

BVCC General Meeting

January 9, 2023

**"Digital File Management Conventions:
Making Files Easier to Find Later"**

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Digital vs Physical Files

- **25 years ago almost all my files & records were physical**
 - Less useful stuff got cleaned up only when I ran out of space
 - Difficult to find anything specific without much time & effort
- **Since 2010 almost all my personal files and records are now digital**
 - All old paper records either digitized or tossed
 - Originals only retained if special legal or historical significance (birth certificates, death certificates, marriage license, wills, etc.)
 - All current financial accounts set for "paperless" mode
 - Gradually digitizing boxes of old family records, photos, slides, negatives, etc passed down from deceased parents & siblings
 - Items that have been inventoried & categorized can actually be found

Digital File Management

- **This is related to Pete's class on "Data: Where Is It and What To Do With It"**
 - **This presentation is more oriented toward useful conventions, while the class deals more with tools and methods Windows provides to get there**
 - **These file conventions are useful on other Operating Systems than Windows**
 - **Your desired conventions may change over time depending on what you are archiving**

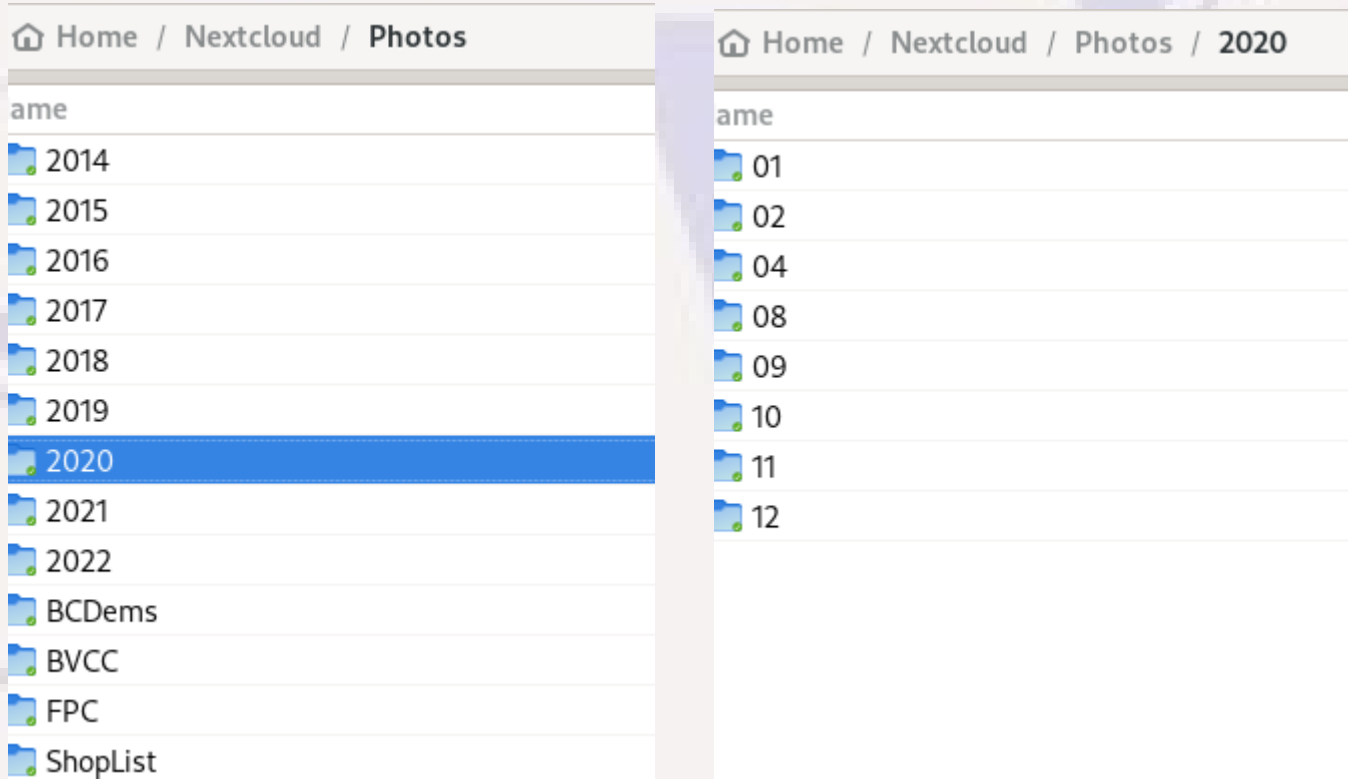
The Problem

- **Applications that save data have default file folder and file naming conventions that may not be that useful**
- **Documents saved from websites have names that are convenient for the website, not necessarily convenient for you**
 - **Documents, Downloads, Pictures folders not sufficiently specific**
 - **default file names may not convey content to you in the future**
 - **It may be practical to examine content manually for 25 files in a folder to find something; for 100 or more files this is definitely not the best approach.**
 - **Need to use conventions that make it easier to find things**

Presentation Comments

- **The slides from this presentation will be made available on the BVCC website (bvcomputerclub.org) under menu item Information ► Presentations**
- **Most of the images of folders and files names are from "Files" on a Fedora Linux system, the Linux counterpart to the Windows File Manager. The naming and organizing concepts are independent of the Operating System.**
 - **Linux has better default support for mass renaming of files and using arbitrary Unicode characters (◊, ★, π) in names, but there are ways of doing this in Windows as well.**

Sub-Dividing into Folders Can Help



- Divisions Can be based on Time, file content, or both
- My iPhone puts photos in cloud storage in year, month, and day folders

