

How to Avoid Losing Your Digital Photographs



Agenda



Finding Your Photos



Sharing Your Photos



External Portable Drive



Internet Cloud Storage



Everyday Tips

Presentation

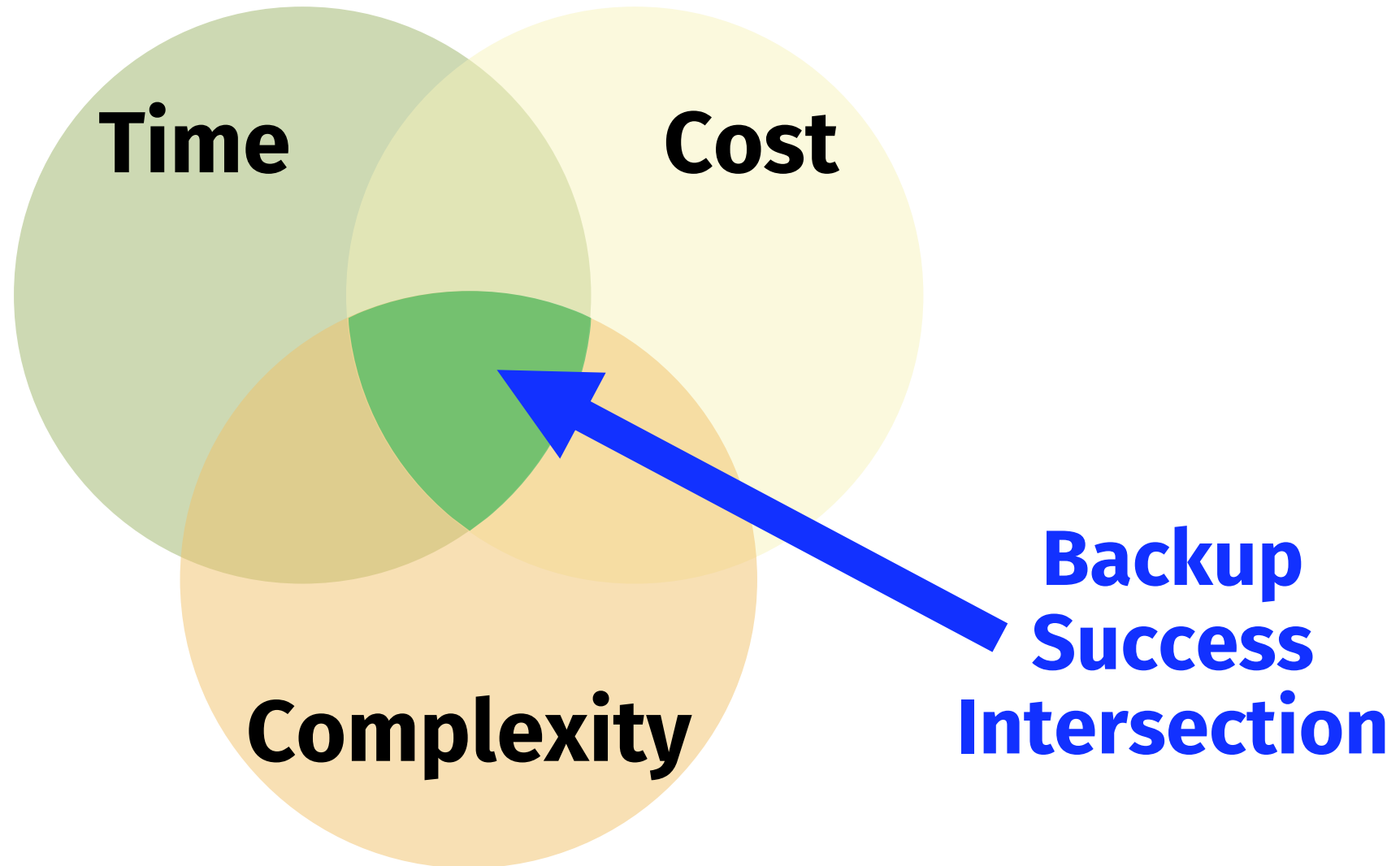
ccullens.com/backup

Chane Cullens
Chane@CCullens.com

May 8, 2024
Milford Camera Club

Why Don't We Backup Enough?

Backing up photos is preserving memories



Facts About Preserving Memories

Your digital memories can disappear in the blink of an eye - hardware failures, loss & disaster

Fact 1

- There are many “right ways”

Fact 2

- Backup is an “ongoing” activity, not a “one-time” activity

Fact 3

- The longer you ignore backup, the worse your loss

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Photos Exist in Many Forms



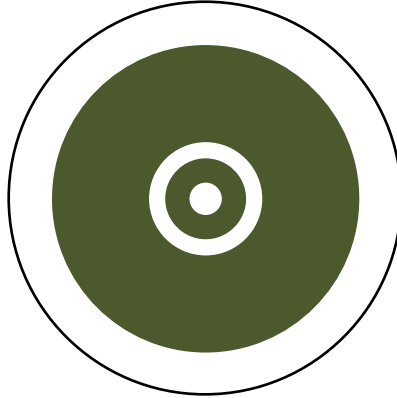
Historical

- Prints, Negatives, Slides – *Convert to digital?*



Printed

- Prints, framed photos, holiday cards, books



Optical

- Blu-ray, CD, DVD



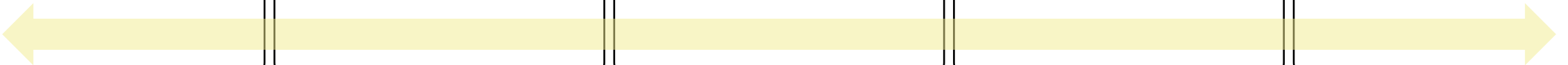
Camera & Computer

- Memory cards, USB flash drives, internal & external drives



Cloud

- Over the internet somewhere in the “cloud”
- Does your phone save to the cloud?





Finding Your Photos

Consistency
reduces the
complexity of
finding a photo

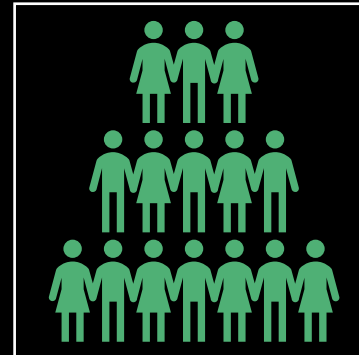
Consistent Digital Archive Location

You must
know where
to look to
find photos



Location, Location,
Location ... My computer,
external drives, drawers ...

