# DROPBOX

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# Introduction

Since 2008, Dropbox has enabled millions of people to sync and share files conveniently. There are several reasons for the service's well-deserved popularity: it's free (for up to 2 GB of data); it works on virtually every modern computer, smartphone, and tablet; a vast number of other apps and services rely on it for storage and syncing; and it works almost transparently—it's so fast and reliable that a user can easily forget it's even there.

For basic file syncing, Dropbox is incredibly easy to use. Download the app, install it, and log in—a process that might take a grand total of two minutes. Pop some files in your new Dropbox folder. Repeat with your other devices and watch your files appear on each. Done!

But behind this simple façade is a great deal of power and complexity. Once you start digging into Dropbox's more-advanced features—sharing files and folders, publishing photos, restoring old and deleted files, interacting with Dropbox-enabled apps, and so on—much of Dropbox's self-explanatory simplicity disappears.

I wrote this book to help shed light on those powerful but less-thanobvious capabilities. I'm a pretty serious computer geek, and I figure that if Dropbox does something that makes me scratch my head, it must be even more perplexing to people who don't wear propeller beanies and pocket protectors. Not that I do. At least in public.

In this book, I skip lightly over many of the basics. I won't tell you how to check system requirements, download and run the installer, or move files into and out of folders. You probably know how to do that stuff already (and if you don't, the Dropbox Web site has lovely tutorials that walk you through the whole process). On the other hand, I also avoid the heavy-duty technical minutiae. This isn't a book for developers wanting to learn the ins and outs of the Dropbox API, or a guide to hacking the hidden database files Dropbox uses for storing user information. But I think the vast majority of people who are neither absolute beginners nor technical wizards will find something of value in these virtual pages.

Even so, there are many topics about which I could have said a great deal more, and I chose to err on the side of brevity. For example, I've covered the Free and Pro versions of Dropbox, which are the same except for the amount of storage available and the fact that paid Pro subscriptions have an optional Packrat service

# Why Dropbox Is Boring (and That's Good)

In a way, it feels odd to write a book about Dropbox at all, because most of what Dropbox does is move data around, silently and automatically, behind the scenes. Although you'll interact somewhat with the Dropbox app and the Dropbox Web site, Dropbox is primarily infrastructure. Plumbing, if you will. Unless you're a plumber—or something is broken and you need one—plumbing is pretty boring. For the most part, it hides behind the walls and under the floors, doing its thing. Dropbox is the same way. Ordinarily, you should barely even notice it.

You know what's *not* boring and requires lots of immediate attention? A broken pipe! Or two apps that have no easy way to share or sync data, forcing you to fiddle with them endlessly to get the results you need. When it comes to infrastructure, trust me: boring is good!

So, when you're reading the parts of this book that aren't terribly exciting—the parts that explain how Dropbox's plumbing works, so to speak—remember that what you're learning has the potential to be terrifically important—you're learning how the underpinnings of Dropbox function, in the event that something goes wrong or acts in an unexpected manner.

# Why Dropbox Is Cool

Now that I've told you why Dropbox is boring, let me show you a different perspective: why it's cool! Just as indoor plumbing makes useful tools like sinks, toilets, and washing machines possible, Dropbox makes a whole range of activities trivially simple that would otherwise be either complex or nearly impossible.

With Dropbox, you can send someone a massive file that would choke any email server. You can collaborate on a document with a colleague across the country as easily as someone in the next office. You can have all your important documents available in your pocket, even though they won't physically fit on your smartphone. You can set up a new computer without worrying about copying old data to it. You can recover lost data with a few clicks. And you can download new apps that will seamlessly sync their data across all

Dropbox is a wonderful tool for managing your own documents and data, sharing information with friends, and collaborating with colleagues. This book helps you put Dropbox to work in the most effective ways while avoiding common frustrations and pitfalls.

your devices. I think that's all mighty cool!

Note: Much of what I've said about Dropbox is true of other services as well, and my spider sense tells me someone out there is about to ask why I singled out this particular service to write about. Among the many other services that do things similar to Dropbox are Bitcasa, Box, Google Drive, Microsoft SkyDrive, SpiderOak, and SugarSync. I've tried all of these and more, and some of them are quite nice. But what makes Dropbox my favorite is its near-universality. If an app or Web site connects to just one cloud storage service, odds are incredibly good that Dropbox will be that one service.

# **Dropbox Quick Start**

The way you approach this book may depend on your situation, including your prior experience with Dropbox. Here are my suggestions for different types of readers.

## **Dropbox Beginner**

If you've never used Dropbox, I strongly suggest reading this book linearly, because earlier chapters provide important foundational information and later chapters build on it. Start with Sync Your Files and keep going. (But, if your reason for starting to use Dropbox is that someone wants to share a folder with you, see "Someone Invited to a Shared Folder," below.)

## **Some Dropbox Experience**

People who already have Dropbox installed and have used it for basic file syncing can skim most of the Sync Your Files chapter, but note that it does cover some non-obvious configuration topics that you may find interesting. You'll probably find more valuable material starting with Share Files and Folders.

# **Dropbox Enthusiast**

If you already feel completely comfortable working with Dropbox, you'll probably want to focus on the more sophisticated uses covered in Work with Apps, Manage Your Account, and Do Cool Things with Dropbox.

## Someone Invited to a Shared Folder

If you're just starting to use Dropbox because someone else invited you to join a shared folder, you may enjoy reading the entire book start to finish, but allow me to highlight some important concepts:

First, although you must create a Dropbox account (which includes choosing a password), you don't necessarily have to install the Dropbox software on your computer or mobile device. You can do everything you need to do within a Web browser, if that's your preference. However, installing the software—especially the desktop software for a Mac or PC—will make it far easier for you to work with files in a shared folder. So, I suggest reading all of the next chapter (Sync Your Files), especially Set Up Dropbox on a Mac or PC, for guidance before doing anything else.

Second, you may want to read the Share Files and Folders chapter—or at least the topics Invite Someone to a Dropbox Folder and Work with Shared Folders—to understand more about how shared folders work from the perspective of the folders' owners. In any case, be on the lookout for a few interspersed tips starting with the words "Sharing Invitees," which call out information that may be particularly useful to you.

# Sync Your Files

The primary purpose of Dropbox is to keep a set of files in sync across all your devices, and to make them accessible on any other computer, via a Web browser. Anything you put in your Dropbox on one device is synced to the Dropbox servers in the cloud, and from there, synced back to the Dropbox on each of your other devices. The effect is that whatever you put in your Dropbox on one device automatically appears (and stays up to date as you change it) on all your devices.

**Note:** When I write that that Dropbox is in "the cloud," I mean that Dropbox has built an Internet service that uses many servers in a variety of locations to support millions of simultaneous users around the world, each of whom can set up and manage Dropbox on their own.

Later, in Share Files and Folders, I talk about sharing items in your Dropbox with other people. In this chapter, my focus is on *you*: getting the Dropbox software up and running on your various devices, finding your way around, and—crucially—making sure your important files and folders begin syncing.

Dropbox uses a number of clever tricks to make cross-device syncing occur with a speed that's sometimes astonishing:

- **LAN sync:** If another device on your local network is logged in to your Dropbox account, the Dropbox app copies any available files directly from that device rather than downloading them from the cloud (which would take much longer). You can turn this feature off if need be; see Adjust Dropbox Preferences, ahead.
- **Deduplication:** Dropbox checks to see if any file you're uploading is identical to a file already stored on the Dropbox servers. This need not be a file in your account; it can be any file, uploaded by anyone, anywhere in the world! If so, Dropbox doesn't take the time to upload another whole copy; it simply puts in a pointer to that existing file behind the scenes. The effect is that in some cases, even gigantic files seem to sync to the cloud almost instantly. Dropbox hangs onto that file as long as it's in at least one person's Dropbox.

• **Delta encoding:** When a file changes on one of your devices, Dropbox doesn't upload the entire file from scratch. Instead, it uploads only the portion of the file that's different. This process is known by various names, including delta encoding, data differencing, and block-level updating.

**Note:** Dropbox's behavior on mobile devices such as smartphones and tablets is a bit different. Because mobile devices tend to have less storage space than computers (and are often subject to bandwidth restrictions and data transfer caps when used over a cellular connection), the mobile Dropbox apps don't sync all files automatically, just those you explicitly request. I say more about this in Use Dropbox on a Mobile Device, later in this chapter.

# Set Up Dropbox on a Mac or PC

First things first. If you *don't* have Dropbox on your computer yet, now is the time to <u>download</u> and install it. If you *do* have Dropbox already...you might still want to download a fresh copy. That's because even though Dropbox has a built-in automatic update mechanism, it didn't work very well until relatively recently. You could be running a version of Dropbox that's a year old without realizing it! But you'll need a recent version to follow the steps in this book.

**Sharing Invitees:** As I mentioned in the Introduction, you can use Dropbox without installing the software on your computer, but the experience is far more convenient and pleasant if you do!

To check which version you have right now, hover your pointer over the Dropbox icon in your menu bar or system tray. If the version that appears there is lower than 2.0 (2.0.5 is the most recent public release as I write this in April 2013), download and install the latest version.

**Tip:** If you visit <u>dropbox.com</u> without being a subscriber, you'll see a button to download Dropbox. But once you sign in, the Dropbox home page shows your files, not a download link. If you need to re-download the desktop app for any reason, choose Your Name > Install or visit <a href="https://www.dropbox.com/install">https://www.dropbox.com/install</a>.