But Default File Names May Be a Problem

- **How to locate specific content out of 40 time-stamped items**

Home / Nextcloud / Photos / 2020 / 02

ame

20-02-08 07-54-47 2719.jpg

20-02-19 09-06-08 2722.jpg

20-02-21 10-09-15 2724.jpg

20-02-21 13-58-17 2727.jpg

20-02-22 09-51-31 2731.jpg

20-02-22 09-51-31 2732.jpg

20-02-22 09-51-32 2733.jpg

20-02-22 09-51-32 2734.jpg

20-02-22 09-51-53 2735.jpg

20-02-22 09-51-53 2736.jpg

20-02-22 09-52-18 2737.mov

20-02-22 09-55-11 2738.jpg

20-02-22 09-56-40 2739.jpg

20-02-22 11-03-11 2741.mov

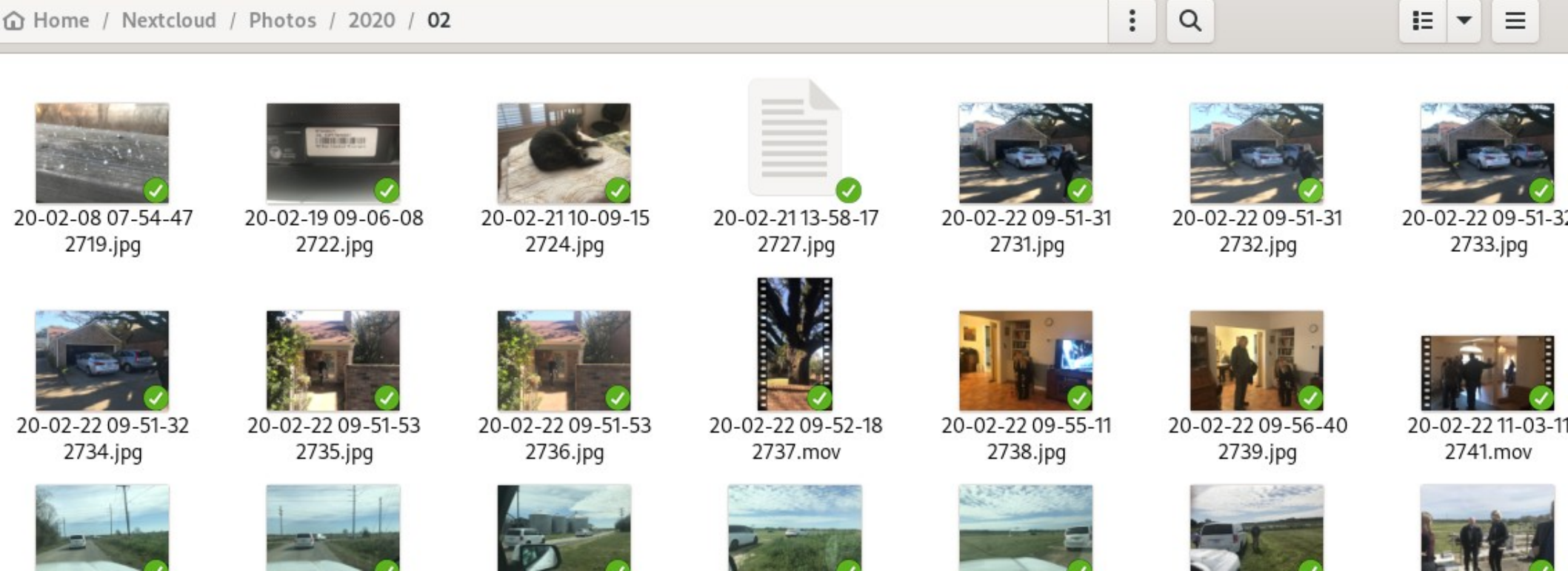
20-02-22 11-41-03 2742.jpg

20-02-22 11-41-05 2743.jpg

20-02-22 11-42-20 2744.jpg

Changing to a Icon/Thumbnail List May Help

- Can be useful for pictures, but difficult to distinguish subjects – less useful for documents with fine details



Using File Names to Convey Content

- Name can include date, subjects, location, etc. – things that might be useful in search for a specific item
 - Should embedded blanks be used? Recommend avoiding blanks and using period (.), hyphen (-) or underscore (_) instead
 - Use of Upper/Lower case – Windows is case-insensitive but case-persistent. Case can be used to make names more readable (ajem1-003-1944-Alice_Cathy_Alicia@WashDC.jpg). Windows considers two folders or files with identical characters except for case differences to be identical and disallows. Avoid using names on case-sensitive systems (Linux) that would conflict on Windows.
 - Characters disallowed or to avoid in folder or file names –
* ? / \ < > " | :
 - Unicode special characters are allowed in file/folder names in Windows, but must be copied and pasted from "character map" App (has a limited selection) or a general Unicode character inserted into a Word or Wordpad document as nnnnALT+x and copy/pasted from there. Interesting examples: 2bd1ALT+x which gives ◊ (? inside a lozenge) or 25caALT+x which gives ◊ (also in character map app).
