

# Backing up Your Data



Backing up your data is the practice of making a copy of that data so that you can restore it in case the original data is lost. Backups can be used to restore an entire hard drive or to restore a smaller number of files that may have been accidentally deleted or corrupted. It is always a good practice to regularly back up data that is stored on your computer.

## Why do I need a backup?

1. **Data loss prevention** - Hard drives crash. Files can accidentally be deleted or become corrupt. Viruses can corrupt or delete files. Computers can be lost or stolen.
2. **Save Time** - If a file is lost or corrupted it can be recovered from the backup, rather than need to be recreated, saving countless hours.
3. **Peace of Mind** - Regular data backups lead to peace of mind. In the event, a cybercrime, system crashes, or other disasters occur, there is a backup ready to go to.

## Backup Options

- **Cloud Storage** - As a Google Education Campus, CIT recommends using Google Drive File Stream to store your files in Google Drive. This application allows you to quickly access all of your Google Drive files on demand, directly from your computer. See our Self Help guide on [installing and configuring Google Drive File Stream](#). CIT will also support other cloud storage offerings from Google and Microsoft.
- **External Hard Drives** - You can use macOS's [Time Machine](#) or Windows' [File History](#) feature to back up data to external drives that are large enough to back up your entire computer. Many external drives also come with additional software to help you manage and schedule regular backups. External drives can be stored at an offsite location to protect them from physical damage that might be caused by a fire or other disaster.
- **USB Flash Drives** - Flash drives are small, portable and can be reused many times, but they also offer significantly less storage space than other backup options. They are also much easier to lose or misplace. You can copy files to a flash drive by inserting it into a USB port on your computer and dragging and dropping the files you want to copy to it.
- **DVDs** - DVDs are physical media that you can use to backup data. A DVD can hold either 4.5 GB (single-layer DVD) or 8.7 GB (double-layer DVD). It is possible to use multiple DVDs to back up all the data on your computer, but it is a time-consuming process. You will need a writable DVD drive in order to copy data to a DVD. If your operating system does not support drag-and-drop DVD writing, you will also need to install a separate software program that allows you to copy your files to DVD.



Please [contact the CIT HelpDesk](#) if you have any questions about establishing a backup plan.

## How frequently should I back up my data?

How often you back up your data is important to you. As a general rule of thumb, consider backing up your data as soon as you have created enough new files or made enough changes to existing files that it would be difficult to recreate them if they were lost.

## What data should I back up?

At the very least, you should back up files that are frequently changed, especially if they are important to you (e.g., term papers, resumes). You may also want to consider not only the documents folders where you store the files you create, but also your Web browser bookmarks, contacts databases, and files stored on your desktop. It's generally not practical to back up copies of programs you have installed, but you should always make sure you keep the installation disks or files so that you can reinstall those programs if necessary.

## Related Articles

- [Backing up Your Data](#)
- [Comparison of File Storage Services](#)
- [Google Backup and Sync](#)
- [Google Drive File Stream](#)
- [Microsoft OneDrive](#)

## More Help

For questions, contact the CIT HelpDesk by calling (585) 245-5588, or visiting our [online service desk](#).

