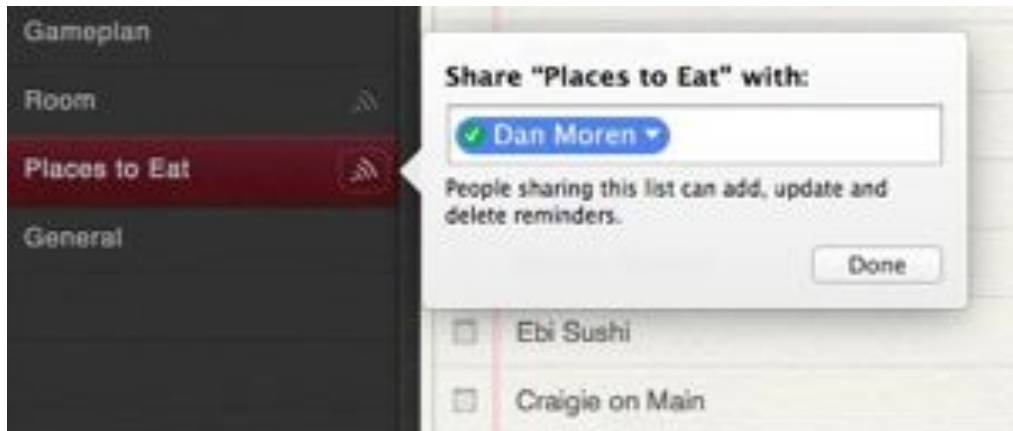


**SHARING TIME** Click the *Share* button to bring up your calendar sharing options.

From here, you can choose to let friends and family with iCloud accounts view or edit this calendar, or you can publish it to the Web, which allows anyone with the link to see your events.

If you share the calendar with friends who have iCloud accounts, they'll be able to add or edit events on that calendar. Those with the public link, however, can only view events, not edit them.

**Share Reminder Lists** On iCloud.com, log in and click the *Reminders* Web app; on your Mac, open the Reminders app. Mouse over the name of a Reminders list to make the Share button pop up, and then click it.



**DELICIOUS EATS** You can share all kinds of lists, including good restaurants around town you'd like to try.

You can only share Reminder lists with friends who have iCloud accounts—there's no public list option as there is for Calendars.

**SHARE CONTACTS** Unfortunately, iCloud doesn't allow you to easily share contacts between accounts. You can't, for example, create a group of contacts within your iCloud account, and then tick off a little box marked "Make these contacts available to my spouse as well." But if you're determined to share a list of friends, you can create an additional iCloud account that you share.

To do that, you go through the usual rigmarole to create an iCloud account: On an iOS device, navigate to *Settings > Mail, Contacts, Calendars > Add Account*. Tap *iCloud* and create a new Apple ID. On the Mac, go to *System Preferences > Mail, Contacts & Calendars*; click the plus button (+) at the bottom of the window, click *iCloud*, and click *Create Apple ID*. (Or, if you've already established that new ID on another device, just enter the Apple ID email address and password and click *Sign In*.)

Once you've obtained that ID and signed in, disable all syncing except for contacts; then add this account to every device you intend to use to share contacts with.

When you open the Contacts application on your Mac or the Contacts app on an iOS device, you'll see your new iCloud account listed under the Accounts section. Drag any contacts that you want to share over to this account. In cases where you don't want to share particular contacts, simply leave them in the account tied to your personal iCloud account (or add them to it, when creating new contacts).



## Mobile Backup

With portable devices, there's always a risk of losing or damaging your hardware when you're out and about. As such, it makes sense to make regular backups of your iPhone, iPad, or iPod touch. With iCloud Backup, you can make a backup of your iOS device's data automatically.

### How Does It Work?

iCloud Backup requires iOS 5 or later and iTunes 10.5 or later, and works similarly to the backup iTunes performs when you connect your device to your Mac or PC. Instead of saving your backup to your computer, however, iCloud Backup sends data to Apple's iCloud service over Wi-Fi. Your device automatically makes a backup when it's plugged in and connected to a Wi-Fi network, so that performing the backup doesn't drain your battery. (You can also manually back up your device at any point by going to *Settings > iCloud > Storage & Backup > Back Up Now.*)



**THE CHECKLIST** Your iCloud account makes a backup of all these items from your iOS device.

So what exactly does iCloud Backup take care of? According to Apple, it uploads your device's settings; app data; home screens and how your apps are organized; photos and videos in the Camera Roll; iMessage, SMS, and MMS messages; and ringtones.

To save space—and reduce upload times—iCloud Backup won't store your purchases; instead, it makes a record of all the purchased iOS apps, books, music, and TV shows on your device. If you need to restore from a backup, iCloud redownloads your purchases from the App Store and iTunes Store. (Depending on your country, licensing restrictions may prevent the restoration of some purchases.)

iCloud Backup won't store music or videos you haven't purchased. (If you want access to that content at all times, consider subscribing to Apple's \$25 iTunes Match, which uploads up to 25,000 songs in your library to iCloud—and this data doesn't count toward your free 5GB storage limit.)

### Back Up Your Data

While Apple offers two methods of backing up your iOS device—backing up via iCloud, or backing up to your computer—you can only use one at a time. If you want to use iCloud Backup for your device, you'll have to forgo backing up via iTunes, though you can make a manual backup to your computer: Sync your device to iTunes (via tethered or Wi-Fi sync). Under the Backups section of the Summary pane, choose to back up to your computer, and then click the *Back Up Now* button. When the backup is finished, switch the button back to iCloud.



**BACKUP CHANGE** Want to make a manual backup to your computer? Just connect your device to iTunes.

If you didn't elect to turn on iCloud Backup when you set up your device, you can enable it through *Settings > iCloud > Storage & Backup* on your iOS device, or by connecting your device to iTunes and choosing to back up to iCloud from the Summary pane. The initial backup takes a few minutes, depending on how much data it's uploading. For example, if you have several videos in your camera roll, the amount of time it takes to perform the first backup will be longer. Subsequent backups can take mere seconds to a few minutes, as iCloud will only back up whatever has changed on your device.

iCloud Backup automatically backs up your device once a day, according to Apple's website, and in our experience it doesn't back up every time you are in the presence of Wi-Fi and plug in your iOS device. However, when it is performing a backup, there's no indicator in your iOS device's status bar—you have to go to *Settings > iCloud > Storage & Backup* to see a progress bar. There's also currently no way to create scheduled backups.

## Location Awareness

Ever since the Find My iPhone service debuted as part of the iPhone 3.0 software in mid-2009, Apple's iOS device location offerings have been a popular feature. iCloud adds your Mac to the list of devices you can locate; in addition, you can find your fellow iCloud-using friends (with their permission) on an iOS device, and remotely talk to your Mac from afar.

### Find My iPhone, iPad, iPod, and Mac

These days, losing a device is almost as traumatic as losing your wallet. Thankfully, [Find My iPhone](#) can ease your panic and help you find your missing devices. The service has also become popular for other uses: More than a few iPhone users who've misplaced their device at home have used the Find My iPhone sound to reveal the phone's location under a jacket next to the sofa.



**FIND ME** Even if your devices are missing, you can track them and send them commands.

By using your iOS device's location—determined using GPS circuitry or wireless activity (or both)—Find My iPhone lets you locate, and even track, your iPhone, iPad, iPod touch, or Mac via iCloud.com or the dedicated Find My iPhone app. Assuming the device has recently been turned on (and, in the case of Wi-Fi-only devices,

awake) and connected to a mobile or Wi-Fi network, you can actually see its location on a map, as well as send a message to it, play a sound on it, remotely lock it, or even securely erase its contents.

**A SERVICE IN TWO PARTS** If you want to be able to locate the gadget in question, the first thing you need to do is make sure the Find My *device* switch is enabled in iCloud's preference screen. You must do this for every device you want to be able to track.

From there, if you need to locate a missing device, you can use either iCloud.com or the Find My iPhone app (on a different device than the one that's gone missing, presumably). To use the app, launch it on any iOS device, and then sign in using your Apple ID and password. To use the website, log in to iCloud.com and then click the *Find My iPhone* button.

The Devices list displays every device—iPhone, iPad, iPod touch, or Mac—that has the Find My *device* service enabled. You'll find this list by clicking or tapping the *Devices* button. A green dot next to a device means iCloud has located it; a gray dot means it could not be found. The status of each device—how long ago iCloud located it, or the fact that iCloud couldn't locate it—appears just below its name.

### OFFLINE DEVICE? DON'T PANIC

iCloud uses an Internet connection to track your device. If there's no connection to be made, your device will show up as offline. But don't lose hope. You can still send sound, lock, and erasure commands to it—when it finds an Internet signal, those commands automatically go into effect. You can also instruct the service to email you when your device comes back online.

Tap or click a device's name to view its location on the map. As with the Maps app, you can zoom in or out, and you can switch between Map, Satellite, and Hybrid views.

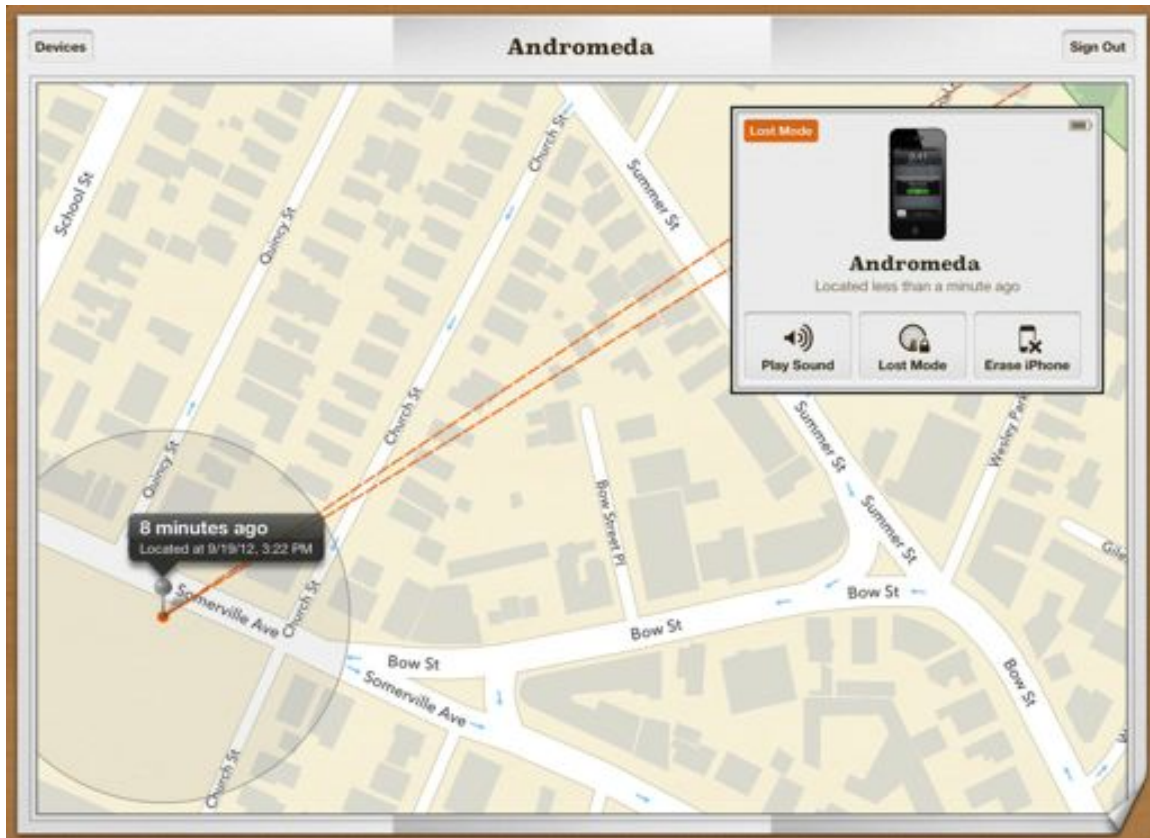
When you have a device selected, iCloud offers you several options. (Choose any of these, and you'll also receive an email to your iCloud account noting that you've selected one of them.)