 - Linux support for Unicode much better: implemented on the desktop level as CTRL+SHIFT+unnnn(space) and works everywhere, not just in specific apps. Have found ◊ useful to insert as a placeholder in a name for "unknowns": Example of naming an image file where some people were unknown:
ajem1-016-1974-12-30-Liveseys.Cate.Miriam.◊.◊.◊.George@816.jpg
 - Both Windows and Linux allow searching of directories and sub-directories for all directories or files containing a specific character string.

Although There Is No One “Right” Way...

- **I would Highly Recommend as part of file name**
 - If document is associated with a specific date: `yyyymmdd` with optional separator char, or possibly `yyyymm`, or `yyyy`, or `yyyy-yyyy` depending on exactness of date.
 - Something that describes or implies content of file
- **Ordering of the name parts depends on how you want the containing folder’s contents to sort**
- **One of those parts could be omitted if the containing folder(s) imply that info, but may make it more difficult to search for a specific file**

You Can Change Your Conventions

- **Division into folders and sub folders and even file name conventions are likely to evolve over time**
 - **Default scanner software naming conventions may influence simplest initial choice for a folder and file name. For archival the file should be renamed and moved to appropriate folder per your conventions.**
 - **Schemes devised for a few family records will likely need expansion or revision after many documents or pictures are added**
 - **New or different descriptive parts in file names may prove useful**
 - **Folder contents may get large enough to make sub folders useful**
 - **May prove more convenient to reorder parts of file names so they sort and group differently within the folder contents list**

