



Beginning Genealogy: Session 3 Digital Methods

CHATHAM COUNTY PARKS AND RECREATION
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Homework review

- Homework from last session:
 - Describe your filing system for files and photos.
 - Decide how you will digitize the materials you have on paper.
 - What issues did you encounter?
 - What did you learn?
 - What holes did you find in your family history?
-
- Any questions on topics from last session?



Your Session 3 objectives.

- Understand common characteristics of desktop genealogy software (DGS).
 - Comparison of desktop genealogy software (DGS).
- Understand photo metadata and organization.
- Devise your schema to back up your paper and data.
- Understand genealogy collaboration and cloud storage.

Ask questions throughout!



Why buy Desktop Genealogy Software?

- In this presentation, we abbreviate this as DGS.
- DGS is not Ancestry.com, FamilySearch.org, or any other online place you might keep your family tree.
- DGS lives on your computer, on your hard drive, where you control the data and all changes made to it.
- DGS lets you get information from multiple sources, plus your own research, and bring it together in one place.

Discussion: What is the class using now?



All DGS should let you:

- Build your family tree, adding relatives and all details.
 - Produce built-in family and pedigree charts, at least minimal reporting/ charts and the ability to import and export data.
 - Should have robust ability to document and cite sources.
 - Add media and link to facts, to include pictures, documents, videos and perhaps sound clips (interviews).
- Store, or link to, your DNA test results.
- Show your family facts on a map.
- Publish your results.
- Get tips/ web hints from major databases, e.g., Ancestry and Family Search.
- Run Windows-only programs on iOS with a wrapper like Crossover, and some make it easier.



How does your DGS handle media?

- In this slide, media means all the exhibits you've collected in your family history files.
 - Photos, census images, draft cards, property records, wills ...
- Does the DGS embed the media in the family history data file or link to an external file?
 - Roots Magic links only and can repair broken links.
 - FTM mostly embeds but can link. FTM likes to put all media in a single folder on your hard drive.
 - Family Historian wants to put media in folders below the project.
 - Others?
- Embedded files don't export to GED. The links for linked files do, but not the files.

Discussion: How does your program handle media?

DGS: Family Tree Maker

As of 9/8/2021

Platform	Windows and Mac OS 10.10+
Website, version, price	https://www.mackiev.com/ftm/ . FTM 2019. \$79.95. No trial version.
Pro's	Easy entry of information, so good for beginners. Download info directly into your tree from Ancestry and Family Search. Sync's with up to three Ancestry trees, making collaboration very easy. Can include same sex marriages.
Con's	Not so excellent source and citation capability. Cannot control person reference ID's. Downloads all media to a single directory. Purchasing from MacKiev web site is convoluted.
Unique (mostly) features	Extremely tight integration with Ancestry.com Can undo last 1000 changes. Free cloud back-up for first year, then subscription.



DGS: Roots Magic

As of 10/10/2021

Platform	Windows and Mac (iOS 10.12+, native)
Website, version, price	https://www.rootsmagic.com/RootsMagic/ . Ver 8 released within the last two weeks. \$34.95. RM Essentials free forever, with some limits. RM To Go will fit on a USB flash drive.
Pro's	Reusable source citations. Can control person reference ID. Can have more than one database open at a time and compare two trees. Can handle any type of parental partnership/ family.
Con's	Charts are less wonderful. New interface in v8 is unproven and some features still being developed. Support forum only on Facebook, but one can open a ticket.
Unique (mostly) features	OpenSQL database lets advanced users manipulate data in bulk. Free online web site for your family tree.

DGS: Legacy Family Tree

As of 9/8/2021

Platform	Windows only
Website, version, price	https://legacyfamilytree.com/ . Ver 9. Download program for \$34.95. Many bundles with different options. Standard version is free, Deluxe version has all features.
Pro's	Embedded browser. Great ability to document sources. Can customize your interface and many aspects of the program. Excellent GEDCOM import accuracy. Excellent scrapbooking tools and charts, including X-DNA. Can compare two people side by side. Can apply hashtags to people to group them, e.g., all farmers. Supports same sex couples.
Con's	No undo/ redo tool. Very dated user interface.
Unique (mostly) features	Connects to the most online sources. Secure online back-up for family tree.