Play Sound emits a loud sound on the device (even if it's muted). The sound will automatically shut off after two minutes, or after you unlock your gadget.

Lost mode (iOS) or Lock (Mac) remotely locks your device with a four-digit passcode. In the case of an iOS device, it uses your usual lock code, if you have one; otherwise, it asks you to provide a code from the app or website.

When an iOS device is in Lost mode, Apple's gray-linen texture replaces your lock-screen wallpaper, and a custom message shows up on an alert that can't be dismissed (on an iPhone, you'll also see a phone number and a big green Call button).

If your device winds up in a dump truck and zooms around town, Lost mode can also map its movements, using gray pins and an orange-dotted line. You can see your device's current battery level, too. (The service will additionally send you email updates as the device moves, if you tell it to do so.)



**LOST AND FOUND** Lost mode keeps track of your device's movements and creates a map for you.

Once you've unlocked your device, or once you've disabled Lost mode from the app or via iCloud.com, it returns to its normal state and Lost mode stops tracking its movements.

If you opt to remotely lock a Mac, once the Mac receives the lock command, it actually shuts down. The next time you attempt to start up the Mac, it boots into Recovery mode and asks you to enter your computer's passcode; if you opted to display a message, it displays that message on the same screen. Once you've entered the correct passcode, the Mac reboots normally.

The final option for both iOS and Mac is a remote wipe. This lets you completely erase—securely—all data and settings from your device. In the case of a Mac, it also sets a four-digit passcode that lets you access your Mac if you ever recover it. You should use the remote wipe option only as a last resort. (This is also a good time to remind you to make good backups of your devices.)

## Find My Friends

Find My Friends uses the same technology as Find My iPhone to let you locate friends by finding their iOS devices—assuming they've given you permission, of course. The app also offers location geofencing so that you can find out not only where your friends currently are, but also when they leave or arrive at a certain place. Unlike Find My iPhone, Find My Friends is only available for iOS devices—Macs are out of luck.



**FIND ME, FRIENDS** The Find My Friends app helps you keep track of your pals and buddies.

Download and launch the free [Find My Friends](#) app on your iPhone, iPad, or iPod touch, and you'll be asked to enter your Apple ID and password. (If you have no passcode on your device, you'll always be asked to enter your password when you open this app—in case your gadget gets lost or stolen, Apple doesn't want random people to be able to see your or your friends' movements.)

After signing in, you'll see a small map, along with a list of friends who have allowed you to see their location. Please note: This list is different from, say, your iMessage buddies or your friends in the Contacts app. To see your pals here, you must manually request to follow their location within Find My Friends.



**MAKE FRIENDS** On first launch, your list will likely taunt you with a No Friends banner. The first thing you'll want to do is add some buddies to follow.

Tap the plus button to add a friend; enter either your friend's Apple ID or, to choose an existing contact, tap the blue plus button. You can add multiple names, sending this initial request to several people at once, if you'd prefer. There's also a space for a custom message. (If you don't enter a message, recipients get a generic request.)

If you're not sure who's using Find My Friends, the app's Friend Suggestions may be able to help. On an iPhone, tap *Friend Suggestions* at the bottom of the Add Friends screen; on an iPad, the Friend Suggestions box pops up when you first tap the *To* field. iCloud then checks your Contacts list for any buddies who use the service. Select friends you want to add by tapping their names, then tap *Done*; this autofills their Apple IDs in the *To* field of your Add Friends request.

After choosing whom you wish to follow, tap *Send*. You'll see a message explaining that you'll be able to follow them after they accept your request. Once a friend has approved your request, he will appear in your friends list.

If your friend approves your request, that just means you can see his location. If he wants to similarly follow *your* location, he'll need to send you a separate request, which you must then approve. In other words, a follow request is unidirectional, not reciprocal.

When friends send you requests, they appear under the Requests tab in the app. Tap *Accept* to allow them to follow you, and, if you aren't already following them, tap the *Ask to Follow* button to send a reciprocal request.

If you want friends to be able to send requests to one or more email addresses other than your Apple ID, you can add those addresses in your account settings on [Apple's website](#): On the Name, ID, and Email Addresses screen, just click *Add Email Address*.

**LOCATE YOUR FRIENDS** You can view the locations of your friends—the people you follow—in several ways. Tap the *Friends* tab, and you see a map that displays (in purple) the location of every friend currently allowing location tracking; your own location is displayed in blue. In addition, all your friends are listed either on the side (iPad) or below the map (iPhone), organized by how far they are from you. On the iPhone, you can go to a full-screen map by tapping once on it.

Tap a person on the list, and the map takes you to her location (if it's currently broadcast). A pop-up menu appears next to the purple dot, listing her name, current location, and how long ago the service located her. On the iPhone, there's also a blue info button; tap that to see her precise location, along with her photo, contact information, an option to label her current location, and a button to notify you when she leaves or arrives at a certain place. (On the iPad, this information is listed below the map.)

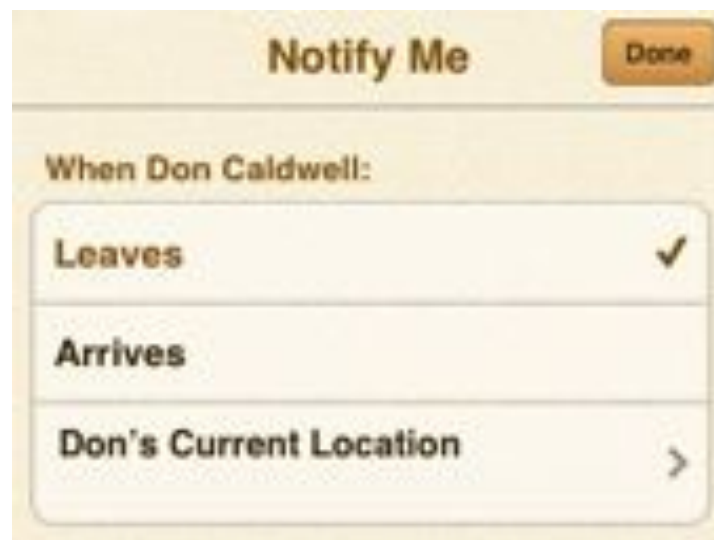
### CHOOSE YOUR FAVORITES

Within your Friends list, you can designate certain people—like your parents or your significant other—as Favorites, allowing them to appear at the top of the list. Tap the *Edit* button, and then tap the star button to the right of the friend's name. They now appear above all other friends. If you have multiple Favorites, you can arrange what order they appear in by dragging up or down on the three horizontal lines to the right of their names.

Within that contact's information, you can ask Find My Friends to give you directions to her current location, or you can call her, email her, send her an iMessage, or FaceTime with her; doing so switches your device to the appropriate app.

You can also tap Choose Label for a friend's location to give her current location a more useful label, such as Gym, Office, or Mom's House.

**NOTIFY ME** If you're waiting for a ride from your buddy and you want to know when he leaves the house, you can turn on *Notify Me*, which sends you an alert when your friend arrives at or departs from a certain address.



**NOTIFIED** Use *Notify Me* to find out when your buddy is leaving to pick you up.

You can access it by tapping an individual contact and then tapping the *Notify Me* button; from there, you choose whether the alert should fire when he enters or exits, and at what address. You can also set up these notifications as repeating alerts; if you want your significant other to know when you leave the office, for instance, you can set up a notification to ping him every time you do. (You get no specification beyond Repeat Every Time, unfortunately, so if you go out for lunch, he'll get that alert too.)

This function is surprisingly useful for timing meetings with friends: For instance, if you're walking distance from a restaurant and your pals are driving, you can set a geofence at a stoplight several blocks away; when they go through it, you get a notification and can start walking.

You can see when your friend has put a notification on you, though you can't remove it. Head to the Me tab to see if someone has applied a geofence to you; if so, the outline of the Location Services arrow appears in the Followers list next to the name of the person who is tracking you. You can tap the name to see what address the person is tracking, though currently the app doesn't offer a way to get rid of the geofence without removing the person as a follower altogether. (You can hide your location from followers temporarily by enabling the switch in the Me tab, but that doesn't wipe out the geofence—it merely disables the geofence while you're hidden. For example, if your friend has a geofence on you for when you leave work, and you turn off your location before you leave, he won't get the notification, but the geofence still exists—if you turn your location back on another day, and then leave work, your friend will get the notification at that time.)

If you want, you can flip this feature around and notify others of your location—either currently, or when you leave or arrive somewhere. Tap the *Me* tab, then tap the *Notify* button and choose whom you want to send an alert to.

Unlike Notify Me, which requires that you and your buddy be following each other, you can send your notifications to anyone, whether they have Find My Friends installed or not. If your contact isn't using Find My Friends, she'll receive an email with your current location (or when you left or arrived); if she does have the app, she'll get an alert from it.

**CREATE TEMPORARY EVENTS** Although these features are nifty for people you trust with your location, you might not want to let every person you met at, say, a conference have permanent access. For those situations, we recommend using the app's Temporary Event feature, which allows you to set geofences and track location for a limited amount of time.