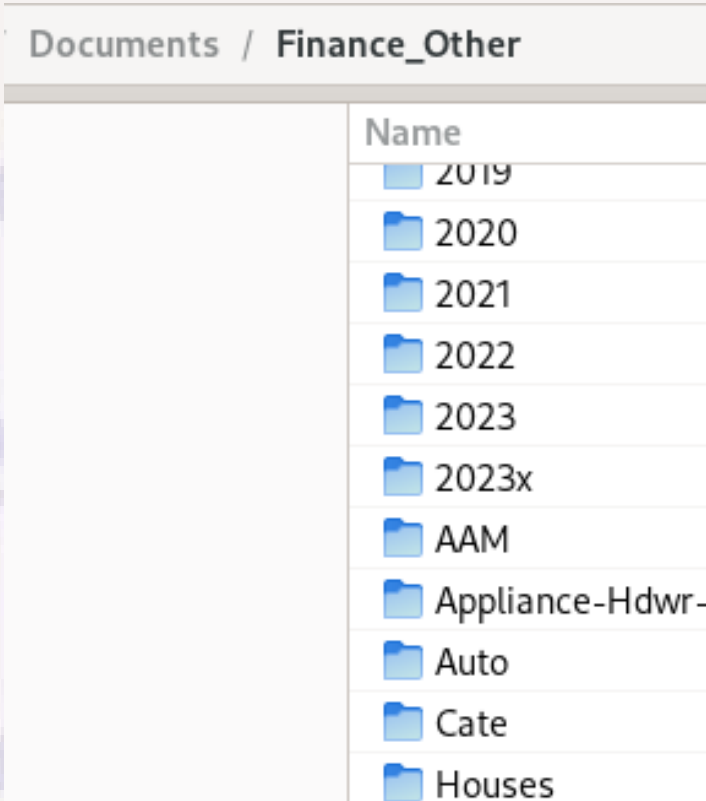
Source of Files May Influence Initial Naming

- **My iPhone/Cloud-Storage interface puts files under year, month & day folders and names images with date, time, and image sequence**
- **My scanners allow file name with a prefix and ordinal**
 - **Prefix can be related to source (from box labels, etc.) – may help in later supplying missing information by association**
 - **If photos or slides include descriptive info or notes on the original, be sure to preserve in some manner until that can be integrated with the image files. Terse descriptions can be made part of the file name.**
 - **Can use short abbreviation in the file name that makes sense to you and provide a "key" file that lists the meanings of abbreviation for others – e.g., I use "@1803", my current street address, to indicate a picture was taken at my house, which implies the street name and city.**

Downloaded Documents

- **Once you've decided on your conventions, the best time to pick a target folder and meaningful name is as you are downloading or soon after – set browser to allow specifying folder & name**
 - **Financial documents need a terse abbreviation of institution, a date (yyyy-mm-dd, yyyyymmdd, yyyy.mm.dd, etc. 4-digits and 2-digits so they sort right) and possibly an abbreviation of type of document.**
 - **Financial documents that are only consulted for a specific year (e.g., tax-related) make sense to organize in "institution" folders under a folder for specific year.**
 - **Documents used in complete historical context make sense to organize by institution or category with multi-year data in same folder**













Examples – Records By Year



Name
2019
2020
2021
2022
2023
2023x
AAM
Appliance-Hdwr-
Auto
Cate
Houses

- **Makes sense for tax-related or other records less likely to be needed after taxes resolved**
- **Putting some non-year-related sub folders in the same Finance_Other folder is an historical relic – when I first started keeping digital records, this parent folder was backed up more frequently than others. No longer the case.**














Examples – Records By Year

/ Finance_Other / 2022	
Name	
 ABFCU	
 Ameren	
 ArvestCk	
 ArvestWM	
 ArvestWM87	
 Citi	
 Discover	
 MiscRcpts	
 MorganStanley	
 TA_MetL	
 Taxes	
 tda_Schwab	

- **Within year, sub-divided by financial institution and actual tax documentation: tax-deductible gift receipts, 1099-INT, 1099-DIV, etc. statements, PDFs of filed taxes, and correspondence about taxes, etc.**