DGS: Family Historian

As of 9/9/2021

Platform	Windows only.
Website, version, price	https://www.family-historian.co.uk/ . Ver 7 (2021). \$64. 30-day free trial of full version. Several bundles.
Pro's	Lots of chart options. More modern interface with easy navigation. Good for online publishing and scrapbooking. Excellent GEDCOM import accuracy. Compare two trees before merging them. Superior customer response and excellent online users' group.
Con's	Cannot enter DNA results without custom fact. Basic chart designs. Somewhat of a learning curve.
Unique (mostly) features	Connects only to FindMyPast and MyHeritage, so is focused on UK and Europe.

DGS: Family Tree Heritage

As of 9/8/2021

Platform	Windows only
Website, version, price	http://www.individualsoftware.com/?product=family-tree-heritage-gold . Ver 9. \$49 for Gold version, \$29.95 for lesser version. Free 7-day trial at http://www.individualsoftware.com/?page_id=4973 . Older, more limited Platinum version \$29.99 at http://www.individualsoftware.com/?product=family-tree-heritage-platinum-9-2 .
Pro's	- Can make changes/ corrections in bulk. - Easy to cite sources. - Can attach multiple people to same source with ditto tool. - Powerful tools to merge two family trees. - Supports same sex and non-traditional couples. - Can add up to three tags to people. - Work with multiple databases.
Con's	- Cannot sync tree to web. - No mapping feature. - Limited chart choices with plain presentation. - No embedded browser.
Unique (mostly) features	Very good reports and charts.



DGS not covered above

- GRAMPS. Free. Windows, Mac and Linux. <https://gramps-project.org/>.
- The Next Generation (TNG). Requires web space hosting and some tech knowledge.
- Ancestral Quest. <https://www.ancquest.com/index.htm>. Windows and Mac. Free limited version.
- Family Tree Builder. <https://www.myheritage.com/family-tree-builder>. Free. Associated with the My Heritage online site.
- GenoPro. <https://genopro.com/>. Used by many scientific disciplines to map complicated social relationships and genograms.
- Personal Ancestral File. Not supported since 2013 but still active.
- Mac Family Tree. Mac specific.



Metadata

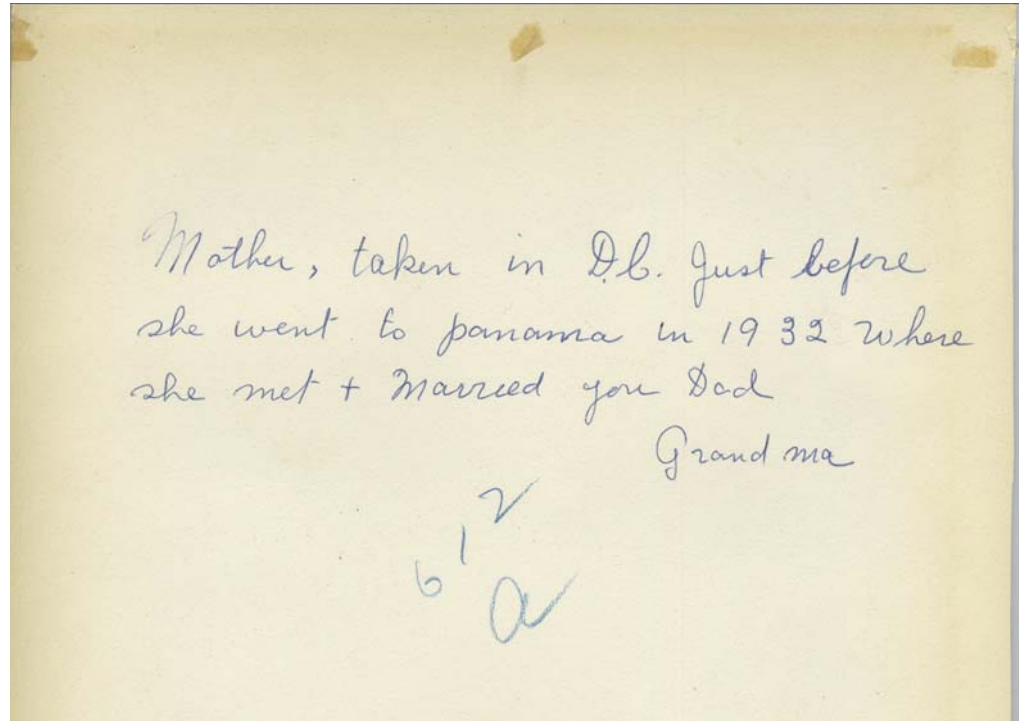


Metadata and media files

- Metadata is information about an item. For example, *YOUR* metadata might be
 - Height, weight, hair color, physical characteristics.
 - Date and place of birth, who are your parents.
 - Where you've traveled.
 - Which sports team you cheer.
- Embedding metadata inside a file means it travels with the file and is less likely to get lost. You can embed nearly any type of information:
 - Names of the people in a photo.
 - Where and when a photo was taken.
 - Copyright notices.
 - Captions written on the back of the photo or the physical album page.