Tap the *Temporary* button at the bottom of the screen, and then tap *Invite Friends* (on an iPad in portrait orientation, this button is hidden in a popover list—tap the list button in the upper left to reveal it). Add the people you wish to invite, give the temporary event a name, and tap the *Ends* field to choose a date and time for the event to end—in other words, the time at which the listed people will no longer be able to locate each other (unless, of course, some of them are following each other independent of the temporary event).

Tap *Send* to create the event. Note that if you send an invitation to someone who isn't already using Find My Friends, he'll receive the invite via email, with information on downloading the app, instead of as an iOS notification.

What's unique about temporary-event invitations is that when friends accept that invitation, the location sharing is automatically multi-way—for the duration of the event, everyone can follow everyone else, without each person having to exchange two invites with every other person.

At any time, you can view the Temporary list to see a list of ongoing temporary events and their participants. For any event, you can tap *View Map* to view a map with each person's location marked or tap *Send iMessage* to send a message to everyone in the group. You can also tap any participant to view his details. If you created the event, you can tap the event name to view a summary of the event, as well as to edit the event name and end, to remove or add participants, or to delete the event. For events you didn't create, you only have the option to leave the event.

**STOP FOLLOWING ME** If you'd rather not let a particular person or group of people follow you, you have several options. If the person is only following you because you're both members of a temporary event, and you created the event, you can simply remove the person from the event; if you aren't the event creator, you must leave the event. If the person is officially following you, you'll need to remove her from your Followers list. Tap *Me* at the bottom of the screen to view the list of your followers, tap the person's name, and then tap *Remove From Followers*.

You can also temporarily disable location sharing to prevent anyone from seeing your location. In the *Me* screen, simply switch the *Hide From Followers* setting to *On*. Switch the setting back to *Off* to resume location sharing. While hiding, you can still send and receive Find My Friends invitations. Unfortunately, there's no way to temporarily hide your location from certain people—it's all or nothing.

**USE MULTIPLE DEVICES WITH FIND MY FRIENDS** If you've got, say, an iPhone and an iPad, you can sign in to Find My Friends on both devices using the same Apple ID. However, your friends can only view the location of one device.



**THE ACTIVE ONE** If you have multiple devices, choose which one broadcasts your location to your friends.

To choose which device will be locatable, tap *Me* at the bottom of the screen, tap *Account* in the upper right, and then tap the desired device under *Active Device*. You'll still be able to use the Find My Friends app on any of your iOS devices, but your followers will see only the selected device's location.

**OTHER SETTINGS** The *Me* screen has information about your current location, as well as an option to assign it a more-meaningful label—one that appears to your followers. Tap *Choose Label*, and then choose one of the stock labels (Home, Work, School, Gym, or None) or create your own custom label. This is also where, as noted above, you can notify someone about your current location and remove followers.

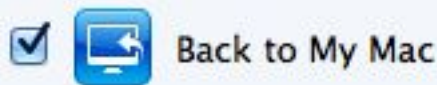
Tap *Account* on the *Me* screen to access a number of account-related settings. In addition to the aforementioned setting for choosing the device to track, you can choose which of the email addresses you've configured on [Apple's website](#) appears in requests you send to friends, decide whether you want to enable geofence alerts for temporary events, and view Find My Friend's Help documentation.

## RESTRICT FRIENDS

If you have a child and want to control what she can and can't do using Find My Friends, you can use iOS's Restrictions (found in *Settings > General > Restrictions*) to prevent any changes to Find My Friends settings, as well as to the current friends list. Just enable restrictions (if they aren't already enabled); provide a four-digit passcode, if necessary; scroll down to the *Allow Changes* section and tap *Find My Friends*; and tap *Don't Allow Changes*.

## Back to My Mac

Back to My Mac is a lifesaver if you ever need to work on a file on your computer when it's located far away. The service performs the nifty magic of letting you remotely access other computers you own over a local network or the Internet by gaining access to its shared volumes and controlling its screen.



**CHECK THAT BOX** If you don't have the **Back to My Mac** checkbox enabled on your home computer, you won't be able to access your files remotely.

The service is very simple to set up: All you should need to do is select the *Back to My Mac* checkbox in iCloud's preference pane. We should note that Back to My Mac can occasionally run into trouble if your computer is behind a firewall or is using an older wireless router; you may have to change a port number or two first to get it working. (Apple has a great article with troubleshooting tips [available on its website](#).)

**ACCESSING YOUR MAC** So you're far from home or office and you want to grab a file—or, even better, access the computer screen itself. How do you go about doing this?

First things first: The Mac you're using must be logged into the same iCloud account as the account you have active on your Mac at home. The easiest way to manage this is to travel with a Mac that uses the same iCloud account—a laptop, for instance. If both computers are logged into iCloud and have Back to My Mac enabled, you should see your computer's name pop up in the sidebar of the Finder window, under Shared. From there, you can choose whether to get files or screen-share with it.

Unfortunately, having a second computer of your own around is not always an option. And as there's no way to get files or view your screen from your iOS devices; if you want to access your files, you'll need to access another Mac somehow. If you're traveling without a second computer, you have two options: borrow a Mac running OS X 10.7.5 if you're staying with a friend who has one, or visit the Apple Store.

### WHEN BACK TO MY MAC WON'T WORK

While Back to My Mac is wonderful when it works, it doesn't always do so. This is in part due to Apple's router and network setting requirements; if your Back to My Mac connection is acting up, our own Chris Breen has [a great article to help you troubleshoot](#). Either way, if you know ahead of time that you might need to connect to your computer at home, it's always prudent to test your setup if possible before taking off on a trip.

If your friend has such a Mac, the easiest method is to log in to her computer as a guest. OS X offers a special guest user account: When you log in, it presents itself as a brand-new user install, and it erases all data when you log out.

To log in to the guest user account, have your friend first uncheck Back to My Mac in her iCloud preferences (if she has an iCloud account), then log out of her account and return you to the login screen. (You should see a Guest User button there; if not, have your friend double-check to see if the guest user profile is set up in the Users & Groups preference pane. Apple also offers a handy tutorial for setting up the account [on its website](#).)

Once you've successfully logged in, go to the iCloud preference pane and enter your Apple ID and password. (Keep your friend nearby, because you'll need her to enter the administrator password for you in a moment.)



**NO CHECKING** Uncheck both of these sync boxes to keep iCloud from needlessly downloading data to your guest account.

When iCloud asks if you want to sync your iCloud information with your computer, you can say no and uncheck both boxes; this will keep iCloud from trying to update the guest user apps with your iCloud information. Once you get to the main iCloud screen, select the *Back to My Mac* checkbox.

At this point, the computer may prompt you for administrator access. Now you need your friend to enter the admin password and authorize Back to My Mac.

Assuming your friend has disabled Back to My Mac on her account, this should now let you access your faraway computer's files. When you're done, just log out of the guest account—this deletes your iCloud account from your friend's computer, and she can log back on and go about her business.

If you'd rather not inconvenience a friend—or you don't have a friend along to inconvenience—your next best option is to do your work at a nearby Apple Store. Pop in, choose a computer, and, in the iCloud preference pane, log in to your iCloud account. Check the *Back to My Mac* box, and your computer should show up under the Shared sidebar in a Finder window. If you use this method, be sure to log *out* of your iCloud account before leaving the store; otherwise, anyone passing by may be able to access your files.

**VIEWING, EDITING, AND DOWNLOADING FILES** Once you have Back to My Mac set up and you spot your computer in the sidebar of the Finder window (under Shared), just click it. Depending on your home computer's security settings, the service will either automatically log you in to your computer with your Apple ID or log you in as a guest; enter your computer's username and password to gain full access to your files.



**FILE RETRIEVER** Connect to your computer to access its file system.

While connected, you can peruse the entirety of your computer's files. Keep in mind that as your computer is not on your local network, you may not want to open files directly from it, unless you want to work very slowly indeed. (We usually recommend copying files by dragging them from your home computer directory to the desktop and working on them locally.) You can disconnect from your computer at any time by clicking the *Disconnect* button.

**SHARE YOUR SCREEN** Your other option for accessing your files is going straight to the source: sharing your home Mac's screen. To access it, select your computer from the Shared sidebar in the Finder, and then click the *Share Screen* button. Depending on your security settings, you may be prompted to enter your username and password—make sure you enter the correct combination for that machine.

Your remote desktop will then appear in a window. When your cursor enters the window, it becomes the cursor on the remote Mac, letting you click buttons, drag windows, and interact with the computer just as if you were sitting in front of it.

To take advantage of some of Screen Sharing's other features, you may need to choose *View > Show Toolbar*. For example, if you don't want to interact with the remote machine, you can click the *Switch between Control and Observe mode* button in the top left.



**FANCY TOOLS** The Screen Sharing app allows you to copy information from your home computer's clipboard, take screenshots, and more.

Screen sharing even lets you copy and paste between the client and host computers. To paste something on the remote machine, select it on your local Mac and copy it to your clipboard. Then, in the Screen Sharing toolbar, click the *Send clipboard contents to the remote clipboard* button. You can then paste your selection on the remote machine. You can even perform the process in reverse—just make sure to click the *Get the remote clipboard contents* button instead.

Keep in mind that while you're in Screen Sharing, most of the keyboard shortcuts you press pass to the remote machine. So, for example, if you press <Command>-Q, that will quit the app in the foreground of the remote machine, not the local machine.

When you're finished, just close the window, and the Screen Sharing app will shut down and terminate the connection. After doing so, don't forget to click the *Disconnect* button in the Finder window.



## Purchase Management

Within Apple's new iCloud service, you can sync, back up your devices, and locate friends—but if you want to manage your music and purchases, look to the service's iTunes in the Cloud initiative: For free, you can automatically download any new purchases across all your devices and access any past purchases (still available on iTunes); pay an extra \$25 a year, and you can store and stream your music online with iTunes Match. Here's how all these options work.

### Automatic Downloads

Both iOS and iTunes include an automatic downloads feature that lets you choose to have your device or computer automatically download any music, books, and apps you've downloaded on other computers or iOS devices.



**INSTA-DOWNLOAD** Turn on Automatic Downloads and new purchases automatically appear in your library.

**SET UP YOUR MAC OR PC** To set up automatic downloads in iTunes, go to *Preferences > Store > Automatic Downloads*. Here, you can individually enable the downloading of music, apps, and books purchased using your iTunes ID. Click the box next to each option that you want to enable, and then click *OK*.