When you install Dropbox on a given Mac or PC, you're prompted to enter your credentials (email address and password) for an existing Dropbox account or set up a new account, if you don't already have one. Once you've done that, the app creates your Dropbox folder if necessary and begins syncing the folder's contents with the cloud. For the most part, that's all you need to do in terms of setup. However, be aware of the following:

- The Dropbox installer asks whether you want to do a Typical or an Advanced setup, the latter offering to let you change your Dropbox location and which folders will sync during setup. Since both of these things can be changed easily later, I suggest sticking with the simpler Typical setup.
- If you boot your computer from a different disk—a typical case is a Mac user who has created a bootable duplicate of her startup disk on an external drive, and has booted temporarily from that disk—Dropbox runs its setup assistant as though you had just installed the app for the first time. This is a security measure, but it doesn't mean Dropbox has deleted all its local storage.
  - Select "I already have a Dropbox account" and enter your existing credentials. If the setup assistant asks whether you want to merge with an existing Dropbox folder, you do—click Merge. Dropbox will then recheck all your files to make sure they're properly in sync, a procedure that is much quicker than downloading everything from scratch.
- Although Dropbox is useful even if you install it on only one device (since it stores a copy of your files in the cloud, enabling you to access them when you're away from your main computer and share them with others), it's most powerful when installed on all your devices—Macs, PCs, smartphones, and tablets. Be sure to run through the installation and setup steps on every device you use.

#### **Choosing a Location for Your Dropbox**

By default, your Dropbox folder lives at the top level of your home folder—for example, /Users/your-username/Dropbox in Mac OS X or C:\Users\your-username\Dropbox in Windows. (A shortcut to your Dropbox also appears under Favorites in the sidebar of Finder windows on a Mac, and in the sidebar of Windows Explorer windows.) You can change this location if you prefer, but there may be undesirable consequences to doing so, at least on a Mac. (I'm unaware of any such problems at the moment on PCs running Windows or Linux, but don't take that as a guarantee that there aren't any.)

Starting with Mac OS X 10.7 Lion, Macs employ a security technique called sandboxing to prevent applications from accessing each other's data in potentially unsafe ways. Not all Mac apps use sandboxing, but many do, including all apps available in the Mac App Store. If one of these apps wants to access data in your Dropbox, Apple's sandboxing rules dictate that the Dropbox folder must be stored in its default location. Moving it elsewhere would prevent sandboxed apps from reading and writing files in your Dropbox. So, if you use a Mac and have—or may in the future have—any sandboxed apps that want to access your Dropbox, your best bet is to keep it at the top level of your home folder.

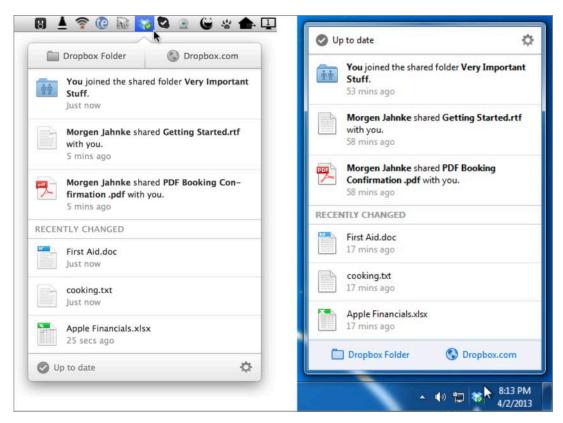
If you'd rather access your Dropbox from another location, the best way to do so is to create an alias (on a Mac) or a shortcut (on Windows or Linux). If you have a compelling need to change your Dropbox location and aren't using a Mac (or, more specifically, any sandboxed Mac apps that access Dropbox), you can choose a different location for your Dropbox—either during installation, or after the fact (see Adjust Dropbox Preferences, ahead).

Do not manually move your Dropbox folder (e.g., in the Finder or Windows Explorer)! Always let the Dropbox app move it for you.

**Tip:** You can (and should) work on files directly in your Dropbox folder just as you would if they were in any other folder on your computer. You need not move or copy files to another place before you open them, and in fact you should avoid doing so—especially when sharing a folder in your Dropbox with other people—because files moved outside your Dropbox no longer sync to the cloud or to your other devices.

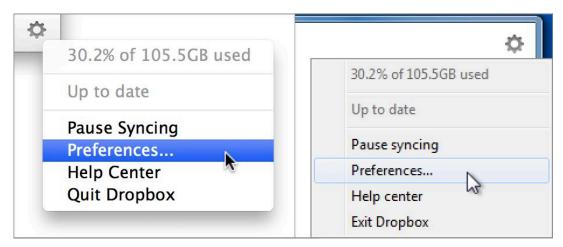
The Dropbox app normally runs quietly in the background, syncing new and modified files as necessary. However, you can interact with the app in a number of ways, including modifying preferences, monitoring sync status, and pausing or resuming syncing.

When Dropbox is running on your Mac or PC, you'll see a small Dropbox icon on your menu bar (Mac) or in your system tray (Windows or Linux). Click this to display the popover Dropbox menu with a quick overview of what Dropbox is up to, which includes the three files most recently synced to the cloud and the three items most recently shared with you (if any).



The Dropbox menu on a Mac (left) and Windows (right).

In this view, click the gear icon in the corner to display a menu with additional commands, and then choose Preferences to open the Preferences window. (From now on, I'll say something like "From the Dropbox menu, open the Preferences window" rather than enumerate all the steps to get there.) Depending on several variables, including whether you've paid for extra storage, you may see more or fewer options on this menu than shown here.



The Dropbox gear menu on a Mac (left) and Windows (right)

**Tip:** On a Mac with Dropbox version 2.0.5 or higher installed, if you hold down the Option key while clicking the Dropbox icon in your menu bar, you can display the old (pre-version 2.0) menu, which is similar to what you see now when clicking the gear menu. So, if you preferred the old behavior (fewer clicks to pause or display preferences, for example), you can have it.

**Tip:** In addition to the Dropbox menu on the main menu bar and the right-click/Control-click contextual menu, Mac users can add a Dropbox menu to the toolbar of their Finder windows for quick access to Dropbox commands. To do this, open any Finder window, choose View > Customize Toolbar, and drag the Dropbox icon to any location on your toolbar. Then click Done.

## **Adjust Dropbox Preferences**

Most of the items in Dropbox's Preferences window are selfexplanatory, and later in the book I return to a handful of preferences that require further discussion. For now, I want to call your attention to a few of particular interest:

• **Enable LAN Sync:** As I mentioned earlier in this chapter, this feature, enabled by default, speeds up syncing by letting Dropbox copy files from other computers on your LAN. I can't think of a good reason to disable it, but if you want to force Dropbox to copy files directly from the cloud, click General at the top of the Preferences window and deselect this checkbox.

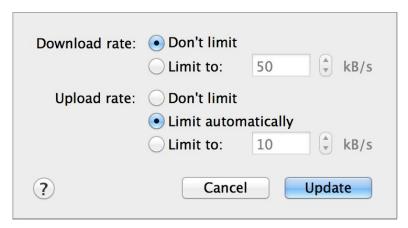


For maximum syncing speed, make sure Enable LAN Sync is selected.

• **Bandwidth:** If need be, you can adjust the way Dropbox uses your network for uploading and downloading files. To do this on a Mac, click Network followed by the Change Settings button next to "Bandwidth"; on a PC, you need only click Bandwidth. The download rate represents how fast Dropbox copies files from the cloud to your computer. Ordinarily you'll want this set to Don't Limit for maximum possible speed, but if you find that Dropbox is overwhelming your Internet connection and slowing down other crucial downloads, you can select Limit To and enter a number (such as the default, 50 kB/s) to slow it down.

The upload rate, on the other hand, is by default set to Limit Automatically, which prevents Dropbox from using more than 75 percent of your available bandwidth for copying files *to* the cloud. For higher Dropbox performance (but with a significant risk of slowing down other network activities, since upstream bandwidth is often much smaller than downstream bandwidth),

you can select Don't Limit. Conversely, to reduce the upload rate to even less than 75 percent of your capacity, select Limit To and enter a number.



These settings let you trade off Dropbox performance and overall Internet upload/download performance. This shows the controls as they appear on a Mac; Windows and Linux differ slightly.

• **Dropbox Location:** To change the location of your Dropbox folder (see the sidebar Choosing a Location for Your Dropbox, previously), click Advanced and choose Other from the Dropbox Location pop-up menu. Navigate to the folder inside which you want your Dropbox folder to be stored and click Select. Dropbox moves your Dropbox folder to the new location.



If you want to store your Dropbox somewhere else, choose Other from the Dropbox Location pop-up menu.

**Note:** Although you can change the location of the Dropbox folder, you cannot change the name of your Dropbox folder; it must be called Dropbox or you'll break its connection with the Dropbox service.

• **Selective Sync:** Another of Dropbox's advanced options is choosing which folders will and won't sync to a given Mac or PC. I return to that topic later in this chapter (see Use Selective Sync on a Mac or PC), after the discussion of which items you may want to sync with Dropbox in the first place.

#### **Monitor Dropbox**

You can monitor what Dropbox is doing in any of several ways:

 The Dropbox icon in your menu bar or system tray has a white checkmark on a green background if all files are in sync, and circular white arrows on a blue background when files are being copied.