What happens to the writing on the back if the photo is lost?



“Mother, taken in DC just before she went to Panama in 1932 where she met + married you Dad. Grandma”

Info to embed in metadata



- Subject: Margaret Mary Caravas
- Subject's age: about 20 (still haven't found her birth record)
- Date taken: before 1932
- Where taken: Washington DC, near home
- Annotation by Jemima Ritchie Caravas to Lorraine Jean Bush implies biological connection.
- Where photo found: my parents' photo collection in Maryland, and it came from mom's dad.
- Traveling to Panama probably means there is a passenger list to find!

Photo metadata

- Metadata can include:
 - Place and date
 - Camera information
 - People and category tags
 - Captions and comments
- Many digital cameras (including cell phones) record metadata
- Windows lets you read metadata from the file properties
- Many programs, some free, let you read and write metadata.

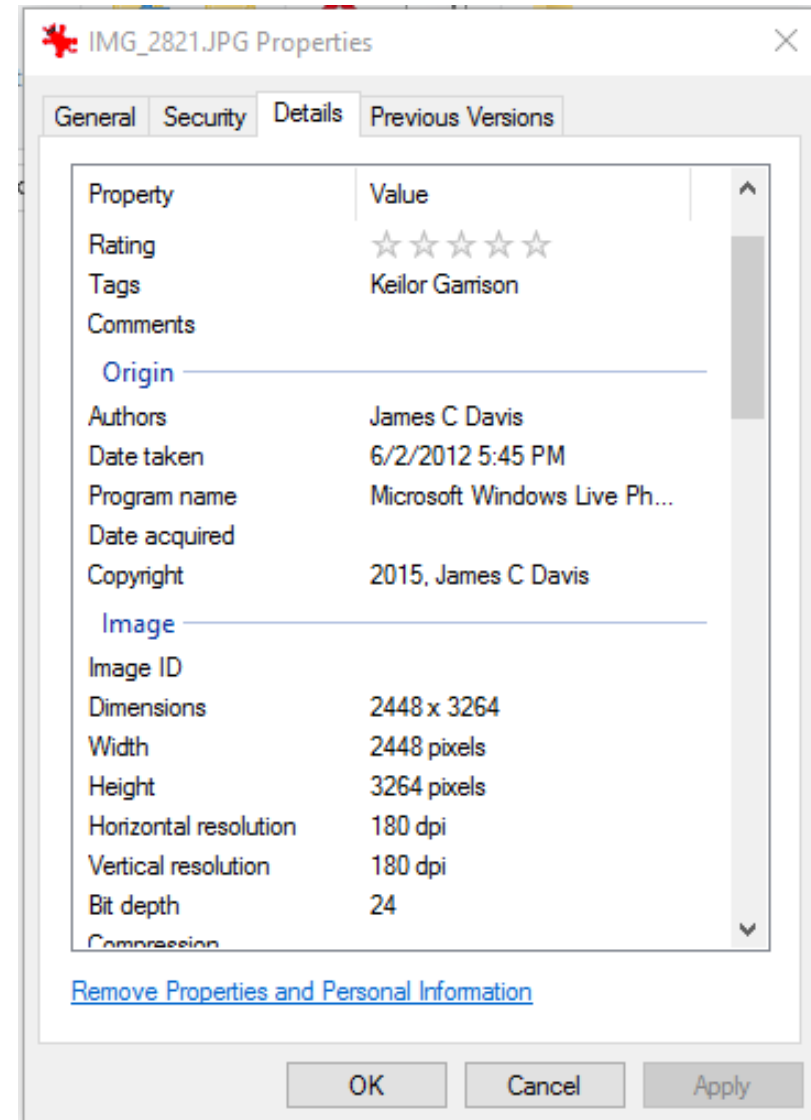




Photo metadata types

- IPTC information overlaps with EXIF, was created in 1990s for all media types and news items.
- EXIF information covers a broad spectrum of info about images sound and tags recorded by digital cameras. Created in 1995. GPS locations written by many cameras, including smart phones.
- XMP is the latest. Created by Adobe in 2001 to standardize digital metadata.
- All metadata is searchable with certain software, e.g., Adobe Lightroom.