Tell others the
location



More than 1 location
is good, more than 3
locations does not
work well






Consistent Organizational Style

Folder Names






Organization Hints

- 1. By date
- 2. With descriptive titles






Year

-  2020
-  2021
-  2022
-  2023
-  2024

Month

-  01 January
-  02 February
-  03 March
-  04 April
-  05 May

Day

-  2023 08 02 Machias
-  2023 08 02 Peacock
-  2023 08 02 Roosevelt
-  2023 08 02 Sunset
-  2023 08 03 Bad Light

2023 08 02 Boat from Machias Seal Island - Eagle, Lighthouse

Consistent Organizational Style

File Names

Example:

20230802 100713 R5-C.cr3

Solves

1. Where to find the original
2. Finding related photos

2023 Year, **08** Month, **02** Day
10 AM, **07** minute, **13** seconds
August 2, 2023 at 10:07 am

FYI – **R5-C** lets us know if Rhonda or Chane and camera

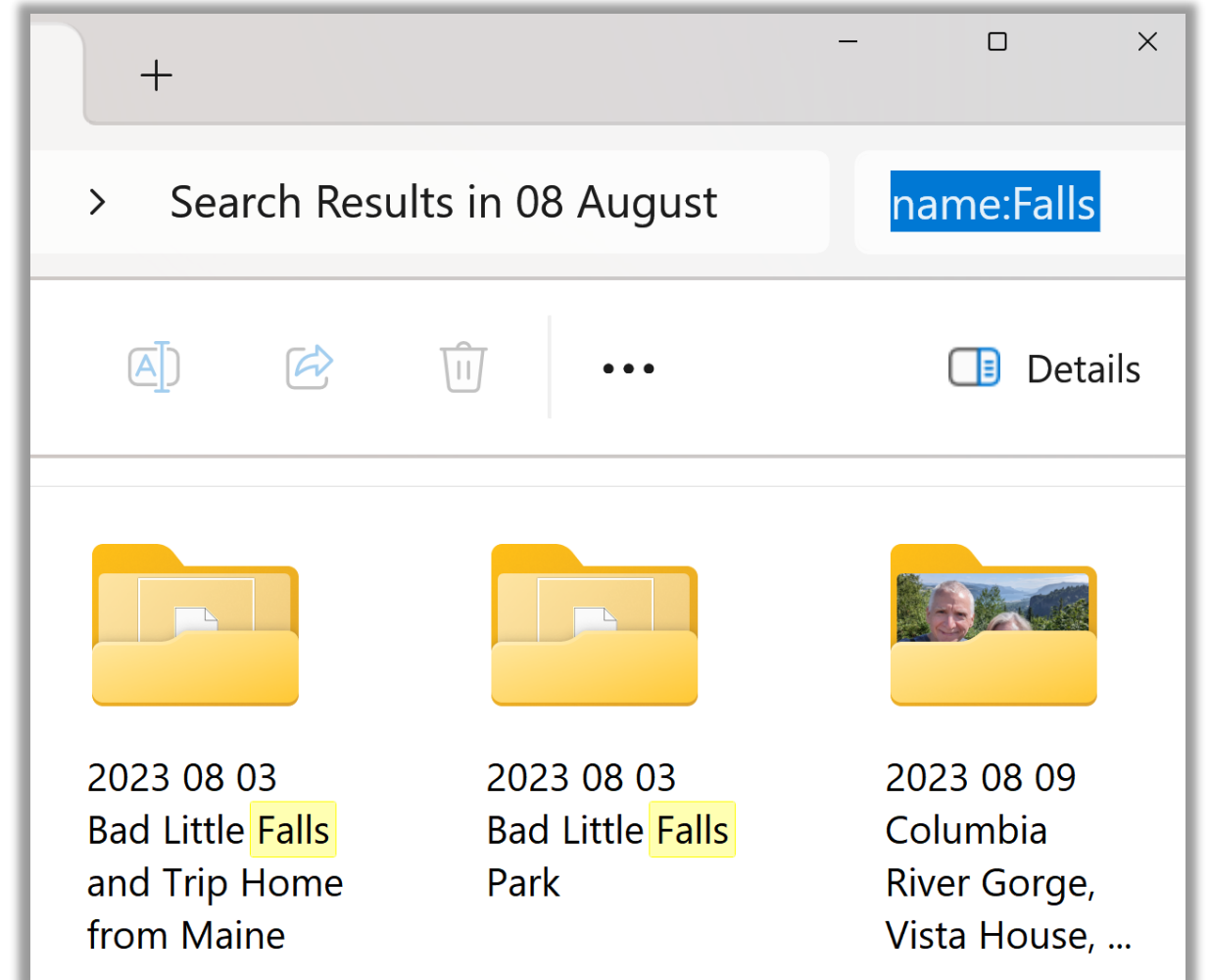
Organization Hints

1. Simply use date + time

Consistent Organizational Style

Finding

Helps Find Things



Chane and Rhonda 14,211 photos captured in August 2023

Why Descriptive Folder Names?

What is Metadata?

Hidden information embedded within a photo file

Technical data

- Settings: aperture, shutter speed, ISO ...
- Camera info: model, lens, date, time, focus point ...
- File size: how large, width, height, rotation
- Location: GPS coordinates, city, state, country