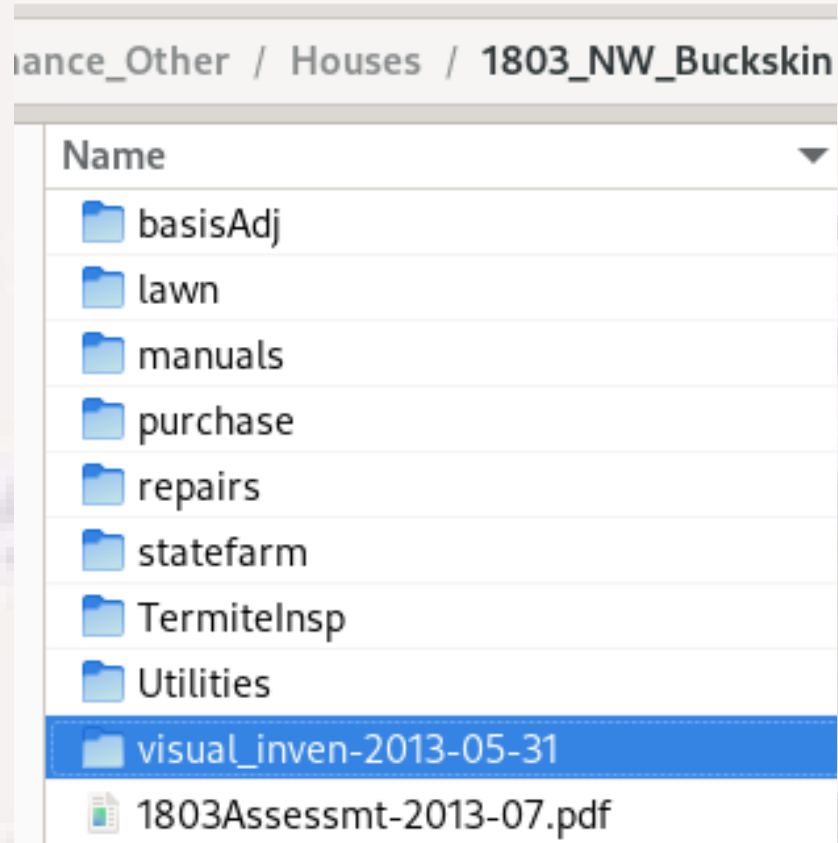
Examples – Records By Year

Finance_Other / 2022 / ABFCU

Name
 abfcu-2022-03-31.pdf
 abfcu-2022-04-30.pdf
 abfcu-2022-05-31.pdf
 abfcu-2022-06-30.pdf
 abfcu-2022-07-31.pdf
 abfcu-2022-08-31.pdf
 abfcu-2022-09-30.pdf
 abfcu-2022-10-31.pdf
 abfcu-2022-11-30.pdf
 abfcu-2022-12-31.pdf
 abfcuvisa-2022-01-12.pdf
 abfcuvisa-2022-02-12.pdf
 abfcuvisa-2022-03-12.pdf

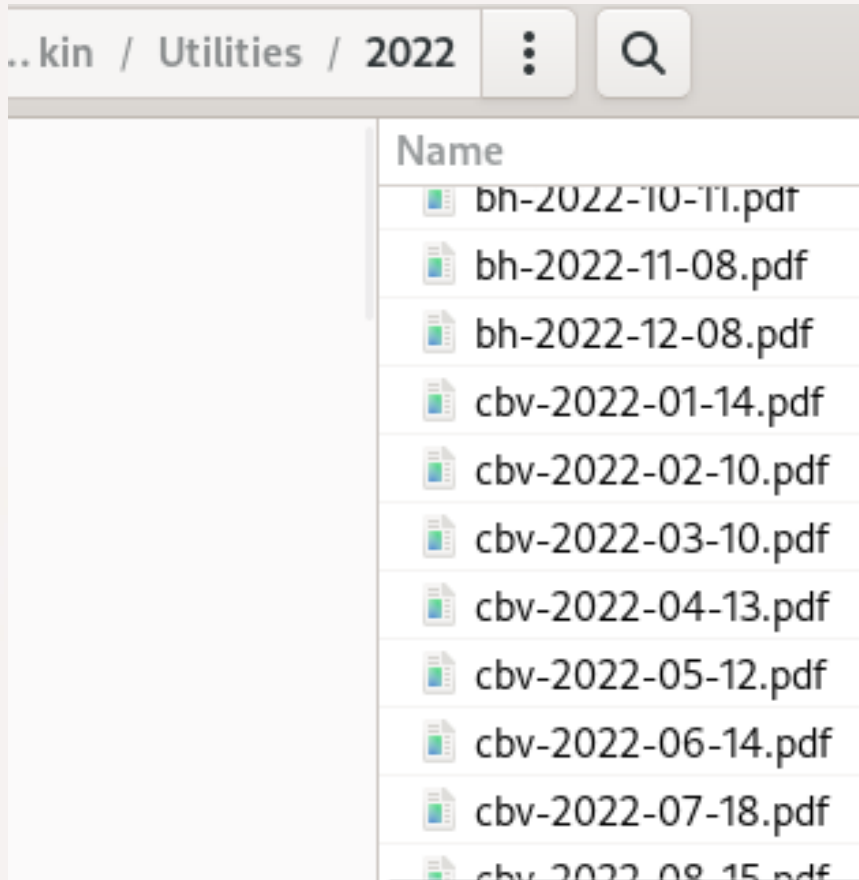
- **Individual files. Monthly statement file names indicate date of statement.**
- **Two types of statements, regular accounts vs VISA CC**
- **Putting the descriptive part for type first makes all of the same time sort together – personal preference**
- **Both downloaded via browser from same website, so having them both in same folder seemed to make sense.**
- **Quick visual scan can show none missing**