**SET UP iOS** On your iOS device, go to *Settings > iTunes & App Stores*; under the Automatic Downloads section are three toggles for Music, Apps, and Books. There's also an option for using cellular data for these downloads—if you're on a device that supports it. Though Apple prohibits you from downloading anything over 50MB while on cellular data, keeping the cellular data option turned on can occasionally result in going over your data plan's limits, so be wary.

One particularly nice use of the automatic downloads feature involves books: Though you can't read iBooks on your Mac, you can browse and purchase them via iTunes. Even on the iPad's large screen, an iOS device isn't the best way to search for and look at the vast selection on the iBookstore, so if you set up automatic downloading for books on your device, you can find and purchase a book from your computer, and then have it ready to read the next time you launch iBooks on your iPad.

### Previously Purchased Content

Another part of iTunes in the Cloud is the ability to redownload previously purchased content and display that content in your iTunes library even if you don't have it locally stored there. You can redownload music, books, apps, movies, and TV shows that you've purchased from the iTunes Store, App Store, or iBookstore in the past. (Note: Redownloading and streaming depends on Apple's licensing agreements, so certain media may not be available in your country. Check your local iTunes Store to be sure.)

**VIEW AND DOWNLOAD CONTENT ON YOUR MAC OR PC** As of iTunes 11, any content you've purchased shows up in your iTunes library; you can stream it off the iTunes servers by playing it, or download it locally to your machine.



**GIVE IT ANOTHER GO** If you want to redownload an old purchase, you can retrieve it from the Purchased section of the iTunes Store.

To view all your previously purchased content, click the *iTunes Store* button, and then click the *Purchased* link under the Quick Links sidebar. Once in the Purchased interface, you'll see Music, Movies, TV Shows, Apps, and Books tabs across the top. Click any of them to see the content available to you; you can differentiate between all previously purchased content, as well as content not on this computer.

### HIDE UNWELCOME PURCHASES

If you bought an item you no longer wish to see in your purchased list, you can mouse over it and click the *X* button that appears. You can restore hidden tracks and items by clicking the *Account* button in iTunes, clicking *View Hidden Purchases*, and then selecting *Unhide* next to the purchases you wish to add back to your iTunes in the Cloud library. (There's no way to permanently delete a hidden track.)

To download an item, click the cloud icon next to a song, album, music video, movie, TV show, app, or book to begin the download process. You can also download all your music or individual TV show seasons by using the *Download All* button.

**VIEW AND DOWNLOAD CONTENT ON iOS** On your iOS devices, the redownload process is fragmented by app. For music and videos, launch the iTunes Store app and tap the *Purchased* button at the bottom (or, on an iPhone, tap *More > Purchased*). From there, choose between Music, Movies, and TV Shows (via a pop-up menu on the iPad or from the *Purchased* screen on the iPhone). As with iTunes, you can choose between All and Not On This iPhone (or iPod or iPad, depending on what device you're using); use the cloud icon to download.

For apps, launch the App Store app. Tap the *Purchased* button (iPad) or *Updates > Purchased* at the top (iPhone) to view previously download apps by download date (newest first). Here, too, you can see all apps or just those you haven't installed. And on the iPad, you can choose between viewing iPad-specific and universal apps, and iPhone-only apps. Tap the icon to download.

iBooks is unique among its media brethren in that it displays your purchased books within the app itself, under the *Purchased Books* collection (tap the *Collections* bar at the top and tap *Purchased Books* to view). Books that aren't on your device show up with a cloud icon on their upper right cover; tap one to download it. (You can also go to *Store > Purchased*.) iBooks also offers iCloud page syncing—start a book on one device, and when you download it on another device, it opens to the correct page.

**VIEW CONTENT ON THE APPLE TV** One other advantage of the iTunes in the Cloud functionality is that the second-generation Apple TV can stream your previously purchased music, movies, and TV shows rather than having to locally store them. Once you log in with your Apple ID and password on your Apple TV, you should have full access to your library.

### iTunes Match

Perhaps no part of Apple's iTunes in the Cloud initiative has prompted as much interest as iTunes Match. You could attribute that to a number of factors, including Apple's industry-dominating music store, iTunes Match's library-matching system, and the fundamental integration with all of Apple's devices. But in general, it may be the idea of having your music everywhere, always at your fingertips, that has really captured the interest of users.

**WHAT IS IT?** iTunes Match allows you to easily stream up to 25,000 tracks of your music collection to any of your devices—and you can download those tracks to any of your computers or iOS devices. In addition, if you have low-quality tracks or DRM-shackled tunes from iTunes of old, iTunes Match automatically upgrades them to a 256-kbps DRM-free high-quality AAC version.



**A MATCH MADE IN iCloud** iTunes Match lets you upload and match all your old ripped tracks and stream them from any of your iCloud-enabled devices.

iTunes Match is a paid addition to Apple's iCloud online service: You'll have to pony up \$25 per year via your iTunes account for the feature.

That accounts for the iTunes part, but what about the Match? Instead of making you upload all those tracks you've downloaded, as competing services from Google and Amazon do, iTunes scans your library and compares the tracks to the iTunes Store's catalog. If it can match a song in your library with a track from the iTunes Store, iTunes Match doesn't bother uploading the music file—which saves you time and bandwidth.

Of course, you may have some tracks in your library that aren't available in the iTunes Store; in that case, iTunes will upload just those files. Neither matched tracks nor uploaded tracks count against the 5GB of storage that iCloud provides to every user, however.

Still, iTunes Match has its limits: As many music listeners with large libraries have noted, if your library contains more than 25,000 songs that haven't been purchased from the iTunes Store, you won't be able to sign up for iTunes Match without doing some fancy footwork.

**SET UP iTUNES MATCH** The initial setup of iTunes Match takes place right on your Mac—you'll need iTunes 10.5.1 or later to get started. Open iTunes and go to *Store > Turn On iTunes Match*, and then follow the onscreen instructions.



**MATCHMAKER, MATCHMAKER** After you sign up for iTunes Match, it scans your library, matching and uploading songs.

Once you've enabled iTunes Match, Apple starts scanning your library. This process—and the subsequent uploading of any unmatched tracks—can take a while, but since it happens in the background, you can continue jamming to your music in the meantime. Note that you can't run the Match process on multiple computers simultaneously, so don't start matching tracks on a second computer until the first one has completely finished running the scan.

After iTunes has finished its scanning and uploading process, a cloud icon appears next to the Music item in your iTunes sidebar, and a column heading with the same icon is added to your library. This column shows a little cloud download icon for songs stored in the cloud—locally stored tracks won't have anything in this column.

You can also enable an iCloud Status column by right-clicking the column header or by going to *View > View Options* and selecting *iCloud Status*; that column tells you whether a track has already been matched, is waiting for a match, is a duplicate of a matched song, is ineligible (as is the case for digital booklets, for example, or certain types of audio files), has been removed from one of your devices, or is a track that you purchased from the iTunes Store.

If you download songs from iTunes Match to your computer, their Kind will be listed as 'Matched AAC file'; that's because iTunes Match upgrades any matched tracks to high-quality 256-kbps AAC files. As with any track purchased from the iTunes Store, metadata with your account name will be embedded within the file.

**MATCH FOR iOS** The real usefulness of iTunes Match comes when you activate it on your iOS devices. To enable it, go to *Settings* > *Music* and toggle the iTunes Match slider to *On*. Though iOS warns you that this will replace your Music library, any tracks that are already on the device—because you’ve synced them from iTunes—will remain stored locally on your device. (If you disable iTunes Match again, those tracks should remain intact.) As on your Mac, albums in your iOS device’s music library that are stored in the cloud will now feature a download icon.

After you’ve enabled iTunes Match, any music you’ve purchased from the iTunes Store is automatically available to all of your devices, regardless of whether it’s currently stored on your devices.

**USING ITUNES MATCH** Thanks to the integration between iTunes on your Mac and PC and the Music app on iOS, there’s very little difference between iTunes Match tracks you haven’t downloaded and those you have. For tracks stored in the cloud, you might notice a brief pause between the moment when you tap a song and the start of playback, or when you’re skipping between songs, but other than that, they ought to behave pretty much exactly like locally stored songs: You can sort them, search them, browse by album and artist, and even drag tracks into playlists or use Genius to find similar songs.

On your iPhone or cellular-enabled iPad, you can either configure iTunes Match to work only over Wi-Fi, or choose to let music stream over cellular data by visiting *Settings* > *Store* and enabling *Use Cellular Data*. If you try to play a track over cellular without this option enabled, you’ll get an error message that invites you to enable the cellular data option.

If you don’t want to depend on having a network connection, you can download tracks to your device. Just tap the cloud download icon next to any artist or album, and iTunes automatically starts transferring the music to your iOS device; on your Mac or PC, you can also select multiple tracks, control-click them, and choose *Download*. If you decide at some point that you need to free up some space on your device, you can delete the songs from your library by going to iTunes, selecting the tracks and pressing the <Delete> key. The cloud download icon will once again appear next to the songs, but you’ll still be able to play them back. (If you want to delete the song from both your computer and iCloud, press the <Delete> key, and then check the *Also delete this item from iCloud* box.)

In cases where you know you won’t have access to your online music library for a while—say you’re on a lengthy plane trip—you can make your iOS device show only those tracks stored on it by going to *Settings* > *Music* and switching the *Show All Music* option to *Off*. On your computer, you can go to *View* > *Hide Music Not On This Computer* to get the same effect.

Because iTunes Match syncs with the music library on your Mac, any playlists you’ve created in that library get synced with your devices as well; if you’ve created playlists on your iOS device, you need to sync those with your music library before enabling Match on that device; otherwise, they will be removed from the device. iTunes Match will instantly sync any changes you make to those playlists between all Matched devices. Playlists that contain media types other than music—including voice memos, digital booklets, and so on—will not sync between devices.

If for some reason a track doesn’t correctly sync with iTunes Match, you can right-click it and select *Add to iCloud* to add it manually. Depending on the type of error, however, this may not always work (for example, if Match doesn’t support the song’s file type). For more on Match errors, see “[iTunes Match](#)” in the “Troubleshoot iCloud” chapter.

# Troubleshoot iCloud



**THE TROUBLE WITH THE CLOUD** Even the best services run into trouble now and again.

It's a fact of life: Technology breaks—even technology as physically intangible as iCloud. If you've run into errors with your iCloud account, syncing, Photo Stream, backups, or iTunes Match, we hope this chapter helps you fix your problem.