Descriptive data

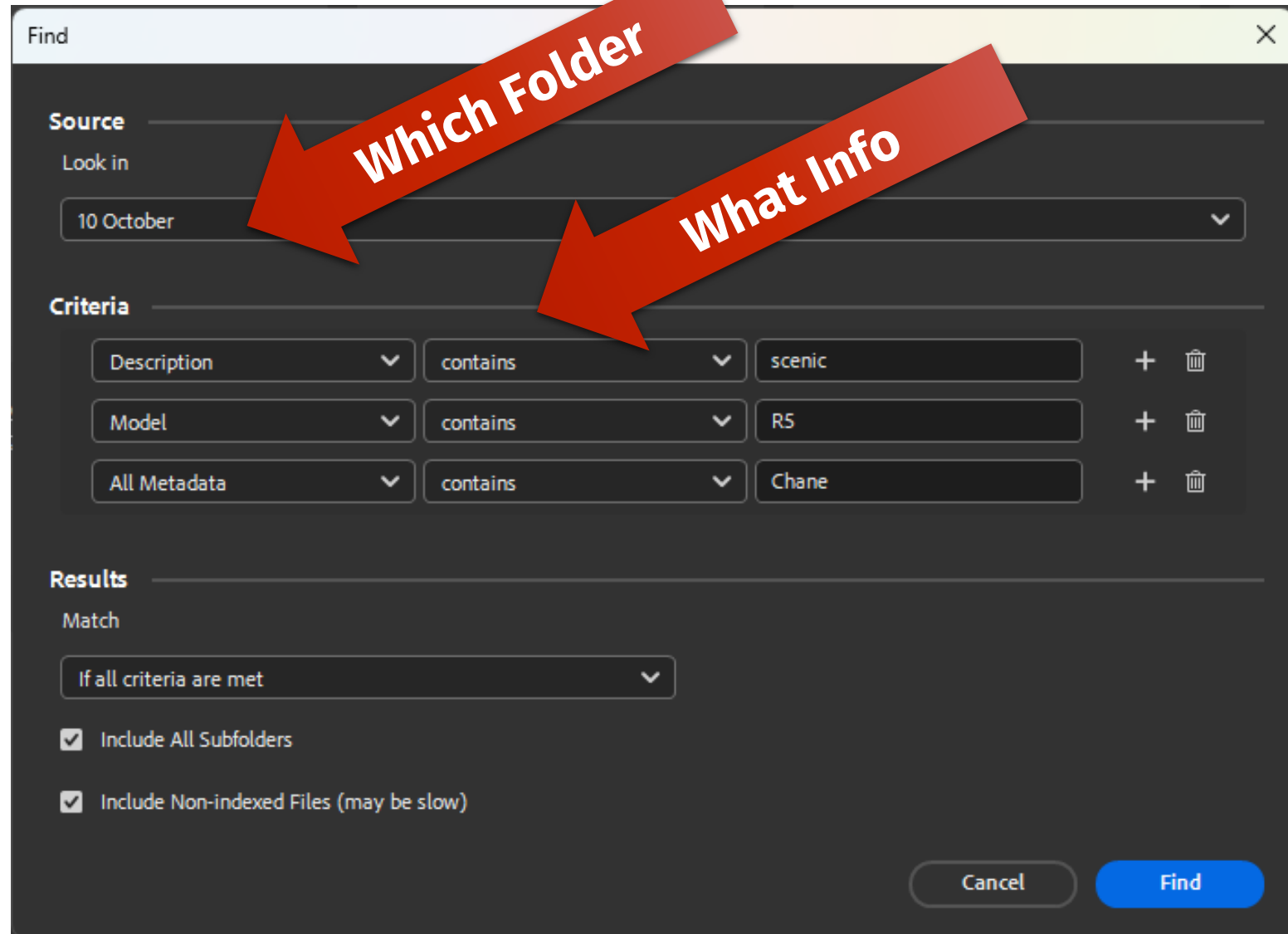
- Caption: a short description of the photo
- Keywords: descriptive terms
- Copyright: who owns the photo
- Contact: phone number, email, URL

Info from camera plus post-processing

| | |
|----------------------------|------------------------|
| Description | Hoi An Old Town |
| City | Hoi An |
| State | South Central Coast |
| Country | Vietnam |
| Keywords | Bridge, Cityscape |
| Credit | Chane & Rhonda Cullens |
| Creator Work Email | Chane@CCullens.com |
| Creator Work URL | www.ccullens.com |
| Aperture Value | 1.8 |
| Exposure Time | 1/13 |
| Date/Time Original | 2019:05:11... |
| GPS Latitude | 15 deg 52' 35.55" N |
| GPS Longitude | 108 deg 19' 36.76" E |
| Plus, over 100 other items | |

Adobe Bridge Advanced Search

Part of the Adobe
Photography
Subscription



The screenshot shows the 'Find' dialog box in Adobe Bridge. It has a title bar with a close button. The 'Source' section includes a 'Look in' dropdown menu currently set to '10 October'. Two red arrows point to this dropdown: one labeled 'Which Folder' and another labeled 'What Info'. The 'Criteria' section contains three rows of search criteria, each with a dropdown for the field, a dropdown for the operator, and a text input for the value. The first row is 'Description' contains 'scenic', the second is 'Model' contains 'R5', and the third is 'All Metadata' contains 'Chane'. Each row has a '+' icon to add more criteria and a trash icon to remove it. The 'Results' section has a 'Match' dropdown set to 'If all criteria are met'. Below this are two checked checkboxes: 'Include All Subfolders' and 'Include Non-indexed Files (may be slow)'. At the bottom right are 'Cancel' and 'Find' buttons.

Find

Source

Look in

10 October

Criteria

| Field | Operator | Value | Action |
|--------------|----------|--------|---------|
| Description | contains | scenic | + trash |
| Model | contains | R5 | + trash |
| All Metadata | contains | Chane | + trash |

Results

Match

If all criteria are met

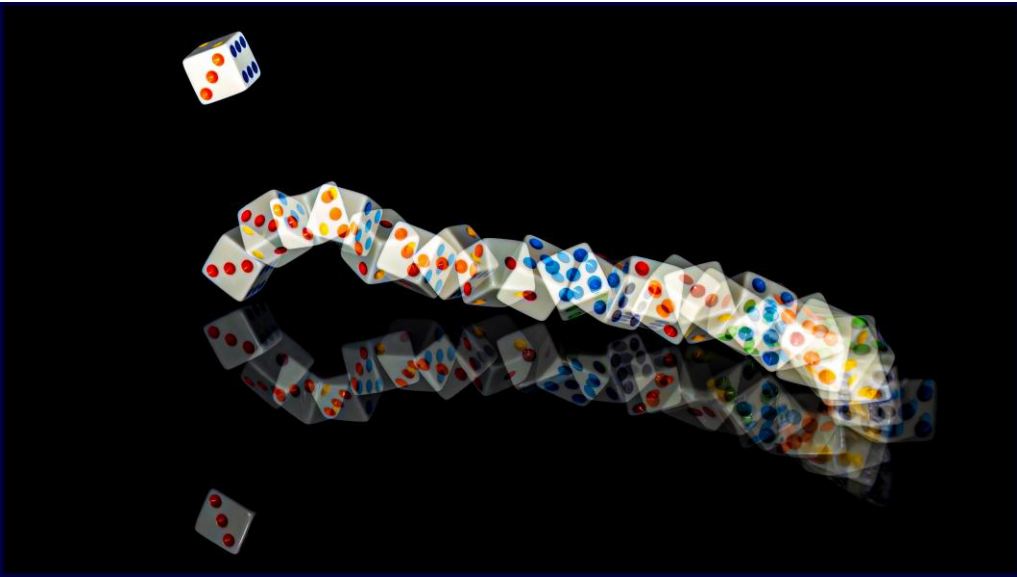
☒ Include All Subfolders

☒ Include Non-indexed Files (may be slow)

