

# **Cloud Drives, especially Google Drive**

**Also Google Docs, Sheets, and Slides**

# Cloud Drives

- **There are many vendors of cloud drive services**
- **I use:**
  - **Google drive (personal, consulting group, church)**
  - **Microsoft OneDrive**
  - **Elephant Drive**
  - **Apple iCloud Drive**
- **Many other vendors, e.g. Dropbox, Box, Amazon Cloud Drive**

# Cloud drive uses

- **Offsite backup; disaster insurance**
- **Supplementary storage capacity**
- **Cross platform accessibility: PC, Mac, iOS, Android**

# Cloud Drive Horror Story

- **Used Mozy backup to backup NAS used for PC backup**
- **Drive failed, RAID controller copied failed drive to second drive**
- **Mozy backup of device had been terminated without notification**
- **With difficulty was able to recover files using a combination of file recovery software on failed drive and an old backup on a lab PC.**
  
- **MORAL#1: Stay current on status of cloud drives. Make sure cloud service provider stays in business!!!**
- **MORAL#2: Backup your backups, and backup the backup of the backup**

# Cloud storage comparison

	OneDrive	Dropbox	Google Drive	Box	Amazon Cloud Drive
File size restrictions?	10GB	10GB with website, none with Dropbox apps	5TB	250MB for free plan, 5GB for paid personal plan	2GB*
Free storage?	5GB**	2GB	15GB	10GB	No***
Can I earn extra free storage?	No**	Yes	No	No	No
Paid plans	\$2/month for 50GB**	\$10/month for 1TB	\$2/month 100GB, \$10/month for 1TB	\$10/month for 100GB	\$12/year for unlimited photos, \$60/year for unlimited files
OSes supported	Windows, Mac, Android, iOS, Windows Phone	Windows, Mac, Linux, Android, iOS, Windows Phone, BlackBerry, Kindle Fire	Windows, Mac, Android, iOS	Windows, Mac, Android, iOS, Windows Phone, BlackBerry	Windows, Mac, Android, iOS, Kindle Fire

<https://www.cnet.com/how-to/onedrive-dropbox-google-drive-and-box-which-cloud-storage-service-is-right-for-you/>

# Google Drive

- **15 GB free**
- **\$2 / month for 100 GB**
- **I have free Google drive for personal use, my wife has one for her personal use**
- **We have a 100 GB \$2 / month for cloud backup of data for Lowell Consulting Group**

# How to use Google Drive

- **Sign up for Gmail**
- **Sign up for Google Drive**
- **Download Google Drive for PC**
- **Google Drive shows as a folder on your PC**
  - **C:\Users\Bob\Google Drive**
- **Files copied to Google drive folder are synced to the cloud automatically**
- **Files added to Google Drive from other devices automatically synced to Google drive folder on PC**

# Example: Lowell Consulting Group

- **We have very large number of small data files from performance testing of devices**
- **We use Second Copy to automatically copy in real time the folder containing the data file folders to the Google drive folder on the PC.**
- **Google Drive syncs this folder to the cloud so that we all can access the data from our PC's, Mac's and phones from wherever.**