## WHEN TO GO TO THE EXPERTS

While this guide attempts to answer basic questions and provide troubleshooting help for most simple problems, don't be afraid to seek out the professionals for a tougher problem. Syncing issues can sometimes get nasty, and simple solutions may not always work. If this happens, the folks at your [Apple Store](#) are always happy to try and help; you can also try going through [Apple's online support system](#).

# Accounts

While Apple's iCloud service offers users a whole wealth of new sync features, access to purchased content, and geolocation fun, running into account creation problems can be confusing at best, slam-your-head-against-a-wall-in-frustration at worst. To help ease the pain (and keep your walls dent free), we've put together some common upgrading scenarios for migrating to iCloud.

## The Basics

We have a few specific account-based scenarios below, but before we go on, here are a few general tips.

**IF YOU HAVE AN APPLE ID THAT YOU WANT TO USE FOR SYNC AND PURCHASES** Convert it to iCloud. If you used your Apple ID for one of Apple's older sync services, you may also have active me.com and mac.com accounts. While you should get in the habit of using example@icloud.com, don't worry: You can still use your .me and .mac email addresses.

**IF YOU WANT TO SYNC WITH ONE ID AND PURCHASE WITH ANOTHER** Convert one to iCloud; use the other to log in to the iTunes and App Stores.

**IF YOU WANT TO SYNC WITH MULTIPLE IDS** Hook up your primary account to your device; add a secondary account for calendar and contacts syncing using the Mail, Contacts & Calendars pane in System Preferences on your Mac or the Settings app on your iOS device.

## Hardware and Software Scenarios

By default, iCloud supports devices running iOS 5 or later, Macs running OS X Lion or later, and PCs running Windows Vista or later. But what if you're still running Snow Leopard or iOS 4?

**WHAT IF I UPGRADE TO iCloud AND I'M STILL RUNNING SNOW LEOPARD (OR LEOPARD)?** As Apple has yet to release a patch for its earlier operating systems that enables iCloud in System Preferences, you won't be able to automatically sync your iCloud mail, contacts, and calendars, though you can set up sync for your mail and calendars by manually adding your iCloud account to Mail (see "[Syncing](#)" later in this chapter for more information). You'll also be able to access iCloud features via the iCloud website. When it comes to features like Documents in the Cloud, Photo Stream, and Find My Mac, however, you'll be left out in the cold.

**WHAT IF I UPGRADE TO iCloud ON MY MAC OR PC, BUT I'M STILL RUNNING iOS 4 ON MY IPHONE?** If you have a device that's still running iOS 4, you'll be able to activate Find My *device* by adding a MobileMe account with your iCloud credentials under *Settings > Mail, Contacts, Calendars*, but you'll need to set up your iCloud mail, contacts, and calendars manually (which requires a bit of legwork; this [blog by Brian Li](#) has some great tips about how to go about doing it). As with iCloud on Snow Leopard, it's not the easiest setup, but it's doable.



### Single-User Setup Scenarios

If you're looking to sign up yourself—and yourself only—for iCloud, here are various scenarios you may run into.

**YOU HAVE NEVER PURCHASED ANYTHING FROM APPLE (BESIDES THIS BRAND-NEW DEVICE YOU NOW HAVE IN YOUR HANDS), YOU DON'T KNOW WHAT AN APPLE ID IS, AND YOU WANT TO SIGN UP FOR A FREE iCloud ACCOUNT** Great! You can do this in one of two ways: Sign up from a mobile device running iOS 5 or later; or sign up via the iCloud preference pane on a Mac running OS X 10.7.5 or later. (See “[Set Up iCloud](#)” in the “Get Started” chapter for more information.)

**YOU HAVE AN APPLE ID YOU USE FOR PURCHASING ITEMS THAT YOU ALSO WANT TO USE FOR iCloud** Convert it to iCloud by logging in to the iCloud website with your Apple ID; you can also do this by logging in to iCloud on your iOS device or Mac. (On an iOS device, go to *Settings* > *iCloud*; on a Mac, go to *System Preferences* > *iCloud*.)

**YOU CREATED AN iCloud ACCOUNT FOR SYNCING, BUT YOU ALSO HAVE A SEPARATE APPLE ID FOR PURCHASES** If you don't want to convert your Apple ID into an iCloud account—possibly to keep your sync data and your purchase data separate—you can have two coexisting accounts on your Mac, PC, and iOS devices. After you set up your iCloud account, just add your iTunes Store credentials separately.

On a Mac or PC, open iTunes, go to *Store* > *Log In*, and enter the Apple ID and password you use for purchases.

On an iOS device, go to *Settings* > *iTunes & App Stores*. If you've added your iCloud account to your device, those credentials appear by default; to replace them with the Apple ID you use for purchases, tap your iCloud ID at the top of the screen and then tap *Sign Out*. Once you've signed out, you can log back in with the secondary ID.

**YOU WANT TO CHANGE YOUR APPLE ID TO A DIFFERENT EMAIL ADDRESS** If you already have an Apple ID but want to use a different email address, it's easy to do from [Apple's website](#).

On the My Apple ID website, click the *Manage your Apple ID* button. After logging in with your Apple ID and password, click the *Sign In* button. If you have anything but a mac.com, me.com, or icloud.com address, you should see an Edit link next to the email address that appears under the 'Apple ID and Primary Email Address' heading in this screen. Click it, enter the email address you want to use, and then click *Save Changes*.

We cite the mac.com, me.com, and icloud.com exceptions because no Edit button appears in this screen if you have one of these addresses. If for some reason you need to disassociate your Apple ID from such an account (or you're having a problem using the method I just described), you'll need to contact Apple to arrange it. You can do that through the [iTunes Support website](#).

**YOU WANT TO MERGE SEVERAL APPLE IDS INTO ONE iCloud ACCOUNT** Unfortunately, Apple currently doesn't allow you to merge Apple IDs.

**YOU HAD AN ACCOUNT WITH ONE OF APPLE'S OLDER, EXPIRED SERVICES (iTOOLS, .MAC, OR MOBILEME), BUT STOPPED SUBSCRIBING, AND YOU STILL USE THAT MAC.COM OR ME.COM ADDRESS AS YOUR APPLE ID FOR PURCHASES** Convert your old account by going to the iCloud website and logging in with that account's credentials. You can also do this by logging into iCloud on your iOS device or Mac.

**YOU HAD AN ACCOUNT WITH ONE OF APPLE'S OLDER, EXPIRED SERVICES (iTOOLS, .MAC, OR MOBILEME), BUT STOPPED SUBSCRIBING; NOW YOU WANT TO USE THAT EMAIL ADDRESS FOR iCloud, BUT YOU USE A DIFFERENT APPLE ID FOR PURCHASES** Convert that address to iCloud by using the method detailed in the scenario above. After you've done so, you can add your Store credentials separately.

On a Mac or PC, open iTunes and go to *Store > Log In*, and then enter the Apple ID and password you use for purchases.

On an iOS device, go to *Settings > iTunes & App Stores*. If you've added your iCloud account to your device, those credentials appear by default; to replace them with the Apple ID you use for purchases, tap your iCloud ID at the top of the screen, and then tap *Sign Out*. Once you're signed out, you can log back in with the secondary ID.

### Multiple-User Setup Scenarios

Want to sync your own data, but share parts of it with others? Is your iCloud account also the account people in your family use for their iTunes Store purchases? We'll walk you through all sorts of multiple-user scenarios.

**YOU AND YOUR FAMILY WANT SEPARATE iCloud ACCOUNTS FOR SYNCING; EVERYONE CURRENTLY USES YOUR ACCOUNT FOR iTUNES STORE PURCHASES** It's fairly easy to get started with iCloud if you use a single Apple ID solely on your own devices. But many families share a single Apple ID across multiple people and devices for purchases, to give everybody in the family access. Must you all share that Apple ID for iCloud, too?

No, you don't have to, and you probably shouldn't either. Just because you all want to own [Hanging With Friends](#) doesn't mean you want to share the same contacts, inbox, or bookmarks. And sharing iCloud accounts would also mean that you would have to share your iOS backup space.

The good news is that you can continue to share an Apple ID with your family for iTunes purchases while maintaining individual, separate iCloud accounts. And the even better news is that Apple totally approves of your doing so, so you needn't feel guilty about it.

As the owner of the Apple ID for purchases, you can go ahead and convert your ID to iCloud, then log in to iCloud on your devices as you would normally.

Your other family members will want to create new iCloud accounts, and then follow these steps:

On a Mac or PC, open iTunes and go to *Store > Log In*, and then enter your Apple ID and password.

On an iOS device, go to *Settings > iTunes & App Stores*. If the user of that device has added an iCloud account to it, those credentials appear by default; to replace them with the Apple ID you use for purchases, tap the iCloud ID at the top of the screen and then tap *Sign Out*. Once signed out, you can log back in with the secondary ID.

If you instead want to keep everyone's syncing—including your own—separate from purchases, leave your Apple ID alone and create a new iCloud account for syncing, and then follow the instructions above to add your Apple ID back to iTunes.

**YOU'VE ALREADY MADE A BUNCH OF PURCHASES USING SEPARATE APPLE IDS, AND YOU WANT TO SHARE ALL OF THEM WITH YOUR FAMILY** Though the following process is tedious, it can work. Add all the content (associated with the different IDs) to iTunes, and then try to play or sync it. You'll be asked to authorize iTunes with the IDs associated with that content. After you do so, you can sync all your devices with that computer to get that content; if an app requires an update on an iOS device, you'll be prompted for the original account's password.

The only hassle with this method comes from authorization limits—Apple currently prohibits you from authorizing more than ten devices with your Apple ID, so if each family member has a computer, iPhone, and iPad, you may run up against these limits very quickly.

**YOU AND YOUR FAMILY MEMBERS WANT SEPARATE iCloud ACCOUNTS FOR EMAIL, BUT YOU WANT TO SHARE CONTACTS AND CALENDARS** Not a problem—you can each have individual accounts but share contacts, calendars, reminders, and notes. Each of you should create a separate iCloud account for your email, keeping syncing turned on for contacts, calendars, reminders, and notes. Then create a new secondary iCloud account for syncing. (Alternatively, you can each create your own iCloud account, and then choose one of your accounts as the secondary account for all other parties.)

On a Mac, go to *System Preferences > Mail, Contacts & Calendars > iCloud*, and then add the secondary iCloud account. (Unfortunately, you can't add secondary iCloud accounts on a PC.) On an iOS device, go to *Settings > Mail, Contacts, Calendars > Add Account > iCloud*.