Cancel Find

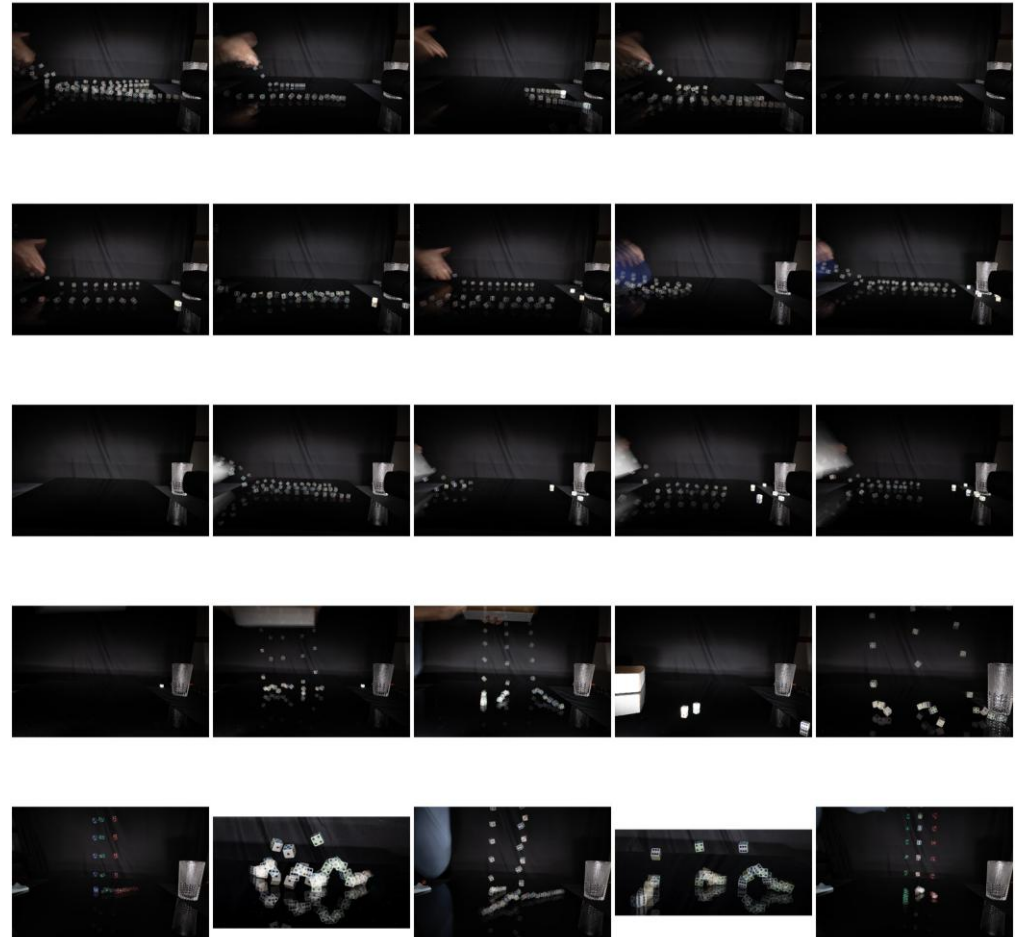
Consider Deleting Photos to Reduce Complexity

You have this.



The answer is always a personal choice.

Do you really need these?