Examples – Mixed Strategies



- Long-term house records sub-divided by house address and then type of record.
- Most of those types have files ordered by either date-desc or by desc-date (in some case my convention changed)
- Some folders, like utilities, are sub-divided by year folders and then ordered by desc-date within the year, so all the bills for same utility sort together in date order
- Also chose to keep cell phone bills with landline bills, even though not really a house utility

Examples – Mixed Strategies



- **Example: 2022 Utilities folder for current house – dated, with very terse abbreviation for description**
 - "bh" = Black Hills Energy (gas)
 - "cbv" = City of Bentonville (electricity, water, sanitation). [When I first set this up I had no Bella Vista awareness, so "bv" wasn't ambiguous, and the convention stuck]
 - I use the date the meter was read, but that's only because I make spreadsheet graphs of utility usage and that's the date I use in the spreadsheet. For most people, the statement issue date makes more sense. When settling my sister's estate, I used the payment-due date for bill file names so they matched the payment transaction dates in the estate accounts.
Use what convention makes sense to you.

How Do You Remember Your Conventions?

- **When I first started out, I tried to keep a spreadsheet of folder and file naming conventions, but found that tedious. Realized...**
 - **It's not that difficult to remember your folder conventions, but file conventions are more difficult because of abbreviations and somewhat arbitrary ordering of file name parts**
 - **If you remember the folder, just look at existing files and follow the same pattern.**
 - **If you need to store the first file in a new year, store it in the last year's folder first so you can see the existing convention, then move to the new year's folder where it belongs and can serve as the pattern for the next item in that year**

Clean-Up Strategies?

- **Short answer so far, None.**
 - So far, disk space is cheaper than the effort to figure out what is no longer of any possible use
 - If you want to know the name of the roof repair company that did good work 5 years ago, you can locate their invoice
 - If you want to know the original cost of some major item purchased via credit card about 10 years ago, you've got that also
 - Takes a little more work because some older PDF statements may be image-based not text-based and only eyeball-searchable.

Pictures and Historical Documents

- **This is still a work in progress – many inherited boxes from sisters, one of whom was repository for documents from our parents**
- **For the most part, item names and folders are still their container when scanned**
 - **if very lucky, exact name, location, people, date is written on original**
 - **If still in development packet, may be a development date and residence address on the packet, or maybe all prints or slides are stamped with month-year – gives approximate date of contents, but film could have been in camera for 6 months.**
 - **If approximate date, location, and subjects can be identified for any photo in the same group that can give clues for the entire group of photos**
 - **Sometimes exact date can be determined from the event: birthday, special holiday, solar eclipse... Or an approximate date from educated guess of approximate age of subjects**
 - **So want to retain in someway, probably in file name, the identity of the smallest group that contained the photo until certain no additional identifying information can be gleaned from the group**

Pictures and Historical Documents














- **All digital pictures that haven't been explicitly documented are now time stamped, and for a number of years also contain meta-data like GPS coordinates to establish location, so they are essentially self-grouping by date and location. If the photo is manipulated, be sure to retain the date (exact time may not be important) and location, if the GPS meta-data is lost**