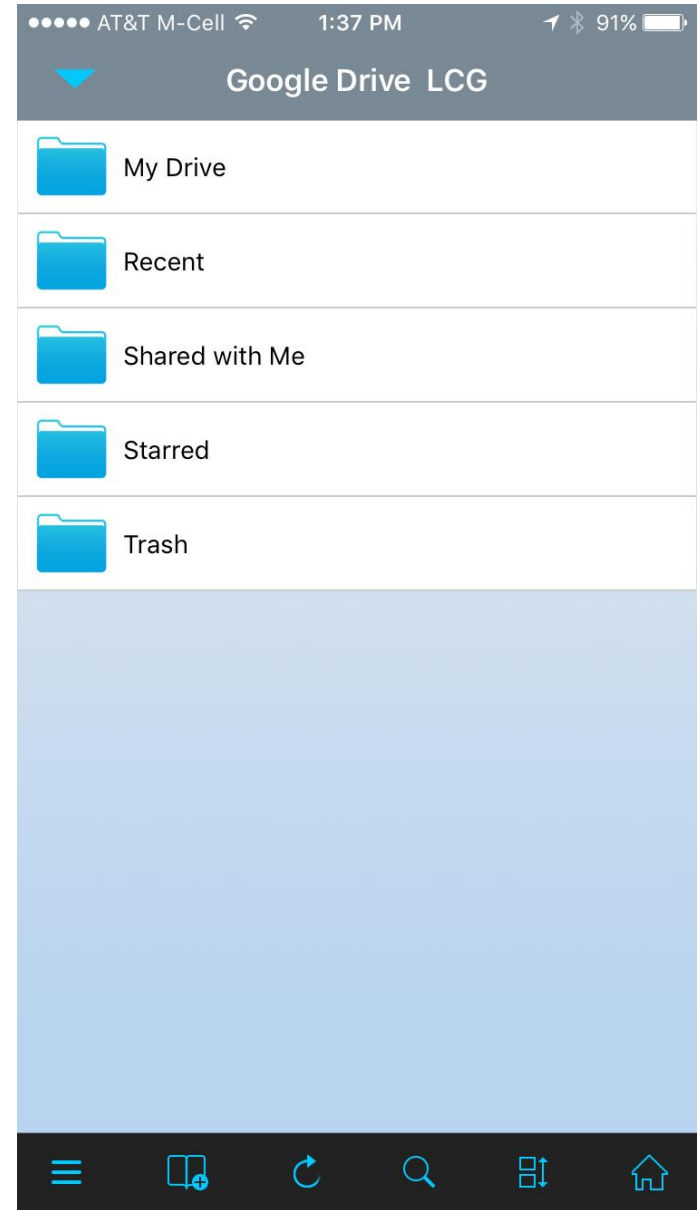
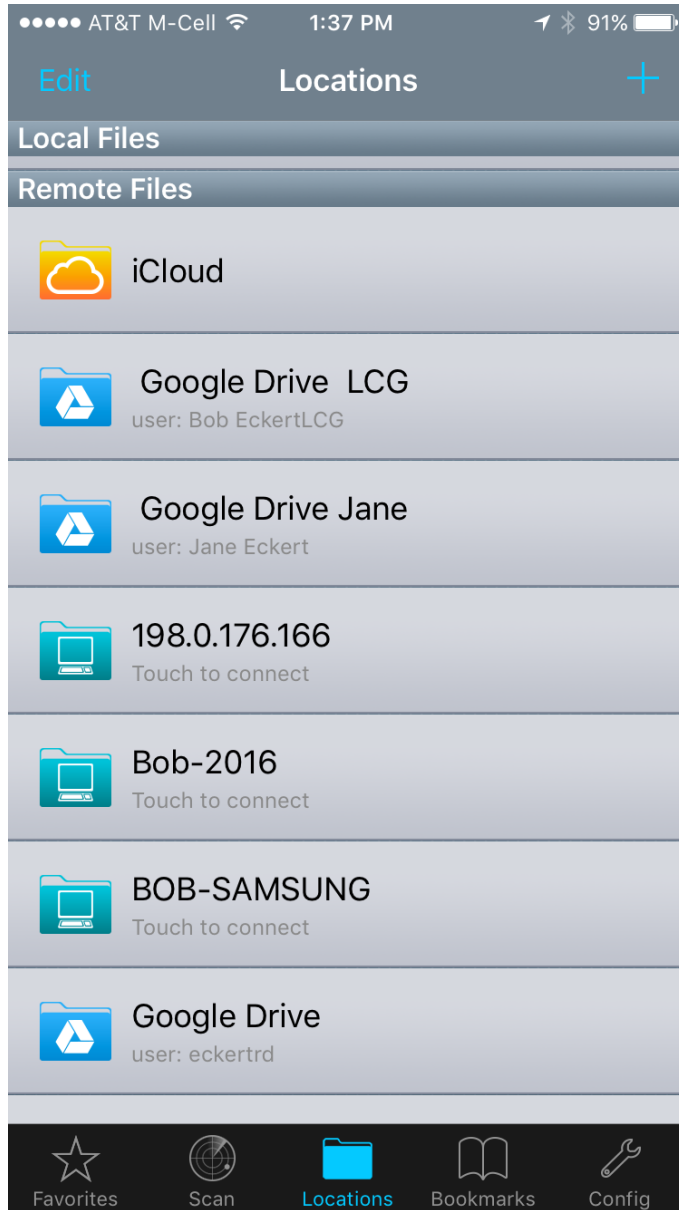
# Accessing Google Drive