Agenda



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Everyday Tips

Printing as Backup

Sharing with friends
and family provides a
type of backup

- Photos 4x6, 5x7 ...
- Books, Calendars ...
- Framed
- Exhibits
- Donations



Camera Club as Backup

Competitions

- Club, Interclub, NECCC

Exhibits

Club Website



Backups from 300 Chane & Rhonda Exhibit Photos

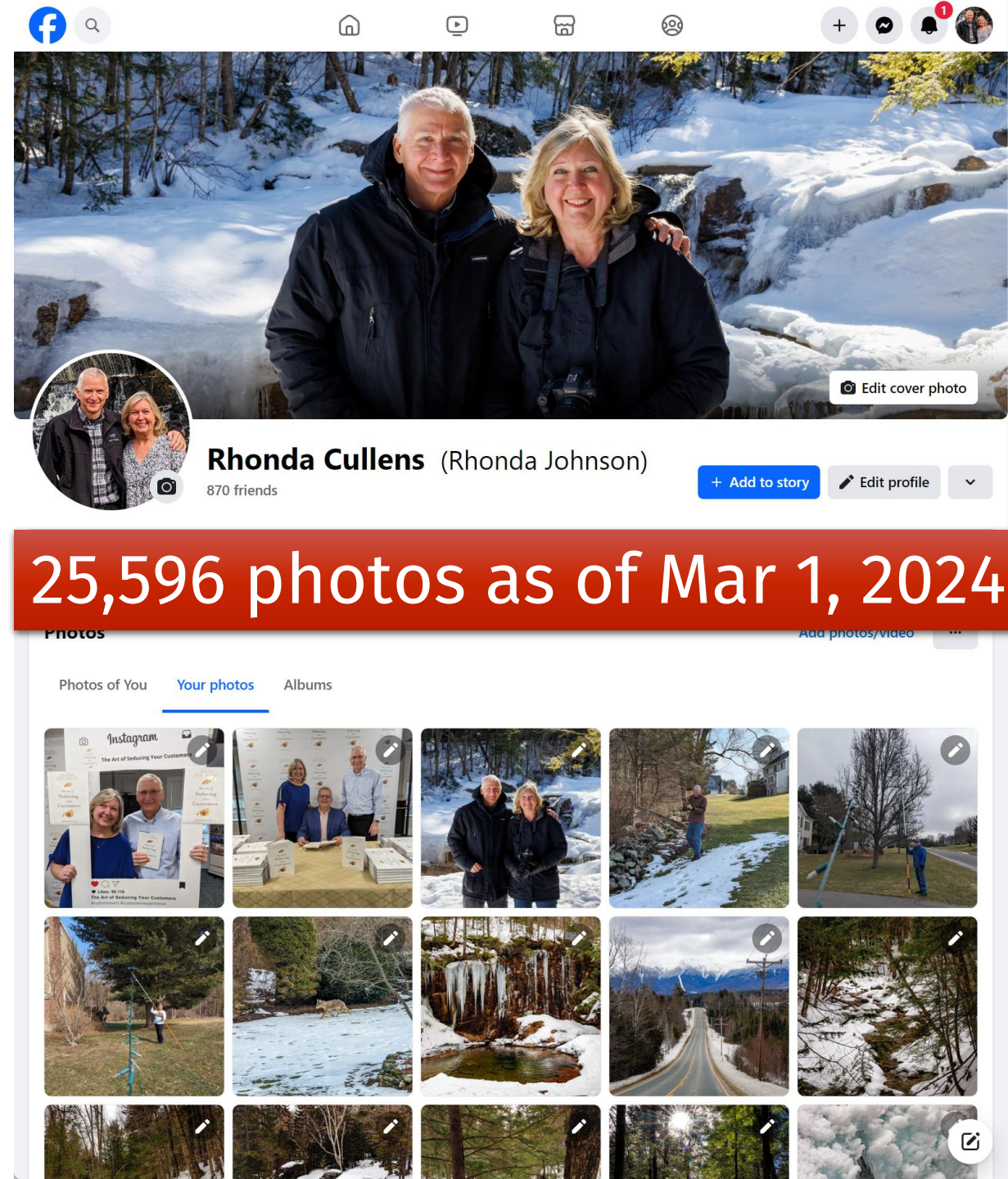
Social Media

“Free” backup

Facebook

Instagram

...



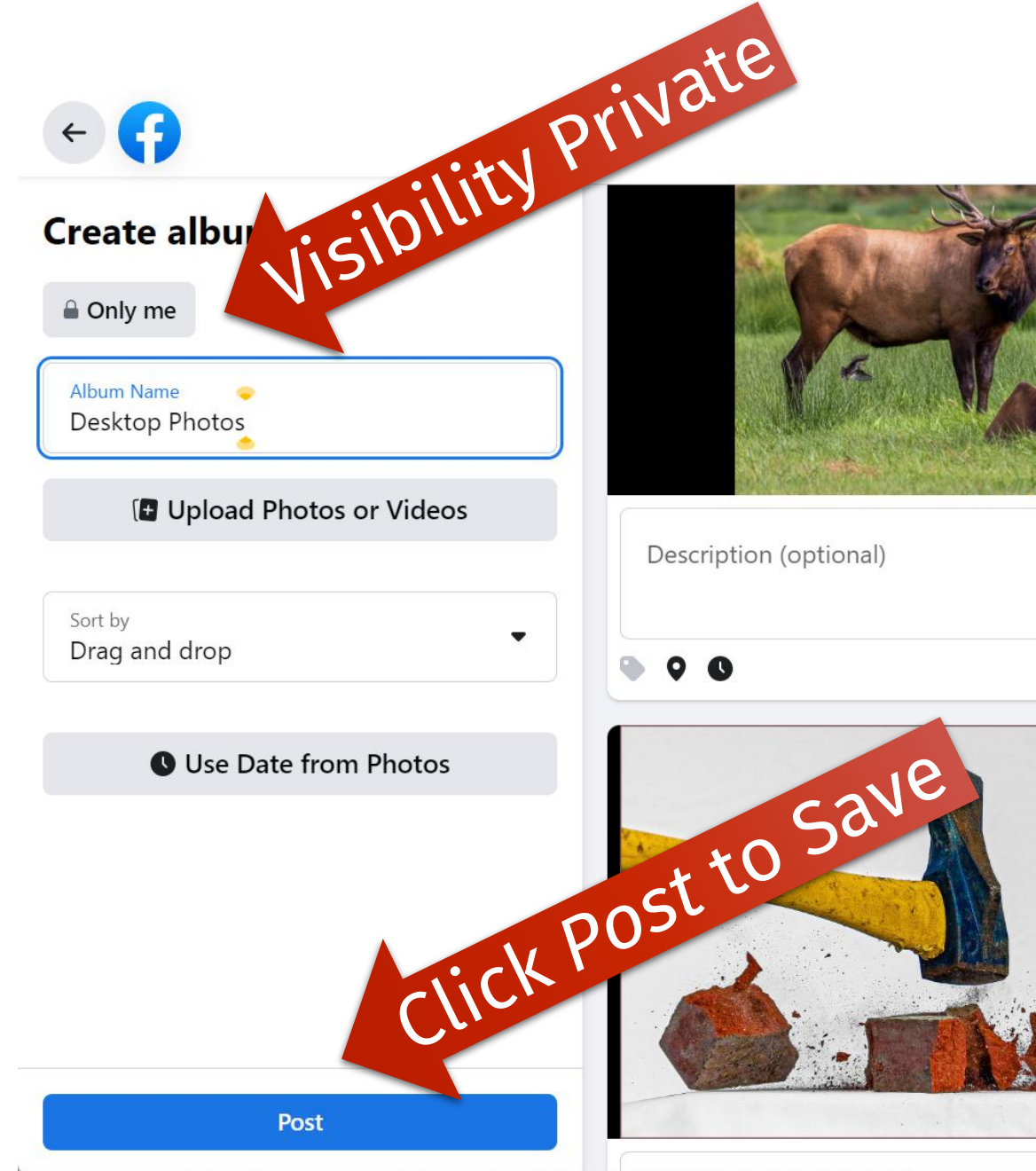
Using Facebook as “Good” Free Backup

Private Facebook Albums

1,000 photos per album

JPEG files

Photo quality good
(2000 x 2000 pixels)



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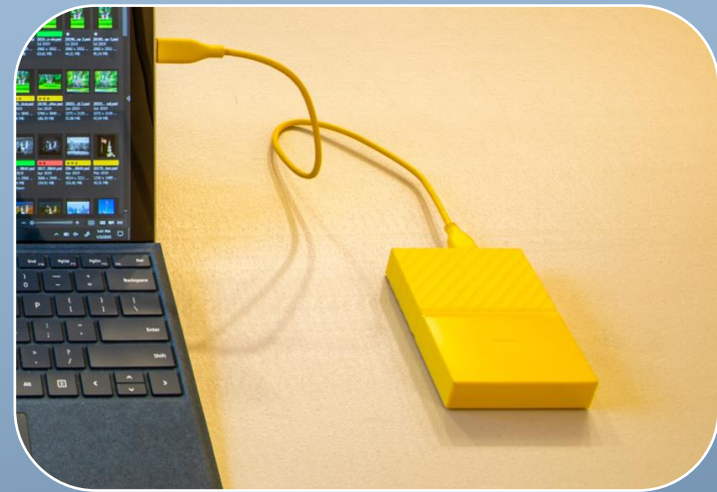