Photo metadata read by IrfanView

IrfanView - Image properties

File name: IMG_2821.JPG

Directory: C:\Drive_L\FinalPix\2010s\2012\2012-0602 Prai

Full path: C:\Drive_L\FinalPix\2010s\2012\2012-0602 Prai

Compression: JPEG, quality: 90, subsampling ON (1x2)

Resolution: 180 x 180 DPI

Original size: 2448 x 3264 Pixels (7.99 MPixels) (3:4)

Current size: 2448 x 3264 Pixels (7.99 MPixels) (3:4)

Print size (from DPI): 34.5 x 46.1 cm; 13.60 x 18.13 inches

Original colors: 16.7 Million (24 BitsPerPixel)

Current colors: 16.7 Million (24 BitsPerPixel)

Number of unique colors: 241905 ☐ Auto count

Disk size: 1.62 MB (1,701,138 Bytes)

Current memory size: 22.86 MB (23,970,856 Bytes)

Current directory index: 17 / 56

File date/time: 2/27/2016 / 21:20:33

Loaded in: 140 milliseconds

IMG_2821.JPG - EXIF Info

EXIF Tag	Value
Filename	IMG_2821.JPG
Make	Canon
Model	Canon PowerShot SD1100 IS
Orientation	Top left
XResolution	180
YResolution	180
ResolutionUnit	Inch
Software	Microsoft Windows Live Photo Gallery 1...
Date Time	2012:06:04 16:14:28
Artist	James C Davis
YCbCrPositioning	Centered
Copyright	2015, James C Davis
ExifOffset	2262
ExposureTime	1/100 seconds
FNumber	4.90
ISO Speed Ratings	200
ExifVersion	0220
Date Time Original	2012:06:02 17:45:52
Date Time Digitized	2012:06:02 17:45:52
ComponentsConfiguration	YCbCr
CompressedBitsPerPixel	3 (bits/pixel)
ShutterSpeedValue	1/101 seconds
ApertureValue	F 4.91
ExposureBiasValue	0.00
MaxApertureValue	F 4.91
MeteringMode	Multi-segment

IrfanView - IPTC information

Description Keywords/Categories Credits/Origin Options

File name: C:\Drive_L\FinalPix\2010s\2012\2012-0602 Prairie Home Companion\IMG_2821.JPG (File: 1 / 1)

Document title:

Author (byline): James C Davis

Author title:

Copyright: 2015, James C Davis

Caption: (description)

Caption writer:

Headline:

Special instructions:

Note for batch mode: Same IPTC can be added to all files (see Options-Tab)

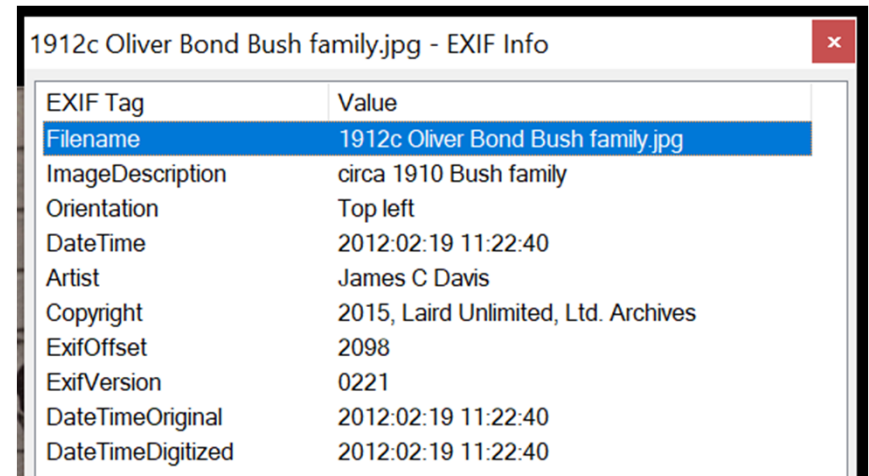
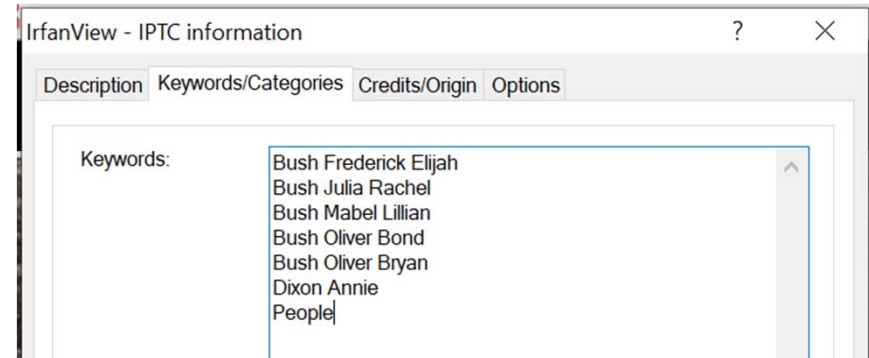
Hint: allowed placeholders: \$D, \$d, \$F, \$N, \$O, \$T, \$U, \$S, \$C, \$Ex = EXIF, \$Ix = IPTC, I

Excellent free image software: <https://www.irfanview.com/>

Metadata example



The Oliver Bond Bush family, 1912





Backing up your digital data (and all that paper, too!)