Toggle the calendars, contacts, notes, and reminders switches on for the secondary account, and you should be sharing in no time. Secondary iCloud accounts on a device are limited to just the syncing of contacts, calendars, mail, reminders, and notes: You can't use your significant other's account to sync Safari bookmarks, Photo Stream, Documents & Data, or Find My iPhone, or to back up iOS devices.

# Syncing

In theory, having all your data magically synced between your devices should be a wonderful and painless process. In actuality, technology isn't perfect—and mistakes can and will happen. In this section, we've collected a few common iCloud syncing problems and ways to troubleshoot.

## General Sync Problems

If it's duplicates, merging errors, or mail problems you've run into, we've got some solutions for you.

**DUPLICATES, DUPLICATES, DUPLICATES** Unfortunately, while we'd love Apple's iCloud syncing to be perfect all the time, often it's not. Throw third-party services and iTunes syncing into the mix, and it's pretty easy to accidentally find yourself with a contact list in triplicate. Here are some pitfalls to watch out for.

First, you're in danger of getting duplicate items if you're using a version of iTunes older than iTunes 11. (If you've upgraded to iTunes 11, you can disregard this section.)

If you are using iTunes 10 or earlier, though, and you've switched on calendar syncing with both iCloud and iTunes, you could be in for some serious duplication. To check, connect your iOS device to your Mac, select it in iTunes' Source list, choose the *Info* tab, and peer at the Sync Calendars entry. Look for these words: 'Your calendars are being synced with iCloud over the air. Your calendars will also sync directly with this computer. This may result in duplicated data showing on your device.'

This is a very strong hint that you're doing The Bad Thing and that you need to make a choice between syncing with your Mac or syncing with iCloud. You can disable calendar syncing within iTunes by unchecking the Sync Calendars option. When you do, iTunes will offer to remove its calendar entries from your iPhone.

(If you're still not sure that's what's happening, launch the Calendar app on your iPhone, tap the *Calendars* button in the top left corner, and look at the headings on the resulting Calendars screen. If you see one entry for From My Mac and another that includes your iCloud address—*example@icloud.com*, for instance—you're duplicating your efforts.)

But suppose you have different events in the calendars synced from your Mac and those synced via iCloud, and you'd like to have all of your events on the iPhone. Try this: Attach your iPhone to your Mac and, in the *Info* tab, disable *Calendar syncing*. When you see the offer to keep or remove the calendars currently on the iPhone, choose to keep them, and then click the *Apply* button at the bottom of the window.

Now, move to your iPhone, choose *Settings > iCloud*, and flick the toggle next to Calendars to *Off*. Again, you'll be offered the choice to keep or delete your calendars. In this instance, delete them (don't worry, they're stored in the cloud). Now switch the Calendars toggle back to *On*. In the sheet that appears, tap *Merge*.

What happens? The duplicate events currently stored on your iPhone (the ones synced from your Mac) and on iCloud are merged into a single event. Any additional events not found in your iCloud calendar get added to iCloud.

**MERGING DIFFICULTIES** Content merges—which happen when you try to sync an active iCloud account with a device that already has calendars and contacts on it—can also be a source of trouble.

iCloud always attempts to merge things seamlessly: If it's merging calendars, for example, and you have two events with the same name, it automatically tries to accept the one you created most recently. Most of the time, data merges should work seamlessly, but there can occasionally be goof-ups. If you're worried about accidentally overwriting your device's data with your iCloud data, make a backup of your device before you turn on iCloud.

On a Mac running Mountain Lion, you can back up Calendar data by going to *File > Export > Calendar Archive*; back up Contacts by going to *File > Export > Contacts Archive*; back up Reminders by going to *File > Export*; and back up Notes by copying the contents of *youruserfolder/Library/Containers/com.apple.Notes/Data/Library/Notes*. (You can also run a Time Machine backup before adding iCloud to back up the whole kit and caboodle.)

On an iOS device, you can back up your data by creating a device backup through iTunes. (In iTunes 11, choose *This computer* under the Automatically Back Up section in the Summary pane, and then click *Back Up Now*.)

**SECONDARY EMAIL ERRORS** If your Mac generates errors when you try to add an iCloud email address via the Mail, Contacts & Calendars preference pane, you may need to set up your account manually. To do so, open the Mail app and go to *Preferences > Accounts*.

In Mail's Accounts setting, click the plus button (+) and enter your iCloud address and password as you normally would. Hold down the <Option> key and click *Continue*. Instead of having Mail set up your account for you, you can now set it up manually.

In the next sheet (which reads Incoming Mail Server), choose *IMAP* from the Account Type pop-up menu. Leave iCloud in the description field. In the Incoming Mail Server field, enter *imap.mail.me.com*. Your username and password should be filled in automatically. Hold down <Option> and click *Continue* again.

In the next sheet (Incoming Mail Security), enable the *Use Secure Socket Layer (SSL)* option and choose *Password* from the Authentication pop-up menu. Click *Continue*.

The final sheet will show you the account configuration. Look it over to make sure everything is entered correctly. (If it isn't, click the *Go Back* button to do exactly that and make corrections where needed.) Click *Create* to create your account. Your email account should now work as expected.

## iCloud Syncing With Older Machines

Officially, iCloud only supports Macs running OS X 10.7.5 or later, iOS devices running iOS 5 or later, and PCs running Windows Vista or later. If you're stuck with an older device, however, it's possible to get some features working—though not all.

**SYNC SUPPORT ON iOS 4** If you're using an older iPhone (3 or earlier) or an iPod touch (second generation or earlier), you unfortunately can't upgrade to iOS 5—and iCloud along with it. But you can still get iCloud email, contacts, and calendar syncing. Unfortunately, it's not the easiest process in the world, and requires a bit of

fiddling with plist files on your Mac. If you really need sync support, though, Ben Li's [Life, Music, and Everything Else](#) blog has a great step-by-step tutorial.

**SYNC SUPPORT FOR OS X SNOW LEOPARD** If you're still using Snow Leopard on your Mac, you won't see an iCloud pane in System Preferences; instead, you'll see a pane for MobileMe, Apple's bygone sync service. If you're determined to sync your mail, calendars, contacts, and bookmarks, however, you can do so without too much trouble. Thomas Brand's [Egg Freckles](#) blog offers tips on setting up these features in Snow Leopard.

**SYNC SUPPORT FOR WINDOWS XP** Apple's iCloud control panel for Windows is currently available only for PCs running Windows Vista or later. You can get your iCloud email running on an XP computer without much hassle; if you want to do much else, however, you'll have to do some fiddling with the control panel file—not for the faint of heart. (If you're determined to do so, the [xlii](#) blog offers a step-by-step tutorial; note that we at *Macworld* haven't tested this walkthrough and can't vouch for its effectiveness.)

### The Nitty-Gritty of Documents & Data Sync

Apple's Documents & Data sync for OS X apps and App Store apps generally works fairly seamlessly, but if you're curious about how it works—or if you're running into an error—here are some answers.

**WHAT FILES DOES DOCUMENTS & DATA SYNC BACK UP?** iCloud syncs documents and data created by any iOS App Store and Mac App Store apps (including Apple's own) that can take advantage of the service. If your app isn't sold on the Mac App Store or App Store, it can't use iCloud, and the iCloud service won't back up or sync those files; you'll need a third-party service such as [Dropbox](#) to do that.

**CAN I SEE ALL MY iCloud DOCUMENTS IN ONE PLACE?** No. Unlike the file system on a computer, iCloud doesn't store documents in folders; instead, each app has control of its files and data. As such, when you're in Numbers, you can view all the spreadsheets you've saved to iCloud from the Numbers app, but you can't view any spreadsheets you've saved to iCloud from a different program.

You can see how much iCloud is currently storing—sorted by app—from the Manage Backup section of your iCloud preference screen, but you won't be able to open any of the files.

**DELETING GAMES AND RESCUING DATA** If you delete a game on your iOS device or Mac—and that game has iCloud support—when you reinstall the game, it should retain your data. You can also sync game saves between devices, so you can pause play on an iPad and pick it up on an iPhone.

**HOW DO I GET RID OF DATA?** If you have documents you no longer want saved to iCloud, you can either delete them one by one within the relevant app, or you can go to the Manage Storage section of your iCloud preference screen and delete them from there.

## Finesse Photo Stream

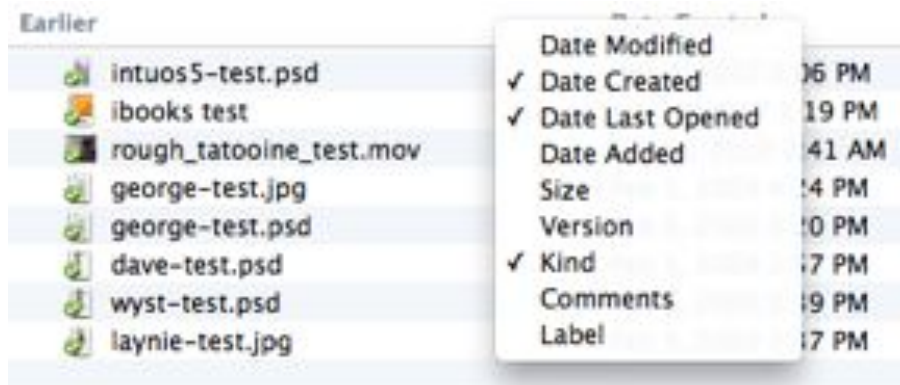
Have questions about Photo Stream? We can help.

**I WANT TO SEE PHOTO STREAM IMAGES ON MY MAC MORE QUICKLY** There are plenty of ways to transfer photos from an iOS device to a Mac, but it can still be a hassle. Photo Stream is no exception: The service has no problem streaming recently taken images, but you still have to load iPhoto or Aperture before you can look at them—that is, unless you know this trick.

First, make sure you have Photo Stream turned on for your iOS devices, as well as on your Mac. Next, go to *youruserfolder/Library/Application Support/iLifeAssetManagement/assets/sub*. (If you aren't sure how to view your Library folder inside your home folder, we have [18 ways to do so](#).)

There, you'll see a bunch of subfolders with names like 013184d3f181aa175db7e48b08817861eff8cac25a. Perform a search for image files in this subfolder by typing **kind:image** in the search field and selecting *Sub* as the focus of the search. (If you take a lot of photos or screenshots, and only want to find one or the other, you could instead search for *png* for screenshots or *jpg* for photos.)

