

Why Would I Want Storage in the Cloud?

- Access using multiple devices you own, eg. desktop and mobile devices.
- You don't need to carry your files around with you eg. on a thumb drive. All you need is access to an internet browser, and your Google login credentials
- Sharing your files/folders
 - Features: view/edit, link, expiring links (with paid subscription)
- Backup
 - Computer files/folders
 - Camera roll (cellphone, tablet)
 - Automatically backing up my phone and tablet
- Chromebook
 - Google Drive is built-in to Chromebooks, so your files and photos are automatically backed up. You'll get 100GB of free storage for two years with most new Chromebooks

Google Drive: Overview

- Google “office”
 - Docs: formats and templates
 - Slides: creating a presentation, importing a PowerPoint presentation
 - Offline support
- Comparison to other cloud storage offerings (OneDrive, Dropbox)
- Folders and files: setting up shared folders and files
- Documents: scan, convert to PDF and store in My drive
- Demo
- For More Information (helpful articles)

Features of Google Drive

- 15G of free storage to use across Google Drive, Gmail, and Google Photos
- Free, web-based software office suite
 - with limited offline support
- Unlimited storage for "High Quality" photos
- Integrated with Android devices (backups, photos)
- **Backup and Synch** client (Windows, Mac)

Google Office

- Free, web-based software office suite offered by Google within its Google Drive service
 - Docs, Spreads, Slides, Forms, Drawings
- Create, edit, and format Google Docs, Sheets, and Slides

- Create from blank or template
- Revision history
- Work with Microsoft Office files
 - Able to read/edit Microsoft formats (See *Work With Office Files: Compatible file types*)
 - To edit an Office file, you can either:
 - Edit the file using Office Compatibility Mode (OCM)
 - Convert the file to Google Docs, Sheets, or Slides.
 - Once you've edited a Google Docs, Sheets, and Slides file, you can then save and export it as an Office file

Demo

- Disclaimer: This is not a tutorial on using Google office! (Or other Google Apps)
 - Over 100 Drive apps can help you do more with your stuff. Try them by installing one from the [Drive collection](#) in the Chrome Web Store.
- Open Google Docs ([link](#))
 - formats and templates. Note Template gallery
 - Revision history, eg. Chromebooks doc
- Similarly, open Spreads ([link](#)) or Slides ([link](#))
- Slides: creating a presentation, importing a PowerPoint presentation

Comparison of Cloud Storage Offerings

	Google Drive	Microsoft Onedrive	Dropbox
Free storage	15G to use across Google Drive, Gmail, and Google Photos	5G	2G
Cost for more storage	110G, \$2.79/mo 200G, \$3.99/mo 2T, \$13.99/mo	100G, \$2/mo 1T, \$8/mo (comes with Office 365 Personal)	5T, \$17.50/mo
Access (web, client, mobile)	Web - Use Google Chrome for ease of use Client - Backup and Synch (for Windows, Mac) Mobile - included on Android devices? just called "Drive"?	Client - Windows 10 includes the client Windows, iOS, and Android	Client - Windows, Linux, iOS Mobile - Android, iOS (Free subscription is restricted to 3 devices (client or mobile))

Notes:

- Files/folders that someone shares with you do not count against your allocation
- Google Drive - some files do not count against your storage allocation quota
 - Google Docs, Sheets, Slides, Forms, and Sites don't take up storage space. (Hover over "-" in size column for explanation.)
 - "High Quality" photos; whereas original quality (full resolution) counts against your quota
 - Unlimited free storage
 - Photos are compressed to save space, using Google's clever image compression algorithms
 - If a photo is larger than 16 MP, it will be resized to 16 MP.
 - Videos higher than 1080p will be resized to high-definition 1080p. A video with 1080p or less will look close to the original.
 - When you upload photos/videos to Drive it is a real file storage, except when you upload through "Backup & Sync" with the setting "High Quality" in Backup & Sync on that computer. (Whew!)
 - Files that are removed stay in Trash and count against your storage allocation quota. Use "Delete forever" or "Empty trash" to free up storage.
- Option for annual payments, eg Microsoft \$79/yr instead of \$8/mo
- OneDrive is built into Windows 10, and you can find your OneDrive files through File Explorer. You can also get the OneDrive app from Microsoft Store.

Demo

- Google photos: ([link](#))
 - Settings, "Upload size for photos and videos"
 - Converting from "Original size" to "High Quality" - initiate compression

Using Google Drive

- My Drive / Shared with Me
- Upload files and folders to Google Drive (My Drive)
 - explicitly or using Backup and Sync
- Viewer for PDF files, photos and other images, text, archives (eg. Zip, tar)
- Player for movies, music
- Relationship between Google Drive and Google Photos
- Scan all your paper documents with Drive for Android. Just snap a photo of documents like receipts, letters and statements – and Drive will store them instantly as PDFs.
 - Optical Character Recognition; open pdf with Google docs

Demo

- Open Google Drive ([link](#)) or use the Google Apps icon
- Look at:
 - My Drive
 - Shared with Me

- Trash
 - Backups
- Hover over "-" in size column for explanation.
- Scan to pdf using phone (In Drive, click on + (Create new)), open pdf with Google Docs
- Google Photos - Upload from Drive

Sharing

- You can share the files and folders that you store in Google Drive with anyone.
 - you can control whether people can edit, comment on, or only view the file
 - Except ... If you share with an email address that isn't a Google Account, they'll only be able to view the file.
 - If you want anyone on the internet to search for, find, and open your file, you can publicly share a file
- Shared with Me
 - Files/folders that someone shares with you do not count against your quota

Demo

- Share a file/folder
 - Email sent to the other party to let them know

Offline

When you are not connected to the internet

- No magic! Must have local copy of the files.
 - Eg. Install the **Backup and Synch** client for Windows 10, or
 - Explicitly download the files you want to work with
- Built-in support for Google office
 - Download the **Google Docs Offline Extension**. Chrome allows you to install browser extensions that add new features and enhance your overall experience. For offline access, this extension will let you use Google Docs, Slides, and Sheets even when you lose internet access.
 - Flip "**Available Offline**" switch on individual files
 - Google will also download some of your most recent files so you can edit them even if you don't already have them open. For older files, however, you'll need to download them beforehand.

Demo

- View local copies of files in File Explorer
 - Note that Google docs, spreads, slides are just links
- Settings

- Click the hamburger menu in the top-left corner of the screen, select Settings and enable the Offline toggle.
- Flip "**Available Offline**" switch on an individual file
- Open Google Docs, open a doc. Now, even if you lose internet, you can continue editing the doc. Changes will be synched when your back online.

Google Account

- If you have a gmail address, then you have a Google account, with access to the following services (and more):
 - Gmail and Calendar
 - Google Drive, with its office suite (Docs, Spreads, Slides, Forms, Drawings)
 - Google Photos
 - YouTube (for uploading videos)
 - Google Play (store for apps, books, movies, music)
 - Google News

For More Information

- Explore the Storage Features of Drive ([link](#))
 - This is a good introduction to Google Drive
- How to Use Google Drive ([link](#))
 - Covers use on computer, Android, iPhone and iPad
- Share files from Google Drive ([link](#))
- Use Google Files Offline ([link](#))
 - Covers offline use on computer, Android, iPhone and iPad
- How to Set Up and Use Google Docs Offline ([link](#))
- Work With Office Files ([link](#))
- How to Use Google Slides ([link](#))
- Google Photos "High quality" vs "Original": What's the difference and should you care ([link](#))
- Changing how Google Drive and Google Photos work together (Jun 12, 2019, [link](#)) ([guide](#))