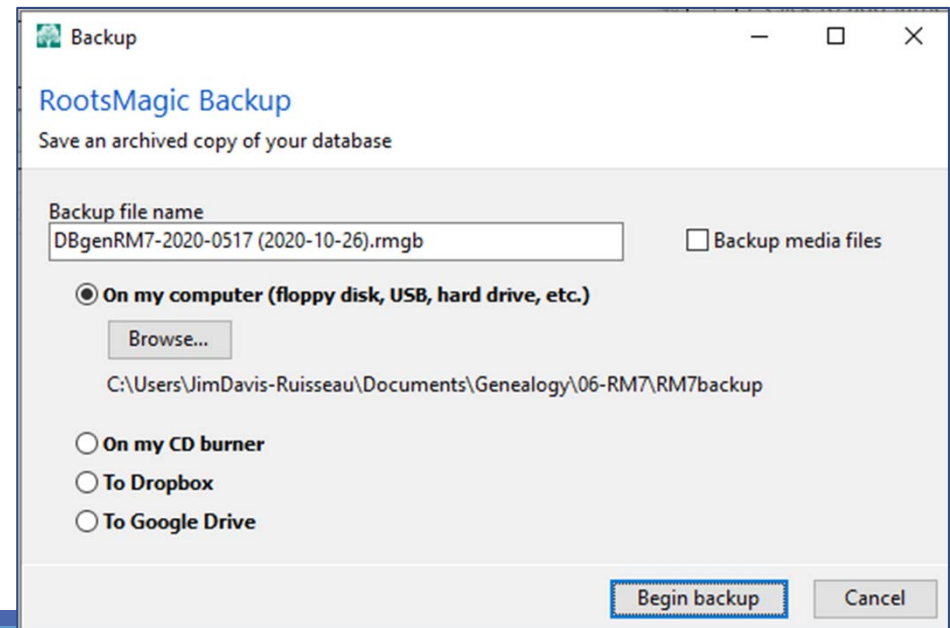
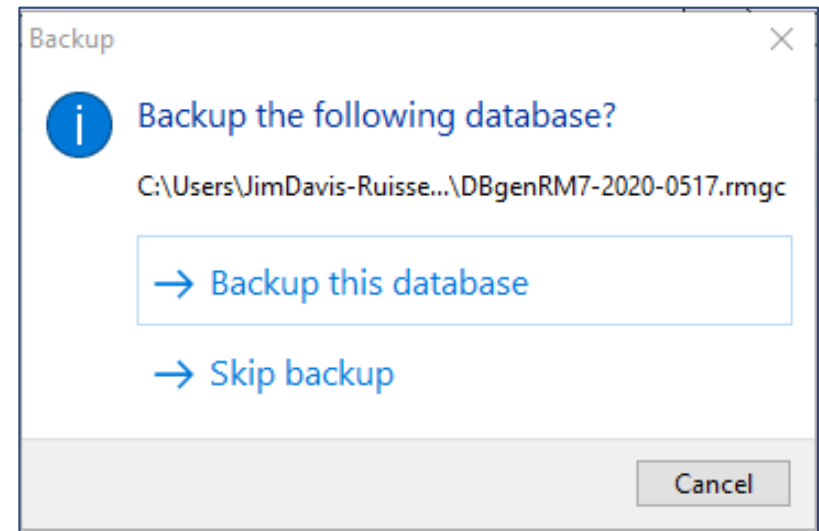
Back-up is terrifically important!

- If your house burns down, all your paper files are gone!
 - You should scan all your paper and save the digital files as described here.
- If your computer crashes, all your digital media is lost! (It might be recoverable.)
- If you're on a road trip with your laptop, what if it gets stolen?

**If you follow a thorough back-up procedure,
your electronic files are still available.**

Very geeky back-up schema

- Level 1: Make a back-up copy of the DGS data file every day.
- When exiting the program, *do* accept the option to make a back-up if you have changed any data.
- If your DGS does not offer the option to back-up, then manually back-up.