Internet Cloud Storage



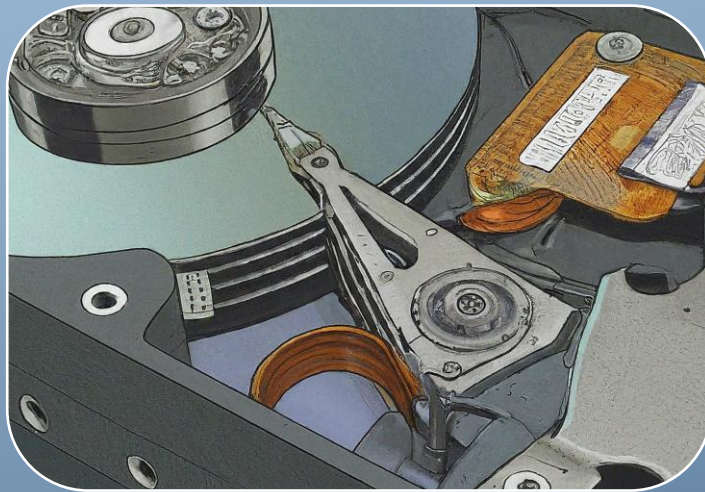
Everyday Tips

Tech Words



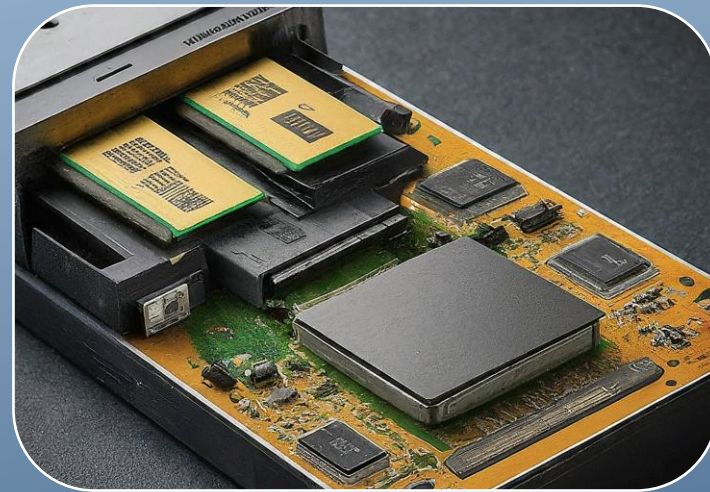
“External”

- Attached with a USB cable



“Hard drive”

- Spinning disks
- Think, mechanical, treat gently



“SSD”

- Solid state drive
- Cost 2.5x
- Think, very fast memory card

Backup 3-2-1 Rule

Introduced by photographer Peter Krogh in 2005. Examples by Chane Cullens.

3: Create one primary backup and two copies of your data.

1. PC drive
2. External drive
3. Safety Deposit Box, Friends house, Office or Cloud

2: Save your backups to two different types of media.

1. PC drives
2. External drives or Cloud

1: Keep at least one backup file offsite.

1. Safety Deposit Box, Friends house, Office or Cloud

External Drive



Works with any computer

Lots of space for \$100 → 4TB hard drive, for 4TB SSD \$250

- 4TB stores ~100,000 RAW or ~500,000 JPEG

Lasts 4+ years with everyday use

Lasts 10+ years in storage

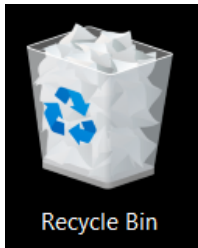
Often includes backup software

Semi-fragile, SSD more durable

Technology Tip

Deleted or Missing Files are often recoverable!

1



Look in Trash

2

The most common loss is when the “index” to files is damaged. AKA Corrupted Drive.

- Search for tools online.
- Chat with a tech team, e.g., Best Buy Geek Squad

External Drives

Many size options - 1TB to 100TB+

- ✓ Cheap
- ✓ Effective
- ✓ Works on any PC
- ✓ A great choice



Great Starters

More Photos

Expensive

How Much Storage?

Key question when purchasing an external drive

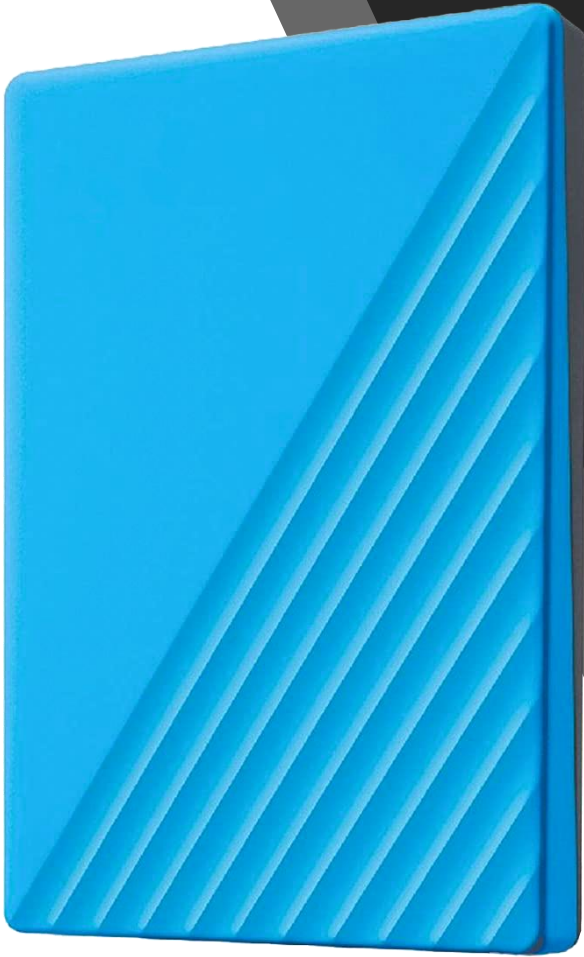
1

Find your **total photo storage size** by adding up your current photo storage areas

cards, flash drives, internal and external drives ...

2

Buy a new drive **twice** as large for years of growth



Where to Start?

