

Genealogy in the Cloud by *mike@blackledge.com*

Almost all genealogy society members have at least one computer; and in today's world, it is not uncommon to also own a computer device such as a tablet or a Smart Phone. If you are a genealogist and have more than one computer/computer device, you should be aware of the Cloud. This Computer Corner article introduces the Cloud and one of its primary software storage packages: Dropbox. Options are presented to help you decide how this software tool can help you.

We've come a long way in computing over just the past decade. Some of the concepts will go even farther in the future, however, it's difficult to determine which ones will make it, and what will become the 8-track tapes of the computer world. Storage (and access) of data, documents, photos, databases, will always be at the base of any computer technology. We know that mass storage has become much more economical recently – CC's recent article on *Gmail for Genealogists* pointed this out. The next iteration of mass storage is available on-line storage – and the concept is called **Cloud Storage**.

Cloud Storage: Cloud Storage is storing your files 'in the cloud' – that is, on-line, somewhere else than on a computer that you own. The "cloud" name comes from the use of a cloud-shaped symbol often used as an abstraction of the process of storing "somewhere else." If you use the Internet, you almost certainly already use cloud storage every day – think about your use of on-line calendars such as Yahoo or Google, or on-line photo albums such as Flickr, Shutterfly, and Google's Picasa, or even your incoming email messages: Hotmail, Gmail and all the other webmail services are all **cloud services**. All your e-mails and folders exist somewhere on some server elsewhere in the world, not on your computer.

Consider the following to convince yourself this is true: you can't get to your email on such webmail services when you're disconnected from the Internet. Also, you don't have to worry about deleting email messages to make room on your hard drive. That data is all "in the cloud" until you download something onto your hard drive or onto your tablet or Smartphone. Thus using Cloud Storage is about accessing applications, software, services and data that do not actually exist on the device you're using.

Dropbox: There are numerous cloud services, all of which offer you some limited storage for free, that cleverly take advantage of Cloud Storage. Dropbox is one of the more innovative such companies and their free software package can be downloaded (obtained) from their web site, *Dropbox.com*. Companies like **Dropbox** offer chunks of cloud space on servers so that you can put your files and folders up there, rather than clogging up your own computer hard drive. But we'll soon see that Dropbox does more than just storage of files.

From Whence Cometh Dropbox? Dropbox, Inc. is a startup company located in San Francisco that has probably one of the most popular file synchronization and sharing tools in the world, supporting



millions of users and growing every day. Yet it was only founded in 2007 by MIT graduates Drew Houston and Arash Ferdowsi, as a Y Combinator startup company. (**Y Combinator** is an American seed accelerator, a type of startup incubator for small companies that provides seed money, advice, and connections in exchange for about 6% of the company's equity.)

Dropbox is a free service that lets you bring your photos, documents, videos – even genealogy databases - anywhere and share them easily. According to Dropbox, founder Drew Houston conceived the idea after repeatedly forgetting his USB flash drive while he was a student at MIT. He says that existing services at the time "suffered problems with Internet latency, large files, bugs, or just made me think too much." He began making something for himself, but then realized that it could benefit others with the same problem.

Houston founded Dropbox, Inc. in June 2007, and shortly thereafter secured seed funding from Y Combinator. Dropbox officially launched at 2008's TechCrunch50, an annual technology conference. Today, more than 50 million people across every continent use Dropbox to always have their stuff at hand, share with family and friends, and work on team projects. (Believe it or not, "stuff" is a Dropbox term, as used in their terms and conditions.) 32.7% of Dropbox users, the largest share, are from the United States, followed by 6.7% from the United Kingdom and 6.5% from Germany.

File Synchronization: The beauty of Dropbox goes beyond what your flash drive can do for you – it syncs the files you put in the Dropbox between computers. Thus, any file you place into (save to) Dropbox also instantly saves to your computers, phones, and the Dropbox website. As an example, I am typing this article at home on my desktop, and it is saved into the Dropbox folder on my desktop. When I leave this desktop, and go over and startup my laptop computer, in a few seconds I will see a message on my screen that says, "1 file synced in Dropbox." My latest version of this article is thus also available "instantly" on any on my other computers on which I have installed Dropbox – including my iPad. Similarly, if I move some photos into one Dropbox, they will be available in all the Dropbox installations.

How Easy is it to use Dropbox? From experience, even though it has no user manuals, I can say it is quite easy. First, you download the Dropbox software and install it on your computer. Dropbox will create a distinctive Dropbox folder under your "My Documents" area. To add files to Dropbox, just drag and drop your files into your Dropbox folder. That's it. The files in your Dropbox folder will automatically be synced online and to your other computers. You don't have to do anything. You can even use the Save As... menu option in most applications to save files directly to your Dropbox folder.

What Operating Systems will work with Dropbox? Mac users have known about the Cloud for years – Apple offers an iCloud service for Apple devices that does what Dropbox does for 'all' – i.e., Dropbox works with Windows, Mac, Linux, iPad, iPhone, Android and BlackBerry. 66.1% of Dropbox users use Windows only, 20.9% use Mac OS only, 2.0% use [Linux](http://en.wikipedia.org/wiki/Linux) Linux only, and the remainder use more than one operating system. Your files are also always available from the secure Dropbox website.