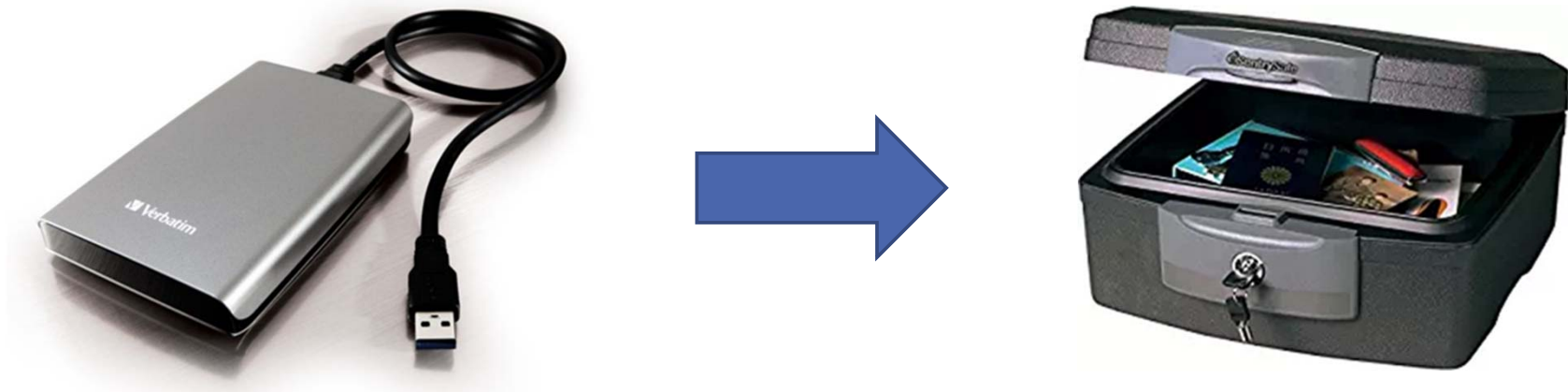
Very geeky back-up schema

- Level 2: Back-up your computer daily to external hard drive.
- A USB flash drive (no moving parts) is convenient and can be stored away from your home.
 - 128GB for \$18, sizes up to about 2TB
- A USB hard drive might store more data, which is useful if you have lots of media.
 - 2TB external drive for \$60, sizes up to 12TB
- A network attached drive can be used to back up multiple computers.