You can save this search as a smart folder by clicking the *Save* button just below the search field. You can save it wherever you want: By default, it will go in the Saved Searches folder, but you can check the *Add to Sidebar* box if you want quick access from the Finder sidebar. You can also choose a different location for the smart folder, such as your desktop. If you want this folder in the Dock, add it by dragging the folder there.



**MORE OPTIONS** Right-click the title bar in List view to add more organizational columns.

Now, whenever you need to get quick access to a photo or screenshot taken on an iOS device, just open this folder. If you have a lot of files, you might want to change to List view and add the Date Created column (right-click the title bar and check the *Date Created* box from the list), and then sort by that date (click the *Date Created* header so the most recent date appears at the top).

**WHY CAN I ONLY SYNC THE LAST 1000 IMAGES?** This is partially due to iCloud's storage limitations. That said, while the service only stores your recent images online, if you sync Photo Stream with your Mac or PC, all Photo Stream images get permanently downloaded to your computer.

**WHAT APPS CAN I USE WITH PHOTO STREAM?** On a Mac, you can use iPhoto '11 or Aperture 3. On a PC, you only have the choice of designating a Pictures folder.



## Backups

Have questions about iOS backups? Here are a few answers.

**CAN I STILL MAKE iTUNES BACKUPS IF I BACK UP MY DEVICE TO iCloud?** You can, but only manually; you'll have to connect your device to iTunes, change the Backups section (located in the Summary pane) to *Automatically Back Up This Computer*, and click *Back Up Now*. After the backup has finished, change this option back to *Automatically Back Up iCloud* to continue backing up remotely.

**CAN YOU DELETE APPS FROM ALL YOUR DEVICES THROUGH iCloud?** No. You can only manage your device's apps from the device itself (or when it's connected to iTunes).

**WILL iCloud BACKUPS EAT UP MY DATA PLAN?** Nope. iCloud seems to be intentionally focused on Wi-Fi syncing. Backups won't happen unless your device is on Wi-Fi and plugged in, for example. But some features sync over cellular connections, and yes, they will use your data plan. Users on limited data plans need to consider their iCloud strategy carefully.

## Location Services

Here we've collected a few questions and answers about iCloud's location services, as well as some tips for optimizing Find My Friends and turning off your location.

**HOW DOES ICLOUD USE MY LOCATION?** iCloud uses your GPS location for two services, assuming you've opted in: Find My iPhone and Find My Friends. (Back to My Mac, while grouped with other location-based services, doesn't use your location; it uses your wireless router.)

**WILL APPLE SELL MY LOCATION DATA TO PEOPLE?** No. Your location data may be used to give you location-targeted iAds, but that data is anonymized when sent to Apple's servers to prevent nefarious types (and advertisers) from knowing who is attached to what location. And you can disable location-based iAds at any time on your device by going to *Settings > Privacy > Location Services > System Services* and turning the Location-Based iAds toggle off.

**HOW DO I STOP PEOPLE FROM FOLLOWING ME IN FIND MY FRIENDS?** Open Find My Friends and tap the *Me* tab, and then turn *Hide from Followers* on. Unfortunately, there's no way to selectively hide yourself from certain followers—you either hide from everyone or from no one. Alternatively, you can remove people from your followers list if you no longer want them to see your location.

**I DON'T WANT TO BROADCAST MY LOCATION** If you don't want your GPS data used for anything, you can go to *Settings > Privacy > Location Services* and disable *Location Services*. Keep in mind that this will also prevent Find My iPhone and the Maps app from functioning.

# iTunes Match

Having trouble with iTunes Match? Whether it's song identification or iCloud errors, we have an overview of some basic issues and how to surmount them.

## iTunes Match and Purchased Content Questions

Have a few more questions about iTunes Match? You've come to the right place.

**WHAT KINDS OF CONTENT CAN ITUNES MATCH UPLOAD OR MATCH?** You can match or upload any music format that's compatible with iTunes. That includes AAC, Protected (DRM or digital rights management) AAC (M4P), MP3, WAV, AIFF, Apple Lossless, and more. You can also redownload music videos that you originally purchased from the iTunes Store, but the service will not match video content or any other iTunes file types (PDF booklets, voice memos).

According to a support document Apple released, you also won't be able to match or upload certain types of music files: files over 200MB, DRM-encumbered tracks that you aren't authorized to play, DRM-encoded songs purchased from an iTunes Store other than the U.S. version, and any music encoded at less than 96 kbps.

You can fool iTunes Match on that last one, however, if you create an AAC version of the song within iTunes (*File > Create New Version > Create iPod or iPhone Version*), and then attempt to match that version.

**WHAT DOES ICLOUD DO WITH MY PURCHASED ITUNES CONTENT?** Using your free iCloud account, you can access a complete record of all your purchases from iTunes. Choose to download new music, apps, and books automatically, and redownload anything for free. If tracks you've purchased are no longer available from the iTunes Store, however, you won't be able to redownload them.

**WILL ITUNES MATCH LET ME UPLOAD OTHER USERS' DRM-PROTECTED FILES?** If you're authorized to play the file, yes—any computer that is authorized to play protected iTunes music can add that music to iTunes Match. This is the case even if the Apple ID you're using for iTunes Match isn't the same one you used to buy the music.

For example, say you have an album in your iTunes library that you purchased using a family member's Apple ID. You bought this album in the days before iTunes went DRM free, so every song is a Protected AAC file—that is, it's copy protected and linked to a single Apple ID. Your laptop is authorized to play content purchased by that ID, so you can listen to the song on your computer and on your iPhone, but you can't move it to any other computer you own because that Apple ID has reached its limit of five authorized computers, and protected iTunes music won't play on unauthorized computers.

Enter iTunes Match. Since your computer is authorized to play those tracks, the protected songs show up in iCloud as Matched. This is the same status iTunes Match uses for songs you've ripped from a CD or received from other sources, and it indicates that you can redownload the song again as a DRM-free 256-kbps AAC file.

When you delete one of these protected songs from your library and redownload it by clicking the *iCloud download* button, ownership is transferred to your iTunes Match account and the file is downloaded as a DRM-free AAC file.

Again, this will only work with songs your computer is authorized to play. Try adding a protected song you aren't authorized to use, and iTunes Match displays a Not Eligible warning.

Unprotected purchases do not have this restriction: DRM-free purchased songs immediately show up as Matched, no authorization required. (Of course, widespread music sharing is still technically illegal. iTunes Match doesn't change that.)

Both of these methods require that the track still exist on the iTunes Store; if Apple has pulled the track, you'll have the option to upload the song, but when you redownload it, it will return to your library as a protected M4P file (if it has DRM) or a DRM-free file, with the original owner in its metadata.

**HOW DOES THE IPOD CLASSIC FIT INTO THE SCHEME OF PUSHING SONGS TO ALL DEVICES?** iCloud requires an Internet connection to do its job, and thus it's limited to iOS devices—which can connect to Wi-Fi networks and in most cases cellular data networks as well. We can't see how an iPod nano or classic could ever fit into the iCloud ecosystem.

**CAN I STREAM MY ITUNES-PURCHASED MUSIC DIRECTLY FROM THE MUSIC APP OR ITUNES ON MY COMPUTER, OR DO I HAVE TO FIRST DOWNLOAD IT TO A DEVICE?** Yes, you can stream purchased music from your library on your Mac, PC, or iOS device—no need to download it first.

**IF I DON'T RENEW ITUNES MATCH AFTER A YEAR, DO I LOSE THOSE 256-KBPS AAC VERSIONS OF MY RIPPED TRACKS?** No. You'll keep any songs you've upgraded. If you unsubscribe, you'll just lose access to streaming and downloading those tracks (and others) to your devices, and you won't be able to redownload them from the iTunes Music Store, unlike your iTunes-purchased content.

**DOES ITUNES MATCH COPY YOUR LYRICS AS WELL?** iTunes Match does retain lyrics you've added to your music (to add lyrics in iTunes, select a track, press <Command>-I, and then click the *Lyrics* tab and paste the lyrics in). When you download a track from the cloud to iTunes, the lyrics are there. One exception: In our tests, we lost the lyrics added to purchased tracks when we redownloaded them.

iTunes Match–synced lyrics don't, however, display on iOS devices. You'll see lyrics on your iPhone, iPad, and iPod touch for music synced directly from iTunes, but not for music downloaded from iTunes Match.

**WILL ITUNES MATCH MESS WITH MY TITLE METADATA?** Fortunately, while iTunes Match seems to have problems with lyrics and artwork, all other tags are retained just as you set them. iTunes Match matches music by the actual sound in the files, using digital fingerprinting—it doesn't look at the tags you set, such as name, album, or artist.

**MATCHED VERSUS UPLOADED TRACKS** If iTunes returns a song of yours as Matched, this means it has a high-quality version available in its track catalog, and you won't have to upload your current version. It won't automatically delete your current, low-quality file; instead, to replace it, you'll need to delete the current file from your library and redownload the track.

*Uploaded* tracks are those iTunes Match has not been able to reconcile with its catalog. The service will instead upload such a track, as is, to its server for playback.

**WHERE DOES MATCH STORE MY UPLOADED SONGS?** As part of your \$25 per year subscription, iTunes Match stores uploaded songs on an iCloud server; when you want to play them back or download them, it redownloads that data locally to your device. This storage is not associated with your iCloud account and doesn't count toward its data limit.

**IF I ADD NEW MUSIC TO MY LIBRARY, DO I HAVE TO MANUALLY TELL ITUNES MATCH TO SCAN IT?** Nope. iTunes Match automatically rescans for content every so often, though you can force a refresh by going to *Store > Update iTunes Match* within iTunes. If you run into errors on individual songs, or you have songs tagged as Removed that you'd like to add back in, you can manually tell Match to scan those songs by right-clicking them and clicking *Add to iCloud*.

**DO MY PLAYLISTS SYNC ACROSS DEVICES?** Yes, they do. You can create, edit, or delete a playlist on your Mac, PC, iPhone or iPad, and those changes sync across any iTunes Match-enabled device you own. One caveat: Playlists with ineligible files in them (videos, voice memos, or PDFs, for example) will not sync.

**WILL ITUNES MATCH SONGS DOWNLOAD OVER A CELLULAR CONNECTION ON MY iOS DEVICE?** They will, but only if you allow them to. Navigate to *Settings > iTunes & App Stores* on your device. The *Use Cellular Data* switch enables you to download content over a cellular connection; turn it off if you'd rather download over Wi-Fi.