The Dropbox icon as it appears when files are in sync (left) and when they're being copied (right).

• Similarly, each file and folder within your Dropbox has either a green-backed checkmark to show that it's in sync or blue-backed arrows to show that it's being copied or queued to be copied soon. (On a Mac, these icons appear only in list and column views, not in icon view.)



Files and folders within your Dropbox have badges to indicate their status—in sync (left) or copying (right).

• When you click the Dropbox icon in your menu bar or system tray, the Dropbox menu shows you the current copying status (this status also appears, along with your current total Dropbox usage, on the pop-up menu when you click the gear icon) and lists the three most recently copied files as well as the three most recent links or folders shared with you (if any).

#### Pause or Resume Syncing

Even if you've limited Dropbox's upload or download rate as described a couple of pages ago, you may encounter situations in which you want to be sure your computer has 100 percent of its bandwidth available—for example, when doing videoconferencing, watching streaming video, or transferring large files. To pause all

Dropbox syncing without quitting the app, click the gear menu and choose Pause Syncing from the pop-up menu. To resume, choose Resume Syncing from the same menu.



On a Mac (but not Windows), a pause badge appears on the Dropbox icon when syncing is paused.

**Note:** Don't forget to turn syncing back on! More than a few times I've found unexpectedly that files were out of sync because I'd paused syncing and failed to re-enable it. I'd love to see Dropbox give Pause Syncing submenus for different amounts of time; the Internet backup application CrashPlan does this, and it's a great way to pause syncing without worrying that you might forget to resume later. (My publisher once made that mistake and caused problems by working on files that weren't in sync.)

# **Decide What to Put in Your Dropbox**

I've noticed that most Dropbox users tend to fall into one of two camps: cautious users who put only a select few files and folders into Dropbox (thus wasting a great deal of potential) and enthusiasts who try to put everything there but the kitchen sink (which can lead to a different set of problems). What should be in, and what should be out?

Although there's no single right answer for everyone, here are some factors to consider:

- Availability: If there are files and folders you're likely to need on multiple devices, your Dropbox is probably a great place for them. Putting items in Dropbox can eliminate the need to use other tools to sync files across computers, carry around a USB thumb drive, or rely on a file server to access documents on multiple devices. In fact, given enough storage space in your Dropbox, I suggest using it as a default storage location—except when one of the next few conditions applies.
- Storage quota: Except with Dropbox for Teams (which I don't cover in this book), every Dropbox user has a data storage limit. That may be as little as 2 GB for users with free accounts who haven't added any bonus space (see Earn Free Bonus Space or over 500 GB for Pro users, but sooner or later, you'll hit your limit. Only you can decide whether more storage space is worth the price (see Upgrade to Dropbox Pro), but however much space you have available, it's wise to leave a bit of breathing room. If you're close to reaching your quota, consider moving some of those files elsewhere or upgrading to get more space.
- Sync complications: Even though Dropbox intelligently syncs only the portions of files that have changed, some apps store data in such a way that using Dropbox can often lead to version conflicts (see Deal with Version Conflicts, just ahead), excessively long upload and download times, and other undesirable behavior. (These problems arise most frequently when more than one computer tries to access the same data at the same time.) For example, virtualization tools such as VMware Fusion, Parallels Desktop, and VirtualBox let you run one operating system inside another—but their massive and frequently changing files aren't a good match for Dropbox, even if you have enough storage space. The same goes for most database apps, iTunes, iPhoto, audio and video editing tools,

and document management apps such as DEVONthink on a Mac (although the latter can use Dropbox for syncing in a different way—see Learn about Third-Party Apps).

If you *must* store data for these types of apps in your Dropbox, be careful to have their apps open on only one device at a time, and allow time for the data to sync before opening the same app on another device.

• **Security:** Although items in your Dropbox are encrypted, they're not necessarily safe from all prying eyes (see <u>Understand Dropbox Security</u>). You might want to think twice about putting extremely sensitive files in your Dropbox unless you first encrypt them yourself.

#### **Deleted Files and Storage Space**

When you delete a file from Dropbox on one of your devices (for example, by dragging it to the Trash or Recycle Bin), or delete it on the Dropbox Web site, Dropbox also removes the file from all your other devices. But your computer keeps a copy of deleted Dropbox files in a hidden cache for up to 3 days, which means you won't *immediately* recover that used space on your disk.

Meanwhile, the Dropbox Web site lets you recover deleted files (see Undelete Files and Folders) for up to 30 days (or, with The Packrat Option, indefinitely). That means deleting a file from your local Dropbox essentially hides it in the cloud until the 30 days are up or you manually delete the file permanently (as I discuss later, in Permanently Delete Files).

When you delete a file from Dropbox, the file no longer counts against your Dropbox quota, even though Dropbox retains the file for 30 days. So, if you have the free 2 GB plan and delete a 1 GB file, you can sync another 1 GB of data but still recover that big deleted file for the next month—you're effectively using 3 GB of storage temporarily for the price of 2 GB (that is, zero).

# Use Selective Sync on a Mac or PC

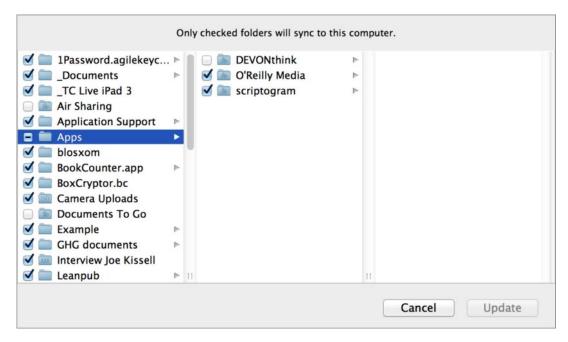
Ordinarily, every file and folder you put in your Dropbox syncs automatically across all your devices. The certainty that all your files are available everywhere is, of course, one of Dropbox's big advantages. However, in some situations you may not want certain items on every device. For example:

- If you have a MacBook Air or other notebook computer with a low-capacity SSD, every gigabyte counts, and you may not be able to afford the space for all the files in your Dropbox.
- If you've joined a shared folder and the folder's owner uses it for files that you need only on some devices, you may want to prevent that folder from syncing where it's not needed.
- If you install Dropbox on a server or other computer that may be accessible by other users, you may want to prevent personal files and folders from syncing to it.
- If you use apps, such as DEVONthink on a Mac, that sync files by way of the Apps subfolder (see Learn about Third-Party Apps), you may end up with two copies of all your files—not only wasting space, but bogging down the computer with unnecessary work and bandwidth usage.

**Note:** Selective Sync is available only in the desktop (Mac, Windows, and Linux) versions of Dropbox; it's unnecessary in the mobile versions because they sync manually rather than automatically.

To use Selective Sync, follow these steps:

- 1. From the Dropbox menu, open the Preferences window.
- 2. Click Advanced.
- 3. On a Mac, click the Change Settings button next to "Selective Sync"; or, on a PC, click Selective Sync.
- 4. Deselect any folders you don't want to sync to this computer. You're not restricted to selecting or deselecting only top-level folders in your Dropbox; you can, for example, navigate to your Apps folder and deselect only a particular subfolder if you like. However, to do this on a PC, you must first click Switch to Advanced View.



Deselect any folders or subfolders you don't want Dropbox to sync to this computer.

#### 5. Click Update.

Depending on the size of the folder(s) you deselect, it may take Dropbox a while to delete those items from your computer, but once they're deleted, you'll no longer receive new versions or updates from the cloud.

## **Deal with Version Conflicts**

Once in a while, you may encounter a situation in which a file changes in two places between syncs, with the result that Dropbox can't tell which version is the most current. This happens most often when files change while a device is offline, or while you've paused syncing (see Pause or Resume Syncing, earlier in this chapter), but it can also be caused by malfunctioning or poorly designed apps, or in situations where you have the same document open for editing on multiple devices simultaneously.

In any case, the result is that somewhere in your Dropbox folder, you may run across a file listing like this:

```
My Document.docx
My Document (iMac's conflicted copy 2013-03-01).docx
```

What this means is that Dropbox encountered two copies of the same file that had changed since the last time it was synced, and rather than risk copying the wrong one, it synced *both* copies to both locations, marking one of them with the name of the device it came from (or, if it's a shared document, the person who shared it) and the date it was modified.

Although it's admirable that Dropbox keeps both copies to avoid any potential data loss, this process is problematic for two reasons:

- It's silent: Dropbox doesn't alert you to the conflict in any way; you learn about it only if you happen to notice that extra file in the directory listing. And you may not notice it if you access a file from an app's Open Recent menu, using an alias or shortcut, or in some other indirect way. Dropbox seems to assume you'll look manually in your Dropbox (and in every subfolder) when opening files, but I've gone weeks without noticing version conflicts because I often open files in other ways.
- **Resolving conflicts is manual:** If I see that I have two versions of a file, it may not be obvious which one was the more recent—and in fact, they may each have different changes that I want to keep. If the files were created in a word processor or text editor with a document comparison (or "diff") mechanism, you may be able to compare the two versions in an automated way and merge any changes, but if not, you may be stuck opening the two files side-by-side and manually looking for differences.

Although there's no foolproof way to prevent version conflicts, you can minimize their occurrence by making sure that any given file in your Dropbox is open on only one device at a time, and that if you must pause syncing for any reason, you resume it as soon as possible.