How to use your new storage drive

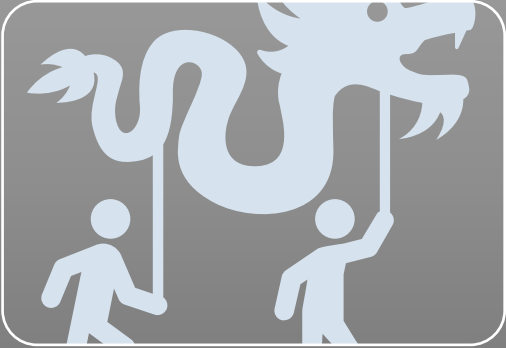
Determine your organization style for folder and file naming

Use for all new photos you download

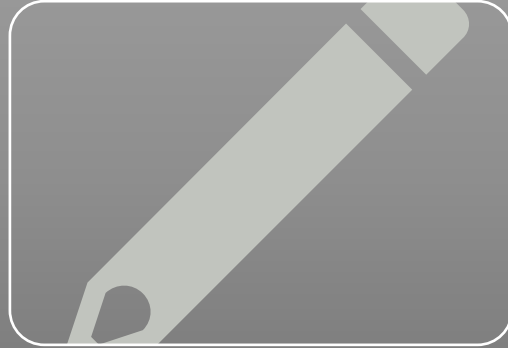
Use for a month or two, then start moving previous years' photos to your new style

Repeat Every Month or Two

Backing up is a never-ending activity



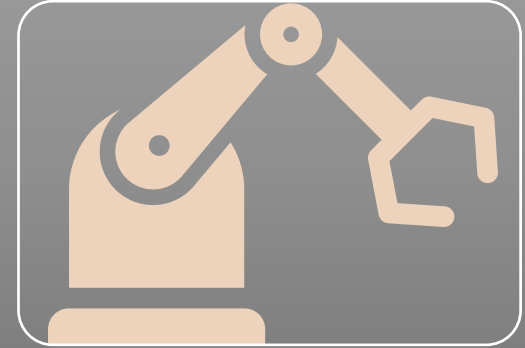
Copy
photos to
the
external
drive



Also, copy
any **edited**
photos you
may have
stored
elsewhere



Organizing
and
copying a
new group
of old
photos



Look for
ways to
automate a
step

Consider! While organizing each month, delete external & copy all

After 4 Years

Buy another external drive



Copy the **old** drive to the **new** drive



Save the **old** drive, just in case something fails



Use the **new** drive for your backups

Extra Effort Tip

Backup 3-2-1 Rule → 1: Keep at least one backup offsite.

Fire, Flood, Disaster ...

1. A couple of times a year
2. Make a copy of your external drive
3. Give the copy to a person in another location
4. No password

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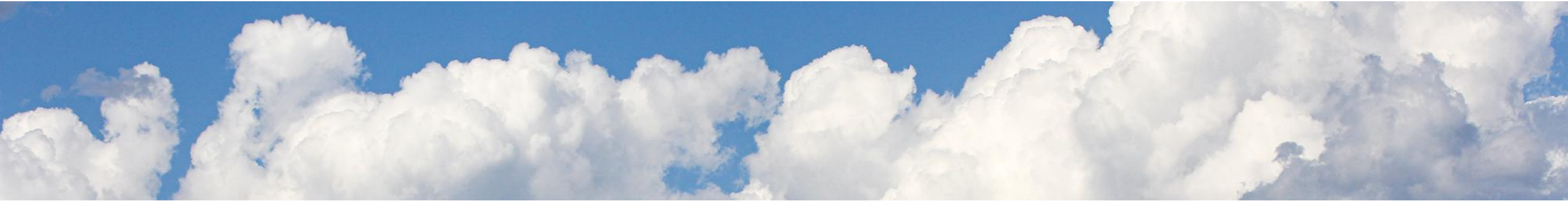
Internet Cloud Storage



Everyday Tips

What Is the “Cloud”?

A bunch of computers accessed using the internet.



The Facebook data centers are a type of “Cloud”

Data centers are physical buildings filled with computers!

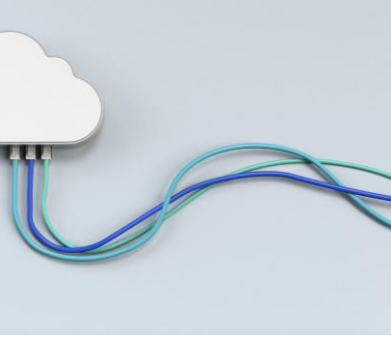
As users of the ‘cloud’, we generally don’t know or care where they are located.

How big is a data center?

Let’s use Facebook’s Prineville, Oregon data center (1 of 18)

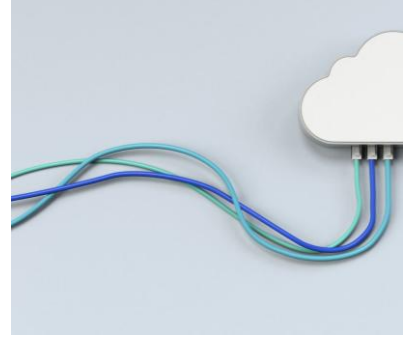
Is it bigger than a football field?

It’s the size of 80 football fields! A \$2 billion investment.



Cloud Backup Services

Some space “Free”. Purchase more when needed.



Microsoft
OneDrive

Apple
iCloud

Google
Drive

Dropbox

Adobe
Creative
Cloud

Amazon
Photos

Feature of
Amazon Prime

These are the big players. There are dozens of other choices.

All have software for Windows, macOS, iOS & Android

How to Choose a Cloud Backup Service

Questions to ask yourself

1

Is your internet speed slow?

Then avoid cloud backup.

2

Does the free tier have enough space?

Decide your space needs and costs.

3

Is it OK to leave your PC on for days?

When starting it takes weeks to upload.

4

Does it also work with your phone?

Simplicity is important.

External Drive Backup or Cloud Backup?

| | External Drive | Cloud |
|--------------|--------------------------------------------------|---------------------------|
| Security | Physical security Don't encrypt. No password. | Password protected |
| Availability | You must have the drive | Anywhere using internet |
| Performance | Good | Limited by internet speed |
| Cost | One-time purchase | Annual purchase (higher) |
| Failure | New drive every 4 years | No data loss expected |
| Complexity | Low | Low to Medium |
| Time | Keep it simple | Keep it simple |