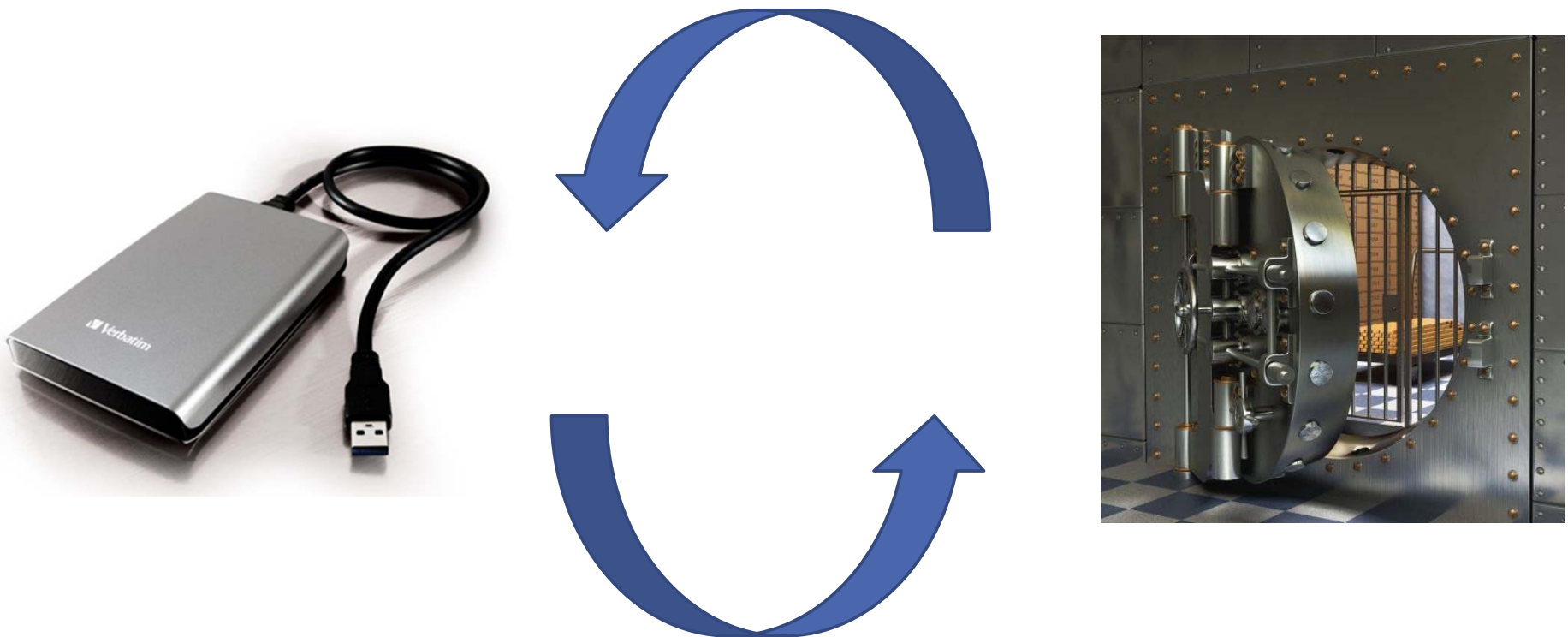
Very geeky back-up schema

- Level 3: Copy the entire contents of the external hard drive to another hard drive not less often than monthly.
- Store the external hard drive in a media safe.
 - Normal fire-proof safes only protect above the combustion point of paper, i.e., 451° Fahrenheit.
 - Media (CDs, DVDs and drives) are damaged between 211°F and 311°F.



Very geeky back-up schema

- Level 4: Rotate the Level 3 external hard drive offsite at least monthly with a second Level 3 drive.
- You want to make sure that your offsite back-up has the latest content.





Encrypt your external drives!

- We presume that you're backing up all your data, such as personal finance, and not just your genealogy data.
- There are several ways to encrypt a drive to protect it from snooping if lost or stolen:
 - Windows 10 Pro includes Bitlocker.
 - Apple provides FileVault and you can encrypt from Finder.
 - Non operating system tools include VeraCrypt for Windows and Kruptos 2 Go for Mac, and there are many others.
 - Some antivirus tools have encryption systems.



Use a password manager!

- If you use a password manager, all you must remember is how to open the password database. You can generate random, complex passwords that are extremely difficult for computers to guess.
- Use random, complex passwords for ALL your online activity!
- Password managers abound and are sometimes provided by your antivirus software. None are perfect.
- Good choices (some free) include KeePass, LastPass, Dashlane, NordPass and Password Safe.

I keep my password database in Google Drive, with an essential key file in Microsoft OneCloud. Highly unlikely that a hacker will get both pieces from different locations and guess my password.

Very geeky back-up schema

- Level 5: Store important data in the cloud. Encrypt the data in transmission and at-rest to prevent hacking.
 - For Google Drive, Dropbox and OneDrive, you have a folder on your hard drive. You copy your files into that folder and the application synchronizes them into cloud storage with a secure connection.
 - Amazon Drive works through your web browser and a certain amount of storage is included with a Prime subscription.
 - Other providers include Spider Oak, Carbonite, Blaze, etc., and carry a subscription cost.

Keep your data safe!





How do you copy files to storage?

- Drag and drop to your external drive or cloud storage folder.
- Use copy tools for incremental back-up.
 - Free File Sync (<https://freefilesync.org/>) has versions for Windows, macOS and Linux.
 - Time Machine for the MAC platform. Built into the Apple operating system.

Most DGS does not work well if data files are used from cloud storage. Use them from your hard drive and copy the file to cloud storage when you're finished for the day.



Sharing with collaborators



Digital genealogy sharing

- Send files and information via email.
- Exchange GEDCOM files, which is an easy way to provide a lot of info quickly.
 - All DGS allows you to export your data to a GEDCOM file and read it into another, but implementation of the standard isn't standard! Example: shared facts.
 - Ancestry lets you export your tree.

Manage your tree

Export your family tree data, as a GEDCOM file, to your computer.

Export tree

- FamilySearch lets you upload a file to preserve an unchanged version but does not support export/ download.



Digital genealogy sharing, cont'd.

- Create a sharable folder or file in the cloud.
 - Remember, “the cloud” is simply someone else’s computer at a physical distance from you.
 - You can share folders in almost all the cloud providers.
 - Share GED files, pictures, documents, etc.
 - It is best not to share DGS data files that are being used. Share copies, not your active file.
- Use OneNote and share a notebook.
 - Lots of text info, embedded pictures, etc.
 - This presentation was developed using OneNote for collaboration, through One Drive.