Pictures and Historical Documents

- **As date information, location, & subjects determined, work that into the file name. Can choose to indicate questionable or unknown information – at one point I just used an "x", but then later changed to use \diamond (unicode 2BD1). Obviously a "?" would also have conveyed uncertainty, but that is a forbidden character in file names.**
- **Once a picture is fully identified, the future goal is to archive it in folders based on content. In the meantime, searches could potentially find it based on the descriptive parts of the file name**

Example of Picture Naming

FamilyRecs / Ewing / Alice1907 / pics

Name
 ajem2-109-1944-08◇-Alicia.holding.Cathy@WashDC.jpg
 ajem2-109-1944-08◇-Alicia.holding.Cathy@WashDC.webp
 ajem2-111-1947-04-Alicia8yr.Catharine2yr8mo.Joel18mo.jpg
 ajem2-111-1947-04-Alicia8yr.Catharine2yr8mo.Joel18mo.webp
 ajem2-112-HelenBullard.jpg
 ajem2-112-HelenBullard.webp
 ajem2-113-1935Spring-Alice@1105LocustColumbia.jpg
 ajem2-113-1935Spring-Alice@1105LocustColumbia.webp
 ajem2-114-1942-01-25-Alice.Alicia.George@PrincetonNJ.jpg
 ajem2-114-1942-01-25-Alice.Alicia.George@PrincetonNJ.webp
 ajem2-115-1944-gmJones.Alicia.George@WashDC.jpg
 ajem2-115-1944-gmJones.Alicia.George@WashDC.webp
 ajem2-116-Alicia◇.◇.jpg

- **Came from a box belonging to my mother (aje), 2nd box of misc pics (m2), 109th - 116th scanned (close physically but jumbled together and not necessarily related)**
- **In some cases, date estimated by appearance**
- **In some cases, date given by age of subjects**
- **In one case date give by season**
- **Multiple subjects separated by "."**
- **◇ Used to indicate uncertainty**

Another Example of Picture Naming

ilyRecs / Ewing / Cate1944 / pics / Scotland2

Name

scot2-000.txt

scot2-001_Oxford.Magdalen.College.png

scot2-002.png

scot2-003_London_Kew.Palace.png

scot2-004.png

scot2-005.png

scot2-006.png

scot2-007.png

scot2-008.png

scot2-009.png

scot2-010.png

scot2-011.png

scot2-012_Holyrood.Abbey_Edinburgh.png

scot2-013.png

scot2-014_Adam.Smith.statue_StGiles_Edinburgh.png

- These "scot2" images were from a slide carousel labeled "Scotland2" that belonged to my sister Cate
- The sequence numbers were set to be in sync with the carousel slot number, as they were organized by Cate for a presentation and in some logical sequence
- Only a limited number of slides had any identification, although presumably slides close in sequence are also close in location
- I think I have documents somewhere that would establish approximate date of the trip. but no evidence of dates was with the slides.
- Since these slides represent places of interest, but not people of interest, they will remain in folders associated with this particular trip, under a folder associated with Cate. If dates can be associated, that will be made part of the folder and/or file names.

Folder Conventions For Pictures

- **This is a work in progress**
 - **Currently newer scanned images are mostly by source of the original pictures**
 - **Family documents for my immediate family tend to be organized by town of residence, school, or place of employment.**
 - **Digital images typically arranged by date with some exceptions**
 - **With the amount of historical pictures, I'm tending toward a folder structure based partially on family branches patterned after a family tree**
 - **Pictures with multiple subjects cross family branches and generations, so would have to figure some way to assign such images to a specific folder. If a picture represents a family unit or an extended family, then a folder corresponding to the head of that family may be the choice. Will have to see if that really works out.**

Backups

- **If you have irreplaceable documents and photos on your computer, you need backups. Look for the next Backup class if you are not taking periodic backups. We currently recommend Macrium Reflect Free, although it looks like in 2024 only the non-free version will be available.**
- **If you have Windows 10 or 11, logon with a MS email account, have OneDrive enabled to sync with your account, and have enough OneDrive space to hold your files, then...**
 - **Your Desktop, Document, and Pictures folders and sub folders under them will by default be mirrored to MS OneDrive Cloud storage. So, if your important files are under one of those folders and all those conditions are met, then that is one backup.**
- **OneDrive should not be your only backup, and by default it at best only covers those specific folders**