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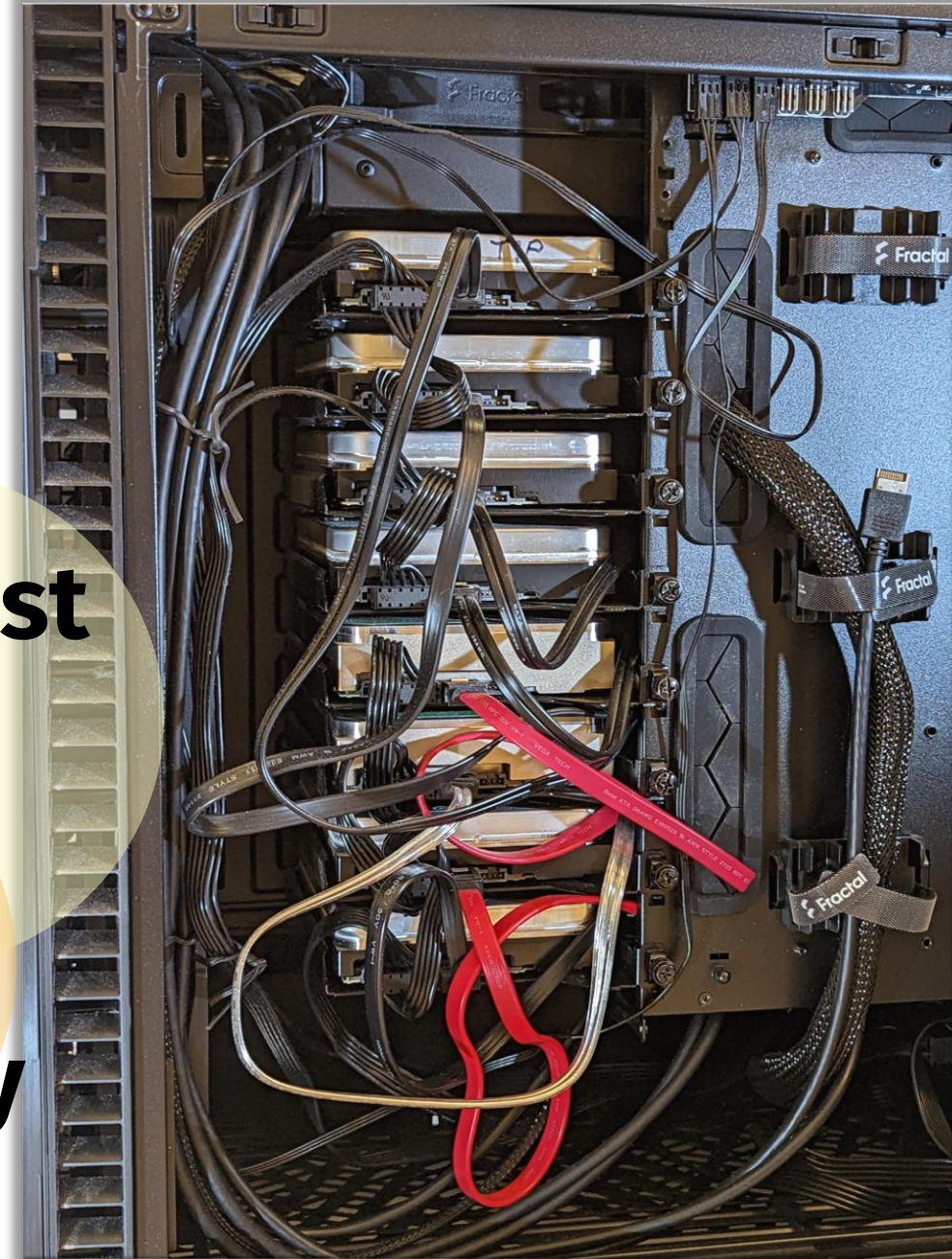
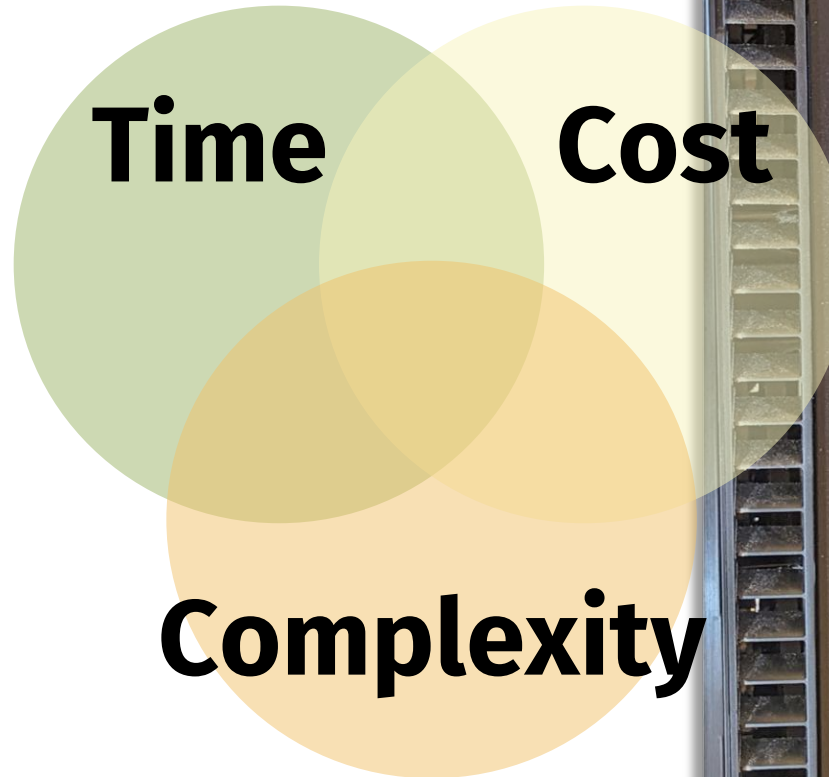
Everyday Tips

Multiple computers with multiple drives, plus cloud

Don't do it!

Seriously, only do it if
you already know how.

- High in Time
- High in Cost
- High in Complexity



Amazon Photos

Free with Amazon Prime ~ \$140 a year

Unlimited Photos!

JPEG(jpg), TIFF (tif), HEIF (heic, hevc), WebP, iOS Burst, GIF, RAW (iOS, Canon, Nikon, Sony, Olympus, DNG ...), BMP, PNG ...

1,000,461

Uploaded by Chane
as of March 21, 2024

Using it for years

Your Photo Stats



Unlimited Photos
10 GB for Video



1,000,461
Photos backed up

Amazon Photos – Amazing Search #1

Search People!

<https://www.amazon.com/photos>

Search “Rhonda”
and “Chane”

Amazon Photos
found 5,100 photos

Amazon finds faces.
You are responsible for
adding a name to face.

Filters

Sorted by **date taken** ▾

Media types

☒ Photos 38 ☐

Date Taken

2024 38

January 24

February 14

2023 647

2022 312

2021 291

2020 94

2019 347

2018 123


2017 236

2016 525


2015 357

2014 222


☒ Feb 14 — 4 items



☒ Feb 13 — 4 items



☒ Feb 12 — 6 items



Amazon Photos – Amazing Search #2

