

## **Backing Up Data for Students and Staff**

Data storage on your laptop, iPad, or smartphone is unreliable and prone to loss. However, it is your responsibility to maintain access to your data regardless of the condition of your device. Below, we'll discuss methods for backing up your data.

### What should I backup?

As your device has an operating system and set of applications that can be reinstalled after a catastrophe, you shouldn't focus on these items. Instead concentrate on your own personal data or downloaded materials.

I suggest you back-up the following following folders on your laptop:

- Documents
- Desktop
- Pictures
- Movies
- Music

For your phone or iPad, you will want to save any created materials that cannot be reproduced such as:

- Photos
- Videos
- Audio recordings
- Notes
- Materials created with specific apps - e.g. eBooks from Book Creator or Videos out of Aurasma

### How often do I need to back-up?

This is a tricky question. For some methods, backups will happen automatically for you whenever you are connected to the Internet. With others, you will have to do the work on your own which may take some time.

At minimum, you should have monthly backup of your data so at worst you will have to recreate a month's worth of work. Ideally, your backup will be continuous or daily.

### Where and how do I back-up?

First, you will need to choose a location for your back-up: cloud service or physical drive

<b>Cloud Service</b>	<b>Physical Drive</b>
Cloud services are Internet based storage that connect directly to your device to synchronize your data whenever it is online.  Common examples: <ul style="list-style-type: none"><li>• Dropbox</li><li>• Google Drive</li><li>• iCloud</li></ul>	Physical drives are actual storage devices you own and have in your possession. To use them you must connect them to your device.  Common examples: <ul style="list-style-type: none"><li>• External hard drive</li><li>• USB Drive</li><li>• SD Card</li><li>• Network attached storage (NAS)</li></ul>

<ul style="list-style-type: none"> <li>• OneDrive</li> </ul> <p>Notes:</p> <ul style="list-style-type: none"> <li>• Cloud services do not require manual backups because they will synchronize whenever the device is connected to the Internet</li> <li>• They will work between your phone, laptop, and iPad seamlessly</li> <li>• They have free options, but these come with limited storage space.</li> <li>• Annual paid versions are more reliable with more space.</li> <li>• Some will only back up certain folders rather than the whole computer.</li> </ul> <p>Why would you choose it:</p> <ol style="list-style-type: none"> <li>1. It's easy and fast</li> <li>2. Accessible anywhere with an Internet connection</li> <li>3. Automatic</li> </ol>	<p>Notes:</p> <ul style="list-style-type: none"> <li>• You will need to manually backup your data to these devices unless you are running a backup program like Time Machine</li> <li>• They will all cost money, but the cost is a one-time purchase price rather than a subscription fee</li> <li>• You will need physical access to the device (or the network in the case of the NAS) to complete the backup/retrieval.</li> <li>• NAS may be difficult to set up.</li> </ul> <p>Why would you choose it:</p> <ol style="list-style-type: none"> <li>1. You have 100% control over the data</li> <li>2. Cheaper in the long run</li> <li>3. The back-up is more permanent</li> </ol>
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**NOTE:** For ease of use, I would suggest students and staff use a **Cloud Service** for their daily back-up needs. For a long term or historical copy of work, I would suggest you buy a USB drive or hard drive and use it only when needed.

### Which Cloud Service should we choose?

There are four main options when selecting a cloud service:

#### 1. [Dropbox](#)

Dropbox is the most popular cloud service on the market today. It is fast and reliable, easily installed on all devices.

On your laptop, it will create a folder that is constantly synchronized with an online account. If you ever need access to your account, you can install Dropbox on another computer or log on online.

For your phone or iPad, Dropbox has an added feature of automatically backing up photos and videos taken with the device.

**DRAWBACKS:** The free version will only give you 20GB of storage with no recovery control (i.e. if you delete it, it's gone forever) and it will only backup a single folder on your computer rather than the folders listed above.

**SUGGESTION:** If you choose to go with Dropbox, plan for the additional storage (1TB of storage) which will include retrieval of deleted items. Further, look into ways to use Time Machine or another back up service to back up to your dropbox account.

## 2. [Google Drive](#)

Google Drive is a cloud storage service connected to the Google family of products (Docs, Sheets, Slides, etc). It works nearly the same as Dropbox, with the same functionality and limitations.

Google Drive will work across devices and offer online access to your folders and files. It will not automatically copy photos and video from your phone or iPad.

DRAWBACKS and SUGGESTION: See Dropbox.

## 3. [iCloud](#)

iCloud is Apple's Cloud Service built into all of its operating systems. You can use iCloud to store all of your personal data and access it between Apple devices.

It will back-up the folders listed above without special configuration or the use of Time Machine. Further, you can use iCloud to store your messages, web history, and passwords stored on your Apple devices.

DRAWBACKS: It will only work on Apple devices. Further, it's initial storage is quite small (5GB).

SUGGESTIONS: If you own an Apple device, use iCloud's free service as a supplement to using Dropbox or Google Drive. If you plan to use as a primary device, buy the paid version.

## 4. [OneDrive](#)

OneDrive is Microsoft's Cloud Service and it combines several of the features of Dropbox, iCloud, and Google Drive.

It will backup and synchronize a single folder on your laptop, phone, or iPad. It is connected to a Office365 suite of services (like Google Drive), and it works quite well with the Windows operating system.

It's free version offers 1TB of storage.

DRAWBACKS: See Dropbox, except the storage size is not an issue. It does not run on Mac OS X, though it will work as an app on an iPhone, Android Phone, or iPad.

SUGGESTIONS: Use it as your backup option if you are using a Windows based laptop. Don't consider it if you are on an Apple.

### Are there other things that can be backed-up?

Beyond your data, several programs and apps will synchronize your device usage that will make recovery easier if there is a disaster.

- [Google Chrome](#) - If you use Chrome as your web browser on all your devices you can share pages and history between the devices, even if you close the window or tab. This requires you to logon to your Google account from each device.
- [LastPass](#) - LastPass is a password storage and generation service that helps you keep your password stored in a central location. It will synchronize between your

devices so you won't have to remember your username/password for a site or service after you first input it. It will also generate complex passwords for you (and store them) if you need additional security.

- [Diigo](#) - Diigo is an online bookmarking and annotation system for websites and PDFs. You can save important sites and take notes on them then share them between your devices.
- [Evernote](#) - Evernote is a note taking system that synchronizes all of your notes to a cloud based account similar to how dropbox operates. Your notes are then available on any device or on the web.
- [Wunderlist](#) - A simple, yet powerful, cloud based to-do list app that synchronizes your lists between devices and the web. It will also allow you share lists with others and tie into your calendar.

#### Other resources

Here are some links for further information on backing up your data:

- [7 Backup Strategies for Your Data, Multimedia, and System Files](#)
- [Students: how to back up your work](#)