**WHAT IF I HAVE MORE THAN 25,000 NONPURCHASED TRACKS?** There are a couple tricks for getting around this—chopping up your library, or tagging some of your songs as podcasts or audiobooks—but unfortunately there's no easy way. For that, we'll have to wait and see if Apple expands the number of tracks you can add, or develops a way for users to sign up even if they have more than 25,000 songs.

**IF I SYNC MUSIC TO MY iOS DEVICE VIA ITUNES, WILL IT REPLACE MY MUSIC WITH ITUNES MATCH SONGS?** As we discovered during our testing, it depends. If you've synced your iOS device to a music library that's connected to iTunes Match, iTunes will only supplement your currently synced content, leaving already synced songs alone and adding iCloud download icons for those it hasn't yet added to your device. If you've synced the device with music not in your iTunes Match collection, however, iTunes will replace all of that content.

**I WANT ITUNES MATCH ON MY COMPUTERS, BUT NOT ON MY iOS DEVICES. CAN I STILL SYNC MUSIC NORMALLY?** Absolutely. If you leave the iTunes Match toggle flipped off on your iOS device, it will continue to sync normally with your computer—even if that computer is using iTunes Match.

**CAN I DELETE EVERYTHING OFF MY COMPUTER AND JUST USE MY STORED MATCH COLLECTION FROM iCloud?** Sure. Apple doesn't require you to have a local copy of your files, so you can theoretically match and upload everything to the cloud, and then delete all those files from your computer. We will say, however, that while the iTunes Match servers are most likely pretty ironclad, and you run little risk of losing your data, flying without any backup is never something we recommend. (If you want to save space on your main computer, you should make a copy of your iTunes Media folder and stick it on an external drive, at the very least.)

### Match Maladies

If iTunes Match is having trouble matching your songs, here are a few basic steps to take.

The first thing you can do is update iTunes Match on your Mac or PC by opening iTunes and going to *Store > Update iTunes Match*. This is Apple's go-to all-purpose troubleshooting fix—useful if you see tracks with error listings or mismatched songs.

Alternatively, if you want to attempt to fix a problem with just one song at a time, <Control>-click (right-click) a problem song and select the *Add to iCloud* command.

If you have DRM-protected songs, make sure your computer is authorized for playback from the account that purchased the music. If you purchased all your music yourself, this should not be an issue. If you have songs that other Apple IDs originally purchased, unauthorized protected songs will not upload or match to iCloud. To address this, authorize the computer via the *Store > Authorize this Computer* command; then select *Update iTunes Match*.

If you're still seeing errors, we recommend turning iTunes Match off and on (by going to *Store > Turn Off iTunes Match*). Don't worry—doing this won't wipe out your prior matching. When you reenable iTunes Match, what may have taken hours to do when you first subscribed should now only take a minute or two to restore. One *Macworld* contributor had to use this technique to fix a failure to download songs from iCloud to his Mac.

Below, we've collected some other common iTunes Match problems.

**MY ALBUM ARTWORK IS MISSING** It seems that iTunes Match is a bit buggy regarding artwork. If you've spent a lot of time adding artwork to your music, you may not want to delete any original files in case you permanently lose that artwork. You can also always go to *File > Library > Get Album Artwork* within iTunes on your Mac or PC to grab artwork off iTunes' servers.

**HOW CAN I DELETE DUPLICATES THAT HAVE BEEN MATCHED?** Delete the duplicates from both your library and iCloud. When you press the *Delete* key, check the box that says *Also delete this item from iCloud*.

**WHY WON'T MY SONGS MATCH?** Sometimes iTunes Match will match only one or two songs in an album, even if the entire album is on iTunes, and list the remaining songs as uploaded. This means you cannot access the higher-quality versions of the uploaded songs.

Unfortunately, there's no way to force iCloud to match rather than upload songs; the consensus is that a server error is at fault. That is, it's a problem in the cloud, not on your Mac; all you can do is hope that Apple will eventually address it. (If you still want to try to self-troubleshoot, you can turn iTunes Match off and on.)

**I HAVE DUPLICATE PLAYLISTS** When you create a new playlist, especially if you create it on an iOS device, you might find that the list gets duplicated. This seems especially likely if you have Airplane mode enabled on your iOS device at the time. The duplicates are usually empty, but they still are obviously annoying.

The symptom appears to be linked to iTunes Match. In fact, in some cases, playlist duplications occur shortly

after you turn iTunes Match on, even if you don't create a new playlist. In any case, once the duplications pop up, they're likely to spread to all your devices that have iTunes Match enabled.

The first step in resolving this problem is to get rid of the duplicate playlists. This can be a time-consuming pain to do manually (deleting playlists one by one). To speed things up, you can launch Automator (a utility built into your Mac) and select the *Remove Empty Playlists* action from its Music Library. Even simpler, you can purchase Doug Adams's \$2 TrackSift utility and delete empty playlists with just a click.

Next, to hopefully prevent this from happening again and to bring back any nonduplicate playlists that may have disappeared at some point, select *Store > Update iTunes Match* in iTunes. If this doesn't work, try the same fix noted in the previous section: While holding down the <Shift> or <Option> key, turn off *iTunes Match*, and then turn it back on again. If you do this, Apple recommends that you first disable iTunes Match on all of your iOS devices, and then reenable it on these devices after turning on Match on your Mac.

**HOW DO I GET PODCASTS AND iTUNES U CONTENT TO MATCH?** iTunes Match is technically only for your music. If you really want to store your podcasts, however, change the Genre category from Podcast to a musical category.

**CAN ONE LIBRARY HAVE TWO SEPARATE iTUNES MATCH ACCOUNTS?** Unfortunately, no. Due to what we suspect is a record company restriction, you can only associate your computer with one Apple ID for iTunes Match and past purchases. If you want to change it to another Apple ID, you'll be able to do so—but after you switch, you won't be able to change it back for 90 days.

In theory, this prevents you from logging in to your friend's iTunes Match account on your computer, downloading all his music, and then swapping back to your own. In actuality, it makes it a tad difficult for families who share an iTunes library, but not an Apple ID. To get around this, we'd suggest either making separate user accounts on your computer, each with its own library, or option-clicking iTunes and creating a new library for each member of the family.

**iTUNES SAYS IT HAS MATCHED TRACKS OF MINE THAT IT DOESN'T HAVE IN THE iTUNES STORE—WHAT'S UP WITH THAT?** iTunes Match does offer some matched tracks for artists it doesn't officially sell in its catalog. This may come down to licensing: It's possible that while record companies and certain artists may be OK with users upgrading an already-owned CD collection, they don't want to sell their music digitally.

**CAN I DOWNLOAD LOW-QUALITY VERSIONS OF MATCHED TRACKS TO MY IPHONE?** Not at this time.

**CAN I TELL iTUNES MATCH NOT TO SYNC CERTAIN SONGS?** Yes, but it's a bit complicated.

If you don't want iTunes Match to display certain purchased tracks (say you downloaded a Spice Girls album in your impressionable youth), head to the iTunes Store on your Mac and click the *Purchased* link in the right sidebar. Hover over the tracks in question and click the X button to hide them. You can do this on your iOS device by going to the iTunes app and tapping *Purchased*, and then swiping on a track to hide it. To view hidden tracks, go to the iTunes Store on your Mac, click your email address, and scroll down to select *View Hidden Purchases*.

If you want to avoid syncing songs in your library with iTunes Match, you can tag them as podcasts or audio-books; unfortunately, they'll have to stay like that as long as you have iTunes Match enabled.

Another option is to sync your entire music library with iTunes Match, and then enable Match on a secondary computer (or a second iTunes library). On this secondary computer, locate the songs you want to remove (they'll show up in your library with an iCloud download icon), highlight them, and press the <Delete> key on your keyboard. When you return to your original music library, those downloaded tracks will still exist, but they'll show up with an iCloud status of Removed, and an icon of a cloud with an X through it. iTunes Match will continue to scan new tracks from your library, but Removed tracks will stay out of the cloud unless you manually tell them to re-sync with Match.

**HOW CAN I HIDE SONGS NOT ON MY DEVICE?** Both iTunes and the Music app have settings that allow you to hide songs not on your device. On your Mac, open iTunes and go to *View > Hide Music in the Cloud*. On your iOS device, go to *Settings > Music* and turn off the Show All Music toggle.

**I MOVED TO ANOTHER COUNTRY—HOW CAN I MERGE MY iTUNES PURCHASES?** Unfortunately, you can't move an account to another country or merge two Apple IDs. You can, however, download all purchased content from your previous country, and then create an iTunes Match account for the new Apple ID's country, and upload or match all that music.

Note that if you change stores on a computer or iOS device to redownload content, for the next 90 days Apple won't let you change the account (and in your case, the store) that the device is linked to.

**THE 5099 DOWNLOAD ERROR** Occasionally, clicking Download icons can lead to 5099 error messages; the message suggests you check to see if you have an active network connection. Turning iTunes Match off and back on again seems to do the trick.

### Match Tips and Tricks

Want to make iTunes Match work well for you? Check out these suggestions.

**CHECK YOUR iCloud STATUS** Want to know what songs of yours are matched, uploaded, ineligible, or have errors? In iTunes, click the *Songs* tab to ensure you're viewing your music in Song view, and then select *View > View Options*. From here, make sure that both the *iCloud Download* and *iCloud Status* items are selected.





**ADD ICLOUD STATUS** Check the *iCloud Download* and *iCloud Status* options to organize your iTunes Match music.

The Download column displays icons indicating the current status of your songs. These icons generally appear only when an action is pending or something has gone awry—such as a song that is ineligible to upload (because it’s in an incompatible format) or an error in the uploading process. That’s why, if all has gone well with your initial iTunes Match setup, you should see few if any icons in this column.

The iCloud Status column lists text describing the status of your songs. If there’s an icon in the Download column for a particular song, the text matches the meaning of the icon. However, this column also tells you the status of songs that have no download icon. In particular, it lists whether each song is purchased (you acquired the song from the iTunes Store), Matched (you acquired the song on your own, but iCloud has a matched and usually higher-quality version), or uploaded (you acquired the song on your own and iTunes didn’t find a match, so it uploaded your copy to iCloud).

The major value of these columns is as a diagnostic aid. They give an indication of why a song is not available in iCloud, helping you figure out what you may be able to do to fix it.

**GET THE HIGHER-QUALITY VERSION OF YOUR MATCHED SONGS** Have some poor-quality ripped tracks that the service has matched? You can delete those songs that iTunes lists as Matched and redownload them to receive a higher-quality version from iCloud. To get the improved version, click the *Download* icon in the iCloud Download column.