# **Use the Dropbox Web Site**

Most of your day-to-day interactions with Dropbox will take place in the Dropbox folder itself or in the app installed on your devices. However, a few activities in Dropbox require a trip to <a href="https://dropbox.com">dropbox.com</a> in a Web browser:

• **Sharing files and folders:** Although you can initiate sharing of an item from any device with a Dropbox app, doing so on a computer opens a Web page where you can copy the link to a file or send it via email, Facebook, or Twitter; or, for a folder, invite members. See Share Files and Folders for more details.

- Working with older and deleted files: If you want to recover an older version of a file, undelete a file, or permanently delete a file, you'll need to visit <u>dropbox.com</u>. See Recover Older and Deleted Files.
- **Managing your account:** If you want to change your password, upgrade to a higher storage quota, or change other account-wide options, you must go to the Dropbox Web site. To learn more, flip ahead to Manage Your Account.
- **Creating photo albums:** The new photo album feature, still in limited public beta testing as I write this, lets you group pictures together for more convenient sharing and display. I say more about this in Create a Photo Album.

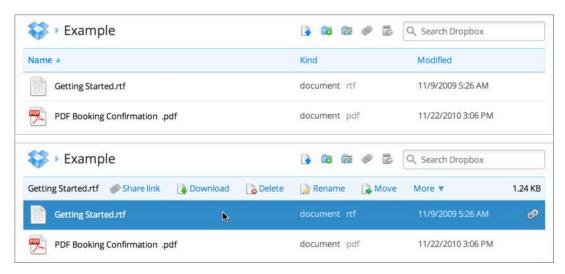
**Tip:** As a shortcut to visit the Dropbox Web site quickly, click the Dropbox icon in your menu bar or system tray and then click Dropbox.com.

In addition to these tasks that can be done *only* on the Dropbox Web site, there are many activities you can optionally do there, if you happen to need access to your Dropbox from a device without the Dropbox app installed (or if, for some reason, you're unable or unwilling to use the Dropbox app):

- Preview documents: Another new feature still available only
  to a limited audience, document preview lets you view common
  file types (such as plain text, Microsoft Word and PowerPoint,
  and PDF) from within your Web browser. (To request early
  access to this feature, visit <a href="https://www.dropbox.com/previews/features">https://www.dropbox.com/previews/features</a> and, if you're not already logged in, enter your
  credentials.)
- **Upload files:** You can click the Upload button to upload files—even multiple files at once—to your Dropbox.
- **Create a folder:** Click the New Folder icon to create a new folder.
- **Search:** Use the search field to find documents by title (not by contents).

For now, I want to mention one thing about the site that may be initially confusing. If you click a document's icon or its name, you'll either display a preview of the document or download it (depending on the document type and your settings). However, if you want to

do other things with a document (share it, delete it, look at previous versions, and so on), you must first *select* it. To do this, click anywhere in the document's row *except* the name or the title—for example, click the white space just to the right of the document's name. When you do this, additional controls appear at the top of the page (such as Share Link, Download, and Delete—the exact options vary depending on the context), replacing the column headers (such as Name, Kind, and Modified).



With nothing selected (top), you see column headers. But click where shown to select a file (bottom) and those headers are replaced with a series of controls.

# **Use Dropbox on a Mobile Device**

Dropbox offers free <u>mobile apps</u> for iOS, Android (including Kindle Fire), and BlackBerry devices. Unofficial apps can be downloaded for <u>Symbian</u>, <u>Windows Phone 7</u>, <u>Windows Phone 8</u>, and <u>MeeGo</u>.

The features and interfaces of these apps vary by platform, and are largely self-explanatory—so I don't go into complete detail here. However, in general, the mobile versions of Dropbox offer fewer capabilities than versions designed for Mac, Windows, and Linux computers. In particular, be aware of the following:

• **Syncing:** Mobile devices don't automatically sync all the files in your Dropbox, due to limited storage space, cellular bandwidth restrictions, and monthly data transfer limits. Instead, the mobile versions of Dropbox list all your files, download only those you explicitly tap, and maintain synced copies (for offline viewing) of only those you mark as a favorite by tapping the star icon.

- **Viewing files:** You can view many common file types (such as PDF, JPEG, and Microsoft Word) within a mobile Dropbox app, although the exact list of supported file types varies by platform.
- **Uploading files:** Dropbox running on a mobile device usually lets you automatically upload photos and videos taken with that device to your Dropbox. In some cases you can upload other files, too. For example, in iOS, if another app has an Open In command, you can use that to send a file to the Dropbox app, which can in turn upload it so that it syncs across your other devices.
- **Sharing:** Just as you can create links to individual files in the desktop and Web versions of Dropbox (see Share a Link), you can share links in the mobile Dropbox apps to share files via email, Facebook, Twitter, and other channels. You cannot, however, share an entire folder (or modify options for an existing shared folder) in a mobile Dropbox app.
- **Editing:** Some mobile versions of Dropbox enable you to edit plain-text files; some don't. (For example, you can on Android, but not on iOS.) However, third-party mobile apps with Dropbox support often include considerably broader editing capabilities.

**Note:** If you're looking for a mobile app that offers more than the stand-alone Dropbox app—for example, editing rich-text files, renaming files, and syncing files with other cloud services—you can choose from among a great many third-party tools. See Learn about Third-Party Apps.

# **Share Files and Folders**

Whereas syncing, which I covered in the previous chapter, lets you make your own files and folders available across the other devices you use personally, sharing lets you selectively give other people access to items in your Dropbox. Sharing in Dropbox takes two different forms, and which one you use on a given occasion depends on your needs:

- **Sharing links:** When you share a link to a file or folder (see "Share a Link," just below), the people who receive the link can download the shared items (or, if they're Dropbox users, add them to their own Dropbox folders). Once a shared item is downloaded, recipients can do anything with it they like, but they can't modify or delete the copy in your Dropbox.
- Inviting users to a folder: Whereas sharing links is one-way and read-only, you can instead opt for a collaborative approach. By inviting other people to a folder (see Invite Someone to a Dropbox Folder), you give them read-write access to anything in it. Folders shared in this way are replicated in each user's Dropbox and kept in sync, just as other folders are.

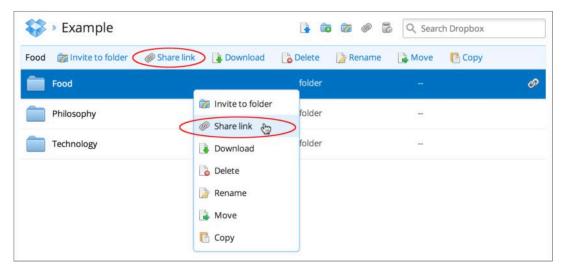
**Note:** Yet another type of sharing is available for photos. I discuss that later, in Work with Photos and Videos.

## **Share a Link**

To send someone else a link to a file or folder in your Dropbox, you'll first need to tell Dropbox what to share, and then decide how you want to share it.

#### To select an item to share on the Dropbox Web site:

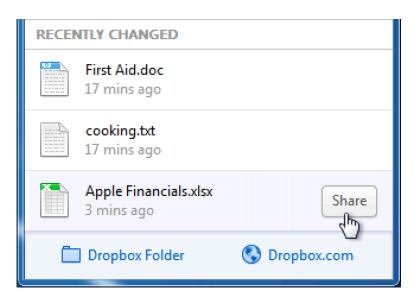
- 1. Log in to your account at <u>dropbox.com</u>.
- 2. Navigate to the folder that *contains* the file or folder you want to share (that is, don't *open* the folder you want to share).
- 3. Either select the item and click Share Link, or right-click it and choose Share Link from the contextual menu.



Select a file or folder and then click Share Link in one of these places.

# Or, to select an item to share on a computer with the Dropbox app installed, try one of these techniques:

• If the file you want to share happens to be one of the last three files synced to the cloud, go to the Dropbox menu (on your menu bar or in the system tray) and hover your pointer over the file. Then click the Share button that appears.



Click this button as a shortcut to share one of the last three files synced to Dropbox.

 On a Mac with the optional Dropbox toolbar menu enabled, select an item inside the Dropbox folder and choose Share Link from the pop-up Dropbox menu in the window's toolbar, or right-click (Control-click) the folder and choose Share Link from Dropbox's contextual menu.

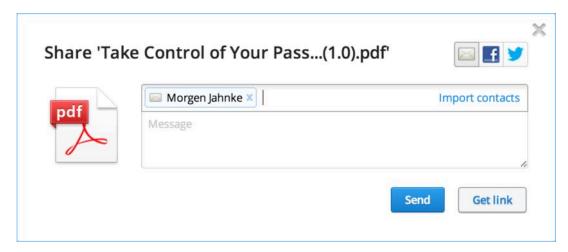


You can use this pop-up menu to share a link or folder.

• On a Windows or Linux PC, right-click an item inside the Dropbox folder and choose Dropbox > Share Link from the contextual menu.

Once you've selected an item to share, do one (or more) of the following on the page that appears on the Dropbox Web site:

- **Copy the URL:** To copy the URL for the shared item to your Clipboard, click Get Link.
- **Email a Link:** To email a link to the shared item, type the email address(es) of the people you want to invite, enter an optional message, and click Send.
- **Share on Facebook:** To share a link on Facebook, click the Facebook icon, type a message, and click Share on Facebook.
- **Share on Twitter:** To share a link on Twitter, click the Twitter icon, optionally edit the pre-filled tweet, and click Tweet.