Working with Partners: If one moves some photos or documents into a computer's Dropbox, they will be available in all of the individual's Dropbox installations. This feature can be valuable if you are working with a team, by using another Dropbox feature called **Public Folder**. When you install your Dropbox software, you will see inside the Dropbox folder (located under your My Documents area within Windows) a folder labeled Public. If you put any file in there, Dropbox will generate a URL

(web-based address) for it – recall that Dropbox stores all your files on its own website. By sharing this URL, your teammates can access that same file – and if they change it, they change your copy. This, of course, demonstrates both the strength and the trepidation of using a public folder.

Concerns with Dropbox: Dropbox by its very nature is part of your back-up plan for files on your computer. Basically any file you put into Dropbox is backed up – on the Dropbox website. Once anything is made public, folks tend to start worrying about what can happen to it – which is why Dropbox makes a point of saying it is a secure website. Dropbox also tells us that all files stored online by Dropbox are encrypted and kept securely on Amazon's Simple Storage Service (S3) in multiple data centers located across the United States. However, we always need to consider: By sharing storage and networks with many other users/customers it may be possible for other customers to access your data - because of human error, faulty equipment, a software error, or even criminal intent. This risk applies to all types of storage, not just cloud storage.

Crashplan for Backup: An alert reader asks, “I have Dropbox which I've been using between my main Mac and my iPad for a few files. What I don't like is having to place whatever file or folder actually into the Dropbox folder. That screws up my filing system: e.g. I want to share [an Excel database file] with my iPad (and Dropbox central). If I move it to the Dropbox folder it is no longer in my [Genealogy] folder. What I've actually done in that case is move a copy of my Excel database. But then it doesn't get updated with whatever changes I make. But for backups I'd want the actual file(s) so they'd automatically update on the remote server when changes are made. Am I thinking right or is there a way to keep them in their original locations and on Dropbox? I've looked at a confusing array of choices and I'm thinking about using **CrashPlan**. What's your opinion? CrashPlan seems like a simple interface and meets my desire to not screw with my preferred locations.”

Our alert reader is right. Dropbox offers a partial answer to the never-ending nag that we should be doing backups – namely, any file you place in your Dropbox is automatically backed up on the Dropbox web site. However, you have to move it into the Dropbox folder, and thus out of your ‘standard’ filing system on your hard drive. One drastic way to solve this minor dilemma is to sign up (pay) for the 100 GB Dropbox option and put EVERYTHING into it. Then it is backed up, and available everywhere else, in a single organized (by you) filing system. All for \$10 a month.

	Dropbox	Live Mesh w/SkyDrive	SpiderOak	SugarSync	Wuala
Supported Operating Systems	Windows, Mac, Linux	Windows, Mac	Windows, Mac, Linux	Windows, Mac	Windows, Mac, Linux
Supported Phones	iPhone, iPad, Android, BlackBerry	N/A	iOS, Android, Maemo	iPhone, iPad, Android, BlackBerry, Windows	iPhone, iPad, Android
Free Space	2 GB	5 GB	2 GB	5 GB	1 GB +
Additional Space: Plans	50GB for \$9.99 per month; 100 GB for \$19.99 per month	N/A	100GB for \$10 per month or \$100 yearly	60GB for \$9.99 per month or \$99.99 per year; plans up to 250GB for \$24.99 per month or \$249.99 per year	10 GB for \$29 per year; plans up to 250 GB for \$289 per year (USD)
Additional Space: GB per \$1/month	~ 5 GB	N/A	~ 10 GB	~ 6 GB	~ 4 GB

But for us cheap thrifty genealogists, there are other options. This article is not about automated backups, but like our alert reader, you might consider **CrashPlan**. It provides a FREE download of their software (for personal use). Unlike ordinary online backup, CrashPlan lets you back up to other destinations in addition to online. You can back up to your other computers, to external hard drives and to computers that belong to friends and family ... for free. If you want to back up online too, you would need to purchase a **CrashPlan+** subscription (about \$25 a year for 10GB or unlimited for about \$50 a year).

Competitors: One rule of economics is “High profits breed ruinous competition.” Dropbox does not have high profits yet, however if any company is as popular as quickly as Dropbox, competitors are bound to appear. Two such competitors are **4Sync** and **Google Drive**. As a ‘thrifty’ (my wife has a different word) genealogist, you may want to use more than one such Cloud Storage service, as you get only so much storage for free.

Free Cloud: Dropbox gives you 2GB (gigabytes) of storage for free – similar to a “small” Flash Drive. Google Drive gives you 5 GB for free, then encourages you to upgrade to 25 GB for \$2.50 per month. Dropbox upgrade is to 100 GB for about \$10 per month. 4Sync really wants your business – they give you 15GB for free.

Summary: Cloud storage and backup is popular with many genealogists these days. Cloud storage is off-site storage capacity accessed through the internet, and purchased on an as-needed basis. Consider it a shared, off-site hard drive that you can use to store or backup your data, limited only by your budget. Most cloud websites make it easy to share your files with others that you designate. If your computer dies, or you inadvertently delete or lose a file, you can easily restore the data from your cloud storage. Dropbox is a popular software choice to access this cloud storage: a safe, free (up to 2 GB), easy to install way for genealogists to move (and sync) their files between more than one computer device. If you haven’t investigated this resource, try installing it on a couple of your computers and see what it can do for you. The public folder allows you to share your ‘stuff’ with others, even non-Dropbox users, as you will have a Dropbox URL for ‘stuff’ in that folder.

For Further Info: Google for: RootsTech 2012 Video “Do I Trust the Cloud?”