- Folder on PC
- Website
- App on iPhone, iPad
- Limitation: can only see one Google Drive at a time.
- On PC, ExpanDrive (\$49.99 single user, multiple PC's) allows mapping of multiple Google Drives
- **DEMO**

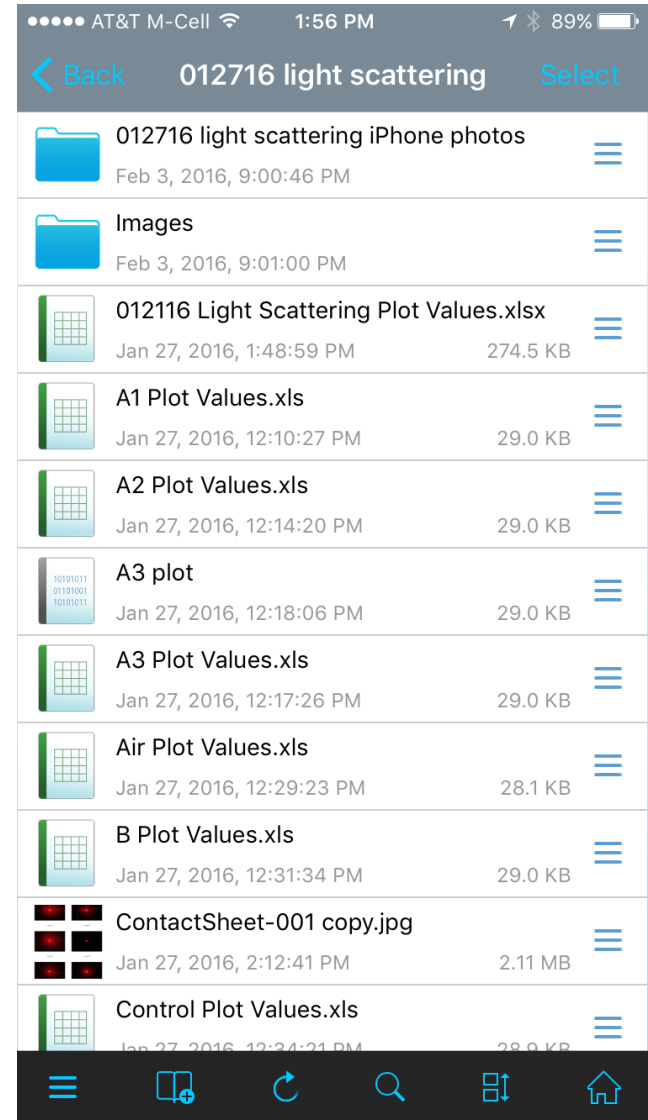
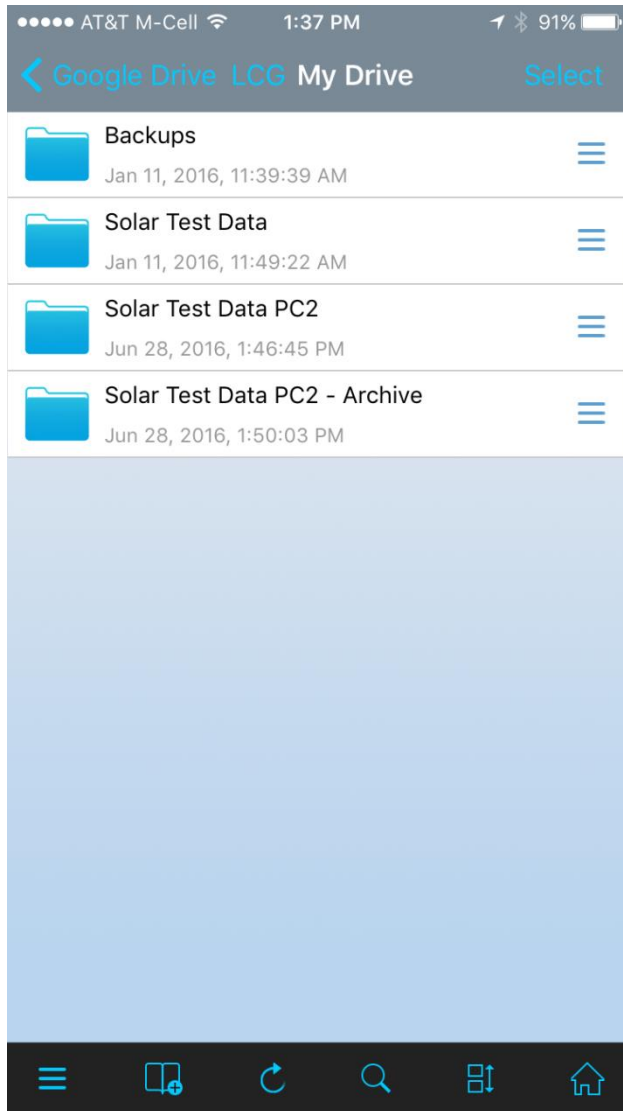
# Accessing Google Drive