Fill in the fields to email a link, or click the Facebook or Twitter icon for other sharing options.

When one of your recipients follows a link to a shared item (regardless of how it was sent), they're taken to a Web page:

• When the shared item is a file, the page previews the file's contents (if it's in a compatible format) or displays an icon for

the file. Either way, users can click Download > Direct Download to download the file or choose Download > Add to My Dropbox to copy the item to the top level of their own Dropbox. (People who don't already have Dropbox accounts can create one on the spot.)

• When the shared item is a folder, the page lists the folder's contents. Users can view or download individual items; they can also click Download > Download as .zip to download an archive of all the items or choose Download > Add to My Dropbox to copy the item to the top level of their own Dropbox.

**Sharing Invitees:** When someone shares files or folders in this way, recipients can view and download them on a Web page without necessarily having Dropbox accounts; the sharing is oneway and read-only, so anyone with the necessary URL can retrieve the files. However, when someone invites you to join a shared folder (covered shortly), that means you can make changes to things in that folder, and doing so requires you to be logged in to your own Dropbox account.

#### **Three Kinds of Dropbox Links**

Depending on the situation, you (and the people with whom you share links) may want any of three different things to happen when a link is clicked:

- ◆ Info/List: In the default case, when you share a link to an item in your Dropbox, the link looks something like https://www.dropbox.com/s/0gb4pdwjkn1q08o/file.txt, and if someone follows that link, what appears is a Web page where the visitor can view information about file.txt and click a button to download it.
- ◆ Preview: If the linked file is a type that can be displayed in a browser window (natively or by way of a browser plug-in) such as plain text, HTML, or PDF—you can modify the URL to force it to do so. To do this, replace www with dl, like so: https://dl.dropbox.com/s/0gb4pdwjkn1q08o/file.txt
- → Download: If you want clicking the link to result in the file or folder being downloaded immediately, without displaying in a browser first, modify the URL as for a preview, but also add ?dl=1 to the end, like this: https://dl.dropbox.com/s/ 0gb4pdwjkn1q08o/file.txt?dl=1

# **Invite Someone to a Dropbox Folder**

For projects that require collaboration among several people, Dropbox lets you share folders with full read-write access. When you invite someone else to a folder (which can be anywhere within your Dropbox), that folder then also appears at the top level of the other user's Dropbox, and changes made by you or any invited user are automatically synced to all the other copies of that folder automatically.

Dropbox folders shared this way can be useful for family members and coworkers, but you may find other applications as well. For example, when my wife and I were preparing to buy our house, our mortgage broker invited us to a shared Dropbox folder so we could quickly pass bank statements, tax forms, legal files, and other documents back and forth.

**Note:** You can't invite someone to share a single file with readwrite access; it must be an entire folder.

As the owner of a shared Dropbox folder, you can:

- Allow invited users to extend the invitation to still other people or not, as you prefer.
- Add more members to the folder later.
- Transfer ownership to another member.
- Unshare a folder at any time, or kick out any individual user (whether invited by you or someone else).

**Note:** Although you can share any folder in your Dropbox, once you've done that, you can't separately share any subfolders inside that folder. For example, if I have a folder called Food in my Dropbox that I share with Alice, Bob, and Carol, and that folder contains a subfolder called Chocolate, I can't opt to share just Chocolate—and not the entire Food folder—with Dan.

**Sharing Invitees:** Please pay careful attention to the list that comes next and the paragraph right after it! Once you've read that, you can skip ahead to the next topic, Work with Shared Folders.

As an *invited member* of a shared Dropbox folder, you can:

- Move the shared folder to another location—even within a nested folder—in your own Dropbox.
- Rename the folder to give it a name that works better for you (without changing the name everyone else sees).
- Invite other people to join it, if the owner has enabled this capability.
- Add new files to the folder, and modify or delete existing files.
- Leave the folder at any time.

One issue with shared folders that has bitten me more than a few times is that *the space occupied by the shared folder counts against* 

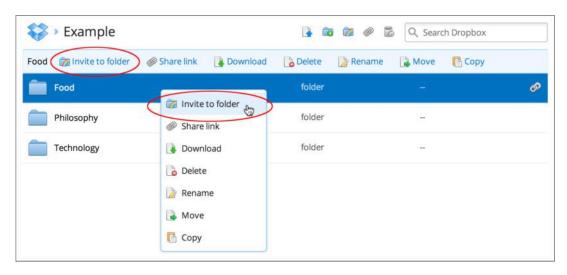
all members' quotas. This can be a problem when a user who has more free storage space than others puts large files in the shared folder. For example, suppose I have a 50 GB Dropbox account, and I invite my buddy to share a folder that has 3 GB of data in it. If he has only a 2 GB quota, he'll go over his limit before the folder has finished syncing. (And, of course, sharing even 1 GB isn't necessarily safe in a situation like this, because my buddy may have other files of his own taking up part of his quota.)

In my opinion, Dropbox should force only one user (presumably, the owner of a shared folder) to pay for the space it occupies, but unless or until the company changes this policy, be circumspect when sharing folders that take up a lot of space.

To share a folder, you'll first need to tell Dropbox what to share, and then specify who will share it.

#### To pick a folder to share on the Dropbox Web site:

- 1. Log in to your account at <u>dropbox.com</u>.
- 2. Navigate to the folder that *contains* the folder you want to share (that is, don't *open* the folder you want to share).
- 3. Either select the folder and click Invite to Folder, or right-click it and choose Invite to Folder from the contextual menu.



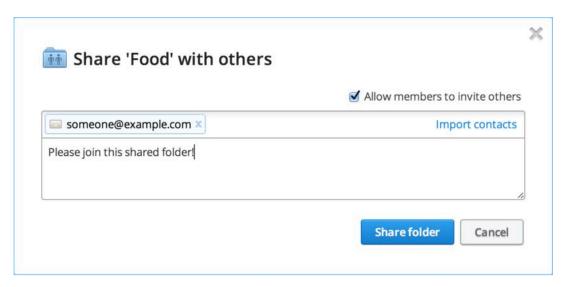
Select a folder and then click Invite to Folder in one of these places.

# Or, to do this on a computer with the Dropbox app installed, do one of the following:

 On a Mac with the optional Dropbox toolbar menu enabled, select a folder inside the Dropbox folder and choose Share This Folder from the pop-up Dropbox menu in the window's toolbar (not to be confused with the main Dropbox menu in your menu bar), or right-click (Control-click) the folder and choose Share This Folder from Dropbox's contextual menu.

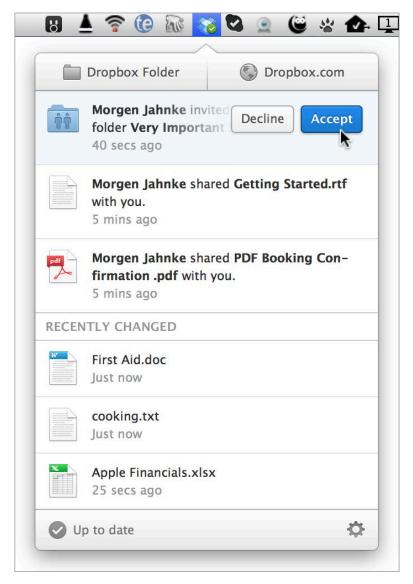
• On a Windows or Linux PC, right-click a folder inside the Dropbox folder and choose Dropbox > Share This Folder from the contextual menu.

Once you've shared a folder in one of these ways, type the email addresses of the people you want to invite, enter an optional message, and click Share Folder.



Use this dialog box to invite people to share a folder with you.

Invitees receive an email message with a link to join the shared folder. In addition, the invitation appears in their Dropbox menus, in their Dropbox mobile apps, and on the Sharing page of the Dropbox Web site for their accounts. (Anyone who is not already a Dropbox user will have to create a Dropbox account in order to access the folder.) Only after invitees click one of these links or buttons to accept the invitation are they added to the shared folder.



Clicking Accept in the Dropbox menu is one of several ways an invitee can join a shared folder.

## **Work with Shared Folders**

If you're sharing a folder with others (whether you're the owner or not), most of the time things should "just work." But having done this myself for years, I recommend following a few best practices to reduce the chances of confusion:

• Train your collaborators: If you're inviting people to share a Dropbox folder with you and you know they've never used Dropbox before, take a moment to explain the basics (see Teach This Book). In particular, make sure they know that they should not move files out of shared Dropbox folders to other locations on their computers, even temporarily (since that will delete the files for everyone else). Been there, had to restore that.

- Decide on a notification system: Depending on one's platform and settings, Dropbox may display notifications when new files appear in shared folders. But because these can quickly turn into so much noise (and because they might be fleeting, or a user might turn them off), you can't assume that others will realize immediately that you've put new data in a shared folder or updated a file on which you're collaborating. Sometimes a good old-fashioned email or text message is the best way to let someone know about new shared files, unless you're certain the other person already has a reliable notification system in place.
- Communicate before you delete: Just as you should train your collaborators not to move or delete files injudiciously, you should follow the same practice yourself, because removing a file from a shared folder (even if you merely move it somewhere else within your Dropbox) deletes it from everyone's copy of that folder. Although other users can restore the files if necessary, not having them where they're expected can disrupt workflows. So before deleting or moving a shared file, make sure that everyone sharing the folder understands what's going to happen and why—and that they have their own separate copies of anything important.
- **Kick carefully:** Similarly, if you need to kick a person out of a shared folder (see <u>Unshare a Link or Folder</u>, ahead), which you may need to do for any number of legitimate reasons, make sure you tell the person first—especially if you plan to prevent the user from keeping a copy of the files. On the other hand, if you're kicking a problematic contractor off a project, a swift kick without notification and deletion of that person's copy of the files may be prudent.
- Watch out for big files: As I explained a few pages back in Invite Someone to a Dropbox Folder, sharing large files (or lots of files) can put others—especially those with free accounts—over their storage quotas. Share judiciously and be aware that you may need to put some time in pruning no-longer-necessary content from large folders or offer to pay for others to get additional storage.

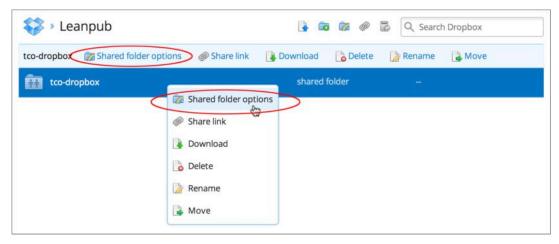
## **Unshare a Link or Folder**

To stop sharing a *linked* file or folder, do the following:

- 1. Log in to your account at <u>dropbox.com</u>.
- 2. Click Links on the left.
- 3. Click the X icon next to the item whose link you want to remove.
- 4. Click Remove Link to confirm.

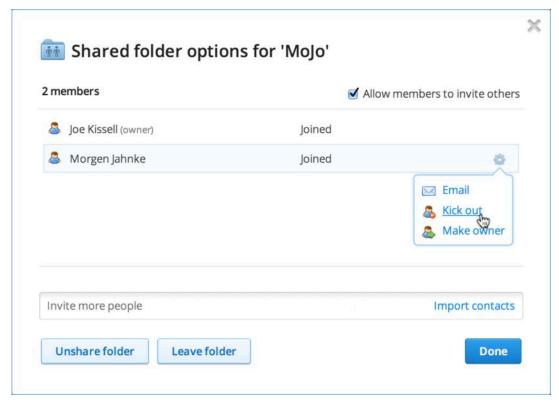
To kick someone out of a (mutually) shared folder of which you're the owner:

- 1. Log in to your account at <u>dropbox.com</u>.
- 2. Navigate to the folder that *contains* the shared folder (that is, don't *open* the shared folder itself).
- 3. Either select the shared folder (which displays icons of two people to represent sharing) and click Shared Folder Options, or right-click it and choose Shared Folder Options from the contextual menu.



Select a shared folder and then click Shared Folder Options in one of these places.

4. In the dialog box that appears, click the gear icon for a member and choose Kick Out from the pop-up menu.



Choose Kick Out to remove this user from the shared folder.

- 5. If you want the user to be able to keep a copy of the existing files, select "*Username* should be able to keep a copy of these files"; if you leave this deselected, then all the files in the shared folder will be deleted from that user's Dropbox immediately and won't be recoverable by that user even by viewing deleted files on the Dropbox Web site.
- 6. Click Kick Out to confirm.

To stop sharing a folder to which you've invited other users:

- 1. Log in to your account at dropbox.com.
- 2. Navigate to the folder that *contains* the shared folder (that is, don't *open* the shared folder itself).
- 3. Either select the shared folder (which displays icons of two people to represent sharing) and click Shared Folder Options, or right-click it and choose Shared Folder Options from the contextual menu.
- 4. In the dialog box that appears, click Unshare Folder.
- 5. If you want the other user(s) to be able to keep a copy of the existing files, select "I want my collaborators to keep a copy of these files"; if you leave this deselected, then all the files in the shared folder will be deleted from the other users' Dropbox

folders immediately and those users won't be able to recover them even by viewing deleted files on the Dropbox Web site.

6. Click Unshare Folder to confirm.

**Sharing Invitees:** If a folder you were sharing suddenly disappears, the owner may have kicked you out—intentionally or otherwise. If you're unsure, ask; the person can always re-invite you if necessary.

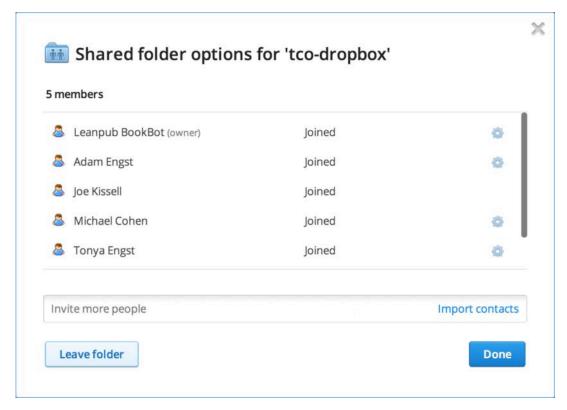
## Leave a Shared Folder

If you no longer want to participate in a shared folder, you need not wait for the owner to remove you; you can remove yourself. (And, having done so, you can decide whether you want to keep the existing files in your Dropbox or delete them to recover the space they occupied.)

**Sharing Invitees:** Don't worry that you'll never be able to get rid of a huge volume of shared files you no longer need. You can leave a folder whenever you want, but if you decide you want back in, you must ask to be invited again.

#### To leave a shared folder:

- 1. Log in to your account at <u>dropbox.com</u>.
- 2. Navigate to the folder that *contains* the shared folder (that is, don't *open* the shared folder itself).
- 3. Either select the shared folder (which displays icons of two people to represent sharing) and click Shared Folder Options, or right-click it and choose Shared Folder Options from the contextual menu.
- 4. In the dialog box that appears, click the Leave Folder button at the bottom.



Click the Leave Folder button to leave a shared folder.

- 5. If you want to keep the files in your Dropbox, leave the "I still want to keep my copy of these files" checkbox selected; or, to delete the files, deselect it.
- 6. Click Leave Folder to confirm.

If you change your mind and want to get back into the shared folder, you must ask the owner to invite you again.

# Recover Older and Deleted Files

You know that every file you put in your Dropbox is immediately synced to the cloud, and thence to all your other devices. But Dropbox is even more sophisticated than that. Every time you change a file in your Dropbox and save it, Dropbox syncs just the differences from the previous version—a rapid process—and it remembers the way the file looked the previous time it was saved, and the time before that, and so on back to the first time you synced it within the last 30 days (or ever, with The Packrat Option. So if you ever need to retrieve an older version of any of your Dropbox files, you can. Similarly, even though you may delete something from your Dropbox, causing it to disappear from your other devices, Dropbox remembers it for at least 30 days and lets you undelete it if need be.

Although this combination of features amounts to a powerful pseudo-backup capability (refer to the sidebar Is Dropbox a Backup Solution?, later in this chapter), Dropbox doesn't go out of its way to make it obvious how to restore older or deleted files. You must use the Dropbox Web site to perform either operation, and the process isn't exactly intuitive.

In this chapter, I tell you how to retrieve these phantom files—as well as how to make Dropbox delete something for good, regardless of how long it has been stored.

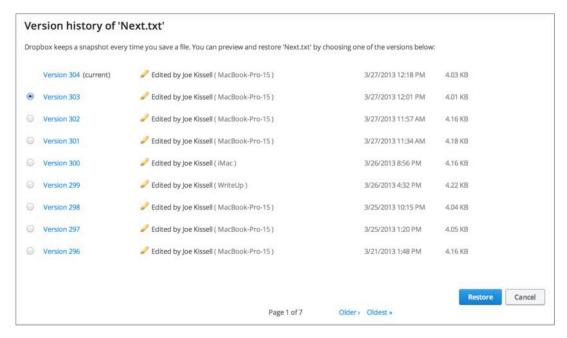
### **Work with File Versions**

To view or restore the previously saved versions of any file in your Dropbox, follow these steps:

- 1. Do one of the following:
  - Log in to your account at <u>dropbox.com</u>, select the file in question, and choose Previous Versions from the More pop-up menu—or right-click the file and choose Previous Versions from the contextual menu.

- On a Mac, right-click (Control-click) a file in your Dropbox and choose View Previous Versions from Dropbox's contextual menu—or choose View Previous Versions from the Dropbox pop-up menu in the Finder's toolbar.
- On a PC, right-click a file in your Dropbox and choose
   Dropbox > View Previous Versions from the contextual menu.

Dropbox lists the previous versions, each showing the user and the computer or app that modified it last, and the date and time of the last modification. If there are many modifications, you may need to page forward or backward to see the one you want.



Dropbox lists all the older versions of each saved file.

- 2. To *preview* any older version (worth checking before you restore), click the linked version number in the list of previous versions.
- 3. To *restore* any older version, select the radio button next to it and then click the Restore button at the bottom of the page.

When you restore a file, Dropbox immediately replaces the version in your Dropbox with the one you selected (overwriting the version that was there previously). So, if you open the restored version and realize you want to undo that restoration—you wanted the version of file that was there before you did the restore after all—you must repeat the process, selecting the version just before the current version.

**Tip:** If you have an app that can perform a diff to show changes between two versions of a file (such as BBEdit on a Mac), you might like to download the free <a href="DropboxDiff Chrome Extension">DropboxDiff Chrome Extension</a> by Victor Shih. With this extension activated, you can select any two arbitrary versions of a file in your revision history and click a button to do the diff.

### **The Packrat Option**

Dropbox keeps old versions of your files, and deleted files, for 30 days. But if you want an extra insurance policy, you can opt for the Packrat option, available to any Pro user at an extra \$39 per year (regardless of the level of storage you're paying for), which gives you indefinite storage of older versions and deleted files. To enable this option, go to the <u>Account Info</u> tab on the Settings page of the Dropbox site, log in if necessary, and click the Activate button next to "Packrat" Unlimited Undo History.

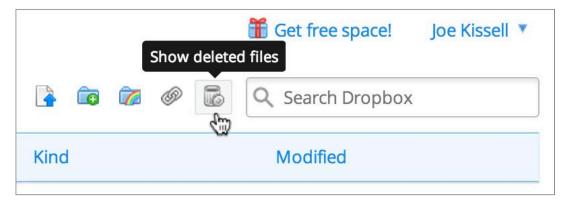
Activating the Packrat option won't undelete files that have already passed the 30-day mark, but it does mean that every time you save or delete a file in your Dropbox from then on, Dropbox keeps a copy. Best of all, none of that extra archived data counts against your storage quota.

### **Undelete Files and Folders**

If you remove a file or folder from your Dropbox—whether you delete it entirely on a given device or merely relocate it—Dropbox deletes it on all your devices. But "delete" really means "hide" (for 30 days or, with the Packrat option, indefinitely). You can unhide—and then undelete—any of these items, but *only* on the Dropbox Web site.

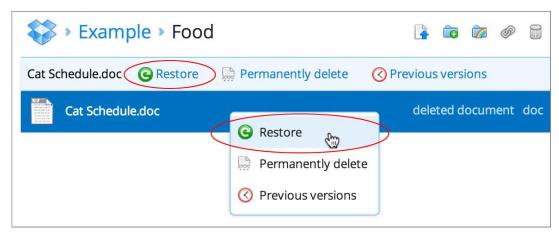
To do so, follow these steps:

- 1. Log in to your account at <u>dropbox.com</u>, and navigate to the place where the file or folder used to be.
- 2. Click the trash can icon at the top of the page to display deleted files and folders. Previously deleted items appear in the list, but with icons and titles shown in gray. You can preview deleted documents just like regular documents.



Click this icon to display deleted files.

3. To restore a deleted file or folder, either select the item and click Restore, or right-click it and choose Restore from the contextual menu. Click Restore again to confirm.



Use one of these commands to restore a deleted file.

**Note:** Once you've unhidden deleted files, you can even view and restore older versions of those files, following the instructions in the previous topic.

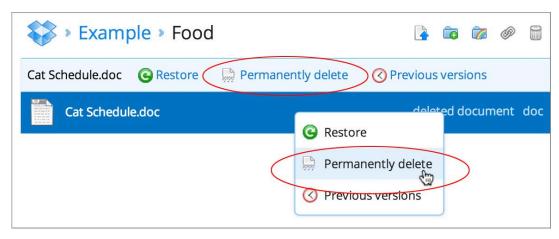
## **Permanently Delete Files**

As I mentioned earlier in the sidebar Deleted Files and Storage Space, deleted files (and older versions) don't count against your storage quota. You could, if you wanted, let Dropbox store hundreds of gigabytes worth of deleted files without any consequences.

However, if for any reason you want to delete a file forever, you can. For example, if you mistakenly put a confidential document in a shared folder and want to make sure that no one else can recover it after you've deleted it, you can permanently delete it.

To delete a file permanently, follow these steps:

- 1. Delete the file normally (on your computer or other device, or on the Dropbox Web site).
- 2. Log in to your account at <u>dropbox.com</u>, and navigate to the place where the file or folder used to be.
- 3. Click the trash can icon at the top of the page to display deleted files and folders.
- 4. Either select the item and click Permanently Delete, or right-click it and choose Permanently Delete from the contextual menu. Click Permanently Delete again to confirm.



Use one of these commands to permanently delete an alreadydeleted file.

Dropbox removes the file from its servers. But be aware of these qualifications:

- Permanent deletion from Dropbox's servers isn't immediate.
   Even though you may no longer be able to see the file, it can take some time for all the cached backup copies to disappear.
   Likewise, your computer may store a cached copy of the deleted file for up to 3 days.
- If you permanently delete a file that's identical to one someone else has stored in Dropbox, Dropbox maintains the file on its servers for that other user.

### Is Dropbox a Backup Solution?

When you put a file in your Dropbox, you have at least two copies of it (one on your device and one in the cloud); if you install Dropbox on multiple computers, each one has a copy of everything in your Dropbox. On top of that, Dropbox stores older and deleted files. So, with all those copies of your files stored in so many places, doesn't that make Dropbox a good backup solution?

My opinion—and I'm speaking as an expert who has written quite a few articles and books about backups—is: *kinda sorta maybe not quite.* That is to say, Dropbox *can* be a good solution to certain backup problems, but it's not a good general-purpose solution:

- ◆ First, remember that Dropbox creates backups—if you want to call them that—of only the files in your Dropbox folder. If you're relying on Dropbox alone for backups, you'd better put every single file you care about in there. For most of us, that's not practical—especially with certain kinds of files, such as databases (see Decide What to Put in Your Dropbox). Even if you did put every important file in there, it would still take a long time and considerable effort to restore all those files, along with reinstalling your operating system and apps, if that became necessary.
- ◆ Second, although it's great that Dropbox saves old versions of files and deleted files for up to 30 days, I've had to restore older items from backups more than a few times. If you're thinking seriously about using Dropbox for your versioned backup, invest in The Packrat Option.
- ◆ Third, Dropbox's LAN Sync feature notwithstanding (discussed in Sync Your Files), if you have to restore a lot of files, it's much quicker to do so from a local backup than from the cloud. (And, of course, if you are without an Internet connection at the moment you need those files, all bets are off.)

In short, although Dropbox provides a type of backup for some of your files, I don't consider it a complete backup solution, and I urge you to take additional steps to back up your data—including backing up your Dropbox folder itself to a local drive. (If you're a Mac user and you want detailed advice on backing up your data, allow me to recommend my ebook <u>Take Control of Backing Up Your Mac</u>.)

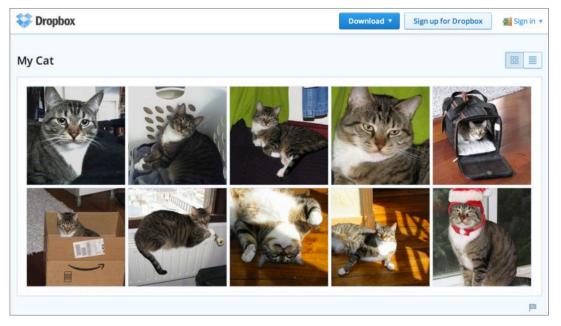
## Work with Photos and Videos

Quick! Think of a type of document almost every smartphone- or tablet-equipped person in the world creates on a daily basis—and might like to store safely in the cloud, sync with other devices, and share with other people. Regardless of all the important business-y reasons to sync and share PDFs, Microsoft Word files, and so on, photos and videos are undoubtedly the documents most frequently uploaded and shared. That makes them a great fit for Dropbox—which, after all, is already great at storing things in the cloud and displaying them for anyone you choose.

Now, you *can* manually drag a photo (or a thousand photos) into your Dropbox, and you *can* share a link to any of them individually or to a folder full of them—and that works surprisingly well. But Dropbox has extra features for photos that give you more flexibility, as well as a simpler, more elegant process for sharing your photos and videos.

### Link to a Folder of Photos

Let's start with the most obvious but least exciting option. You create a folder in your Dropbox, drag as many photos or videos into it as you like (in, presumably, a common format such as JPEG or AVI), and share a link to that folder as described in Share a Link. Anyone who follows that link sees a page of thumbnails. Boom! Instant gallery!



Share a link to a folder full of images, and visitors see something like this.

If you click a thumbnail in the gallery, Dropbox enlarges the image, displaying it against a black background. (If it's a video, click the Play icon in the center of the window to play it.) You can step forward or backward from one image to another, slideshow-style, by clicking the left or right arrows that appear at the bottom of the image or pressing the Left or Right arrow key—and return to the thumbnail view by clicking the X icon in the upper-right corner or pressing Esc.

## **Use Camera Upload**

Dragging photos and videos manually to a folder isn't especially hard, but if they're on your camera, smartphone, or tablet, you must transfer them to your computer first. Wouldn't it be nice if you could skip a manual step or two? You can!

Camera Upload is the next step toward smoother photo sharing. This feature enables Dropbox to automatically import and upload any new photos or videos from devices that you attach to your computer—I explain this next. After that, I talk about how to enjoy Camera Upload on a Mobile Device without connecting to a computer at all. From there, picking photos you want to share is a matter of just a few clicks.

### **Camera Upload on a Computer**

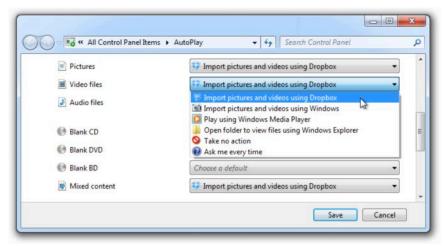
On a Mac or PC, Dropbox's Camera Upload feature can upload photos and videos from nearly any connected camera (or cameracontaining device).