Digital genealogy sharing, cont'd.

- Provide access to your online tree.
 - Limit access privileges to only those collaborators need.
 - Ancestry allows you to collaborate without synchronization issues.

Manage invitees

+ Invite people

Username	Nickname	i Role	i Living Information	Tools
cwikander1	cwikander	Guest ▼ i	☐ Can see living people	Remove
mymagicbrushes	mymagicbrushes	Guest ▼ i	☐ Can see living people	Remove
swtsherlock	nikki	Contributor ▼ i	☒ Can see living people	Remove
tom_bush3	tom.bush3	Guest ▼ i	☐ Can see living people	Remove
 (has not responded to invite)	biz.davis2012	Contributor ▼ i	☒ Can see living people	Remove Reinvite
Username	Nickname	Role	Living Information	Tools

Save Changes

- FamilySearch uses the model “One Tree to Rule Them All,” so anybody can edit anything.
 - Collaborators won’t be able to see your living people.



Improve collaboration by posting your tree in the cloud.

- Post your family tree online in your own web space using special software like TNG (<https://www.tngsitebuilding.com/>). Complex.
- Many DGS let you post your tree to free web space. See mine at <http://sites.rootsmagic.com/Davis-Boyt/>. Moderate difficulty.
- Post your tree on sites like rootsweb.com.
- Make your Ancestry tree “Public.” Easy.



Time for your genealogy.

- Open discussion and questions.
- Homework for next session:
 - Decide which DGS you will use, if you don't already have one.
 - Decide what you will digitize, and how fast you want the process to go.
 - Speak to your collaborators and decide how you will work together.
 - Evaluate your present back-up schema to see if it is sufficient, and what might change.
- Session 4 covers Basic DNA concepts.



Back-up slides



Genealogy collaboration and cloud storage



Here's what OneDrive looks like.

Quick access

OneDrive

CC AuxComm

Documents

Drive_L_OD

FNP documentation

FoCCL

Genealogy

Library volunteering

Navy images

OCRA documentation

Passports and DL

Radio licensure

ReeceJones

SCORE

USNA-BGO

Ruisseau

3D Objects

Desktop

Documents

Name	Date modified	Type	Size
.tmp.drivedownload	10/9/2020 7:01 PM	File folder	
01-Letters	10/10/2020 9:18 AM	File folder	
02-Cemeteries	10/9/2020 8:04 PM	File folder	
03-People	10/9/2020 6:46 PM	File folder	
04-Books and sources	10/10/2020 9:18 AM	File folder	
05-Places	10/9/2020 7:00 PM	File folder	
06-Clooz	10/10/2020 2:39 AM	File folder	
06-RM7	10/14/2020 4:05 PM	File folder	
07-Forms and templates	10/10/2020 9:18 AM	File folder	
08-Guides and tips	10/10/2020 2:44 AM	File folder	
09-media	10/10/2020 4:01 AM	File folder	
10-Gen files to process	10/10/2020 9:19 AM	File folder	
11-Mindmaps and reports	10/10/2020 9:19 AM	File folder	
12-NGS and NCGS	10/10/2020 9:19 AM	File folder	
13-GSUG	10/10/2020 9:19 AM	File folder	
14-Durell	10/10/2020 9:19 AM	File folder	
15-Ships	10/10/2020 9:19 AM	File folder	
16-Zotero	10/10/2020 9:19 AM	File folder	
17-DNA stuff	10/10/2020 9:19 AM	File folder	
18-Charting Companion	10/10/2020 9:19 AM	File folder	
Gen research tasks.xlsx	9/16/2018 5:33 PM	Microsoft Excel W...	21 KB
Genealogy tips for the new FH.docx	12/26/2019 8:59 AM	Microsoft Word D...	20 KB
Genealogy tips for the new FH.pdf	12/26/2019 8:59 AM	Adobe Acrobat D...	94 KB

Some cloud storage options

Provider	Cost	Comment
Google Drive	15 GB free, more with payment	Shareable, convenient
Amazon Prime	Included with Prime subscription.	Unlimited storage for photos with fast search.
Microsoft OneDrive	5 GB free, more with payment. 1 TB included with MS 365.	Shareable, convenient
DropBox Basic	2 GB free, some advertising freebies, more with payment and inviting others.	Shareable, convenient. Free version on only three devices.
Spider Oak One back-up	150GB, \$6/ mo, \$69/ year.	Very secure
Back Blaze	\$6/ mo, \$60/ year.	Unlimited data storage