- **iPhone, iPad app FileBrowser (\$5.99) removes one Google Drive limitation (and allows two way file transfer between iOS devices, cloud drives and PC's)**

# FileBrowser iPhone interface



# FileBrowser iPhone user interface




# Google docs

The screenshot displays the Google Docs web interface. At the top, the browser address bar shows the URL <https://docs.google.com/document/d/1nFHhRjro8kYeHKtcsGZrGQA8nMJA>. The document title is "Untitled - Google Docs". The menu bar includes "File", "Edit", "View", "Favorites", "Tools", and "Help". The document's main menu includes "File", "Edit", "View", "Insert", "Format", "Tools", "Table", "Add-ons", and "Help". The status bar at the top right shows the user "eckertrd@gmail.com" and buttons for "Comments" and "Share". The toolbar contains various editing tools such as undo, redo, bold, italic, underline, text color, background color, bulleted list, numbered list, indent, and link. The document content includes the following text:

This is a test document generated 09/12/2016 as a demo for the Lexington Computer Club meeting on 09/28/2016.

Just as in Microsoft Word, you can insert pictures, spreadsheets, etc.  
This is a photo of Salkantay Pass in Peru:



Obviously, you can change the font.

The footer of the document shows the date "9/28/2016", the name "Bob Eckert", and a zoom level of "100%".

# Google Docs basics

- Get to Google Docs:
- <https://www.google.com/docs/about/>
- Click button; sign in if not already.
- Default save location is your Google Drive
- Can download as MS Word file
  
- **DEMO**

# Collaboration tools

- Can share files and folders

[https://support.google.com/docs/answer/2494822?hl=en&ref\\_topic=4671185](https://support.google.com/docs/answer/2494822?hl=en&ref_topic=4671185)

- Google Docs can read and write MS Word .doc and .docx files
- Limitation: MS Word, Excel macros will NOT run in Google Docs, Sheets