## Cloud Storage & File Sharing

Based on an article by Michael Muchmore & Jill Duffy (CNET)

• Since the advent of the Internet, the technology industry has been steadily moving away from local storage to remote, server-based storage and processing—what is known as the cloud. Look at music and movies: We used to play them from local media, but now they're streamed from servers. You can reap the same advantages of anywhere-access and sharing (and the productivity gains that can bring), as well as the reduction of local storage requirements by keeping your own documents and media files in the cloud.

• These services provide seamless access to all your important data—Word docs, PDFs, spreadsheets, photos, any other digital assets from wherever you are. You no longer need to be sitting at your work PC to see your work files: With cloud syncing you can get to them from your smartphone on the train, from your tablet on your couch, and from the laptop in your hotel room or kitchen. Using a service means no more having to email files to yourself or plug and unplug USB thumb drives.

• If you don't yet have a service for storing and syncing your data in the cloud, you need one. Which one you choose depends on the kinds of files you store, how much security you need, whether you plan to collaborate with other people, and which devices you use to edit and access your files. It may also depend on your comfort level with computers in general. Some services are extremely user-friendly, while others offer advanced customization for more experienced techies.

## What Can Cloud Storage Do for You?

• The very best cloud storage solutions play nicely with other apps and services, making the experience of viewing or editing your files feel natural. Especially in business settings, you want your other software and apps to be able to retrieve or access your files, so making sure you use a service that easily authenticates with the other tools you use is a big deal.

• The range of capabilities of cloud-based storage services is incredible. Many of them specialize in a specific area. For example, Dropbox and SugarSync focus on keeping a synced folder accessible everywhere. SpiderOak emphasizes security. Some cloud storage services, such as Apple iCloud, Google Drive and Microsoft OneDrive, are generalists, offering not only folder and file syncing, but also media-playing and device syncing. These products even double as collaboration software, offering real-time document coediting.

 Distinct from but overlapping in some cases with cloud storage are online backup services. Some of these, such as Carbonite, are all about disaster recovery, while IDrive combines that goal with syncing and sharing capabilities. If you want to bypass the cloud for your backup, you can still go with local backup software, which saves you the time it takes to upload and download your data. • In fact, most cloud services offer some level of backup, almost as a consequence of their intended function. It follows logically that any files uploaded to a cloud service are also protected from disk failures, since there are copies of them in the cloud. But true online backup plays can back up all of your computer's files, not just those in a synced folder structure. Whereas syncing is about managing select files, backup tends to be a bulk, just-in-case play. With syncing, you pick the documents you might need and keep them in the cloud for easy access. With backup, you back up everything you think you might regret losing. Easy, immediate access is not guaranteed with online backup, nor is it the point. Peace of mind is.

## The Deal With the Cloud

 Just to clear up any confusion, the cloud part of cloud-based storage services refers to storing your files somewhere other than your computer's hard drive, usually on the provider's servers. As one tech pundit put it: "There is no Cloud. It's just someone else's computer." Having data in the cloud refers to the ability to access those files through the Internet. Your data is usually encrypted before making the journey over the Internet to the providers' servers, and, while they live on those servers, they're also encrypted. The services don't upload entire files every time they change. They just upload the changes, saving your connection bandwidth.

You can access your cloud files through an app or software installed on your computer (once it's installed, it's usually pretty much invisible), though you need an Internet connection for it to work. If you temporarily don't have an Internet connection, that's okay. The service will wait until the next time you do have a connection and take care of business then.

## Free vs. Paid

• Many cloud storage services have a free account that usually comes with some limitations, such as the amount of storage they provide or a size limit on files you can upload. We prefer services that offer some level of free service (even if it's only 2GB) rather than a time-based trial, because that lets you fully integrate a service into your life for several weeks while you get a feel for how it works and what might go wrong with your particular setup. • What could possibly go wrong? Human error accounts for a good deal of cloud storage tragedies, but the dropped Internet connection is another common troublemaker. Ask around (or just look through our review comments), and you'll hear sad stories of how cloud storage can go wrong. One of the benefits of paying for an account is that it usually comes with additional support from the provider, so if anything does go wrong, you can get someone on the phone to help you resolve the issue.  There are many other reasons to pay for cloud storage, from getting a lot more space (a terabyte really doesn't cost all that much anymore) to being able to upload really big files. That last benefit is relevant to graphic designers, video editors, and other visual artists who often host enormous files. Other perks of paying for your cloud storage often include increased access to file-version history (meaning you can restore an important business proposal to the version you had before your colleague made a bunch of erroneous changes), more security, or more features for collaboration and working with teams.