**Note:** As of April 2013, Camera Upload is available only in the Mac and Windows versions of Dropbox, not the Linux version.

Dropbox enables Camera Upload by default, but you can turn it off if you never want to use it—or turn it back on if you turned it off for some reason. To do any of this, open Dropbox's preferences window and click General. Then, on a Mac, select or deselect (as you prefer) Enable Dropbox Camera Import. Or, on a Windows PC, click the Change AutoPlay Settings link, and then choose your desired option from the Pictures, Video Files, and Mixed Content pop-up menus—either "Import pictures and videos using Dropbox" or another option, as you prefer.



To use Camera Upload on a Mac, make sure Enable Dropbox Camera Import is selected



To use Camera Upload on a Windows PC, make sure the AutoPlay settings for Pictures, Video Files, and Mixed Content are set to "Import pictures and videos using Dropbox."

With Camera Upload enabled, the first time you attach any device that Dropbox recognizes as holding photos or videos (such as a camera, smartphone, or tablet), you'll see an alert asking what you want to do.



Think carefully before you respond to this dialog box!

Here are your choices, which you should think carefully about, because they can't always be changed later:

- If you leave "Automatically import photos when *device-name* is connected" selected and click Start Import, Dropbox copies the photos and videos from the device to a Camera Uploads folder at the top level of your Dropbox, and does the same thing every subsequent time you connect that device. But, be aware that Dropbox offers no interface for turning off this feature later for a single device without turning it off for all devices. So if you're unsure whether you want to do this all the time for a given device, deselect that checkbox before clicking Start Import, and the same alert will appear again the next time you connect that device.
- If you click Never for This Device, then Dropbox not only
  won't import anything from that device now, it won't pester
  you when you plug this device in later, either. On the other hand,
  if you change your mind and decide you do want to automatically
  import photos and videos from this device later, you'll be out of
  luck—Dropbox offers no way to take back this choice.

If you don't want to take any action right now, but also don't
want to make a choice you may later regret (to always or
never import photos and videos from this device), click Cancel.
Dropbox will prompt you again the next time you attach this
device.

**Note:** If the device you connect is an iOS device and it's locked with a passcode, you'll be prompted to unlock it before Dropbox can import its media. If it's an Android device, you must click Connect as a Disk Drive on the device's status bar.

When Dropbox copies media to your Camera Uploads folder, it leaves all the photos and videos on your device, too. So doing this is completely nondestructive and, in that sense, safe. Keep in mind that if you already have some other system for importing or syncing photos and videos—for example, you use iCloud's Photo Stream feature to import photos to your Mac or PC, or you use Image Capture on a Mac, or you have an Eye-Fi card in your camera—you'll end up with duplicates of all your imported media. (That may not be a bad thing if you're worried about accidentally deleting something!) However, if you have Camera Upload enabled in both the desktop version of Dropbox and in the Dropbox app on a mobile device that you periodically connect to your computer, Dropbox won't duplicate photos or videos within your Camera Uploads; as soon as it notices that a given item is already there, it skips over it in the future.

To view thumbnails of the photos from Camera Uploads on the Dropbox Web site, grouped by month, click the Photos link in the upper-left corner of the page. To learn what else you can do with the media Dropbox copies to your Camera Uploads folder, skip ahead to Create a Photo Album.

**Note:** If Camera Upload doesn't work as described here, make sure your computer has the latest version of Dropbox installed. If you're stuck on an older version for some reason, this feature may not be present.

### **Camera Upload on a Mobile Device**

The mobile Dropbox apps for iOS and Android also support Camera Upload, although it works a bit differently there than the desktop version.

When you launch the mobile Dropbox app for the first time, it should prompt you to enable Camera Upload, but regardless of whether you accept that initial invitation, you can enable or disable the feature later. To do so, tap the gear-shaped Settings icon in the Dropbox app, tap Camera Upload, and turn it on or off. On the same screen, you can turn Use Cellular Data on or off, as you prefer (your choice will depend on the details of your data plan).

When Camera Upload is enabled and the Dropbox app is open, Dropbox uploads to your Camera Uploads folder any photos or videos taken on your device that haven't already been copied there. (If you manually remove a photo from your Camera Uploads folder, Dropbox remembers your choice; if you reconnect a device that still contains that photo, it won't be copied again.)

**Note:** On an iOS device, you can enable background uploading—even when the Dropbox app isn't open—triggered by changing locations. You can read more about this on the <u>Dropbox Web site</u>. Click iPhone or iPad on that page for details.

### **Camera Uploads and Free Storage Space**

The first time you upload media using Camera Upload, Dropbox automatically increases your storage quota by 500 MB. Thereafter, for every 500 MB of photo and videos you upload, Dropbox adds another 500 MB to your quota, up to a total of 3 GB. Even if you later delete all that media from your Camera Uploads folder, the extra storage space is yours to keep permanently.

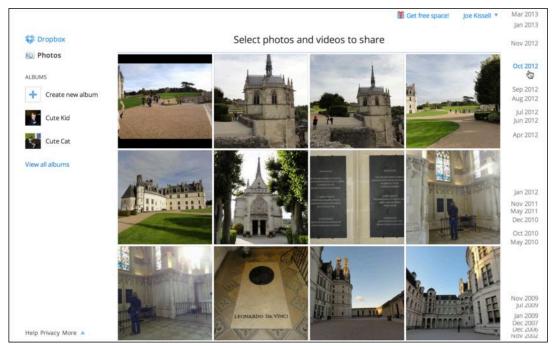
### **Create a Photo Album**

Using Camera Uploads gives you a backup (of sorts) of your photos and videos, and enables them to sync quickly across all your devices. And, the Photos link on the Dropbox Web site lets you view thumbnails of all the photos and videos in Camera Uploads, grouped by month. But by itself, the Camera Uploads folder doesn't improve photo sharing—you almost certainly won't want to share the *entire* Camera Uploads folder with anyone. You can, of course, create subfolders manually and share those, but Dropbox offers another, more advanced approach: a tool to create and share albums. Along with the albums themselves comes an easier way to share your photos.

As I write this in April 2013, albums are considered an "early release" feature, not yet enabled for all accounts. (See Configure Account Settings for information about getting invitations to such features in the future.) In the future, Dropbox will offer albums to everyone automatically. But any Dropbox user can request access to this feature right now by visiting <a href="https://www.dropbox.com/photos/features">https://www.dropbox.com/photos/features</a> and logging in if necessary, and although it may take some time for Dropbox to switch on the feature for you, you'll soon be able to organize your photos into albums and share those albums easily. The rest of this section assumes that you have albums enabled.

To work with photos and videos when albums are enabled:

- 1. Log in to your account at <u>dropbox.com</u>.
- 2. Click the Photos link in the upper-left corner of the page.
  Dropbox displays the contents of your Camera Uploads folder,
  organized by month. To navigate quickly to another month or
  year, move your pointer to the right side of the window. A list
  of months appears; click the one you want to scroll to that point.



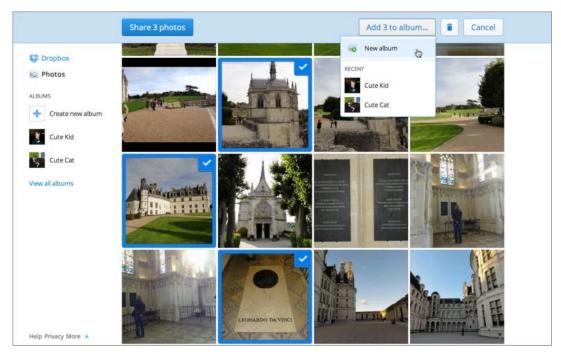
With albums enabled, your Photo page looks like this. Notice the navigational links on the right.

You can now do any of the following:

• **Share items:** To share individual items, or a set of items, without creating an album for them, select the items and click Share *Number* Photo(s) (where "Photo(s)" changes to "Video(s)" or "Item(s)," depending on what you select). You can then share

a link to the items via email, Twitter, or Facebook—or simply copy the link to your Clipboard—exactly as described in Share a Link.

- **Create an album:** To create an album, click Create New Album on the left, type a name for the album, and press Return. (If any photos or videos were already selected when you clicked Create New Album, they're added to the new album automatically.)
- Add items to an album: To add items to an album, select one or more photos or videos. Then either drag them to an album on the left, or click Add *Number* to Album at the top of the window and choose an option from the pop-up menu—either an existing album or New Album. (If you choose New Album, type a name for the album and press Return.)



Select one or more items to reveal additional controls.

- **Display an album:** To display an existing album, click its name on the left. (If it doesn't appear in the list, click View All Albums.) With the album displayed, you can do the following:
- Set the Album Cover: To choose a particular photo to appear on the album's cover, select an item and click Set as Album Cover.
- **Remove Items:** Select one or more items and click Remove *Number* from Album. Click Remove to confirm.

- **Rename an Album:** Choose Rename Album from the pop-up gear menu in the upper-right corner of the window. Type a new name and press Return.
  - Delete an Album: Choose Delete Album from the pop-up gear menu in the upper-right corner of the window, and then click Delete to confirm. This deletes only the album, not its contents.
  - **Share an Album:** With *no* items selected within the album, click Share Album. Then follow the steps covered earlier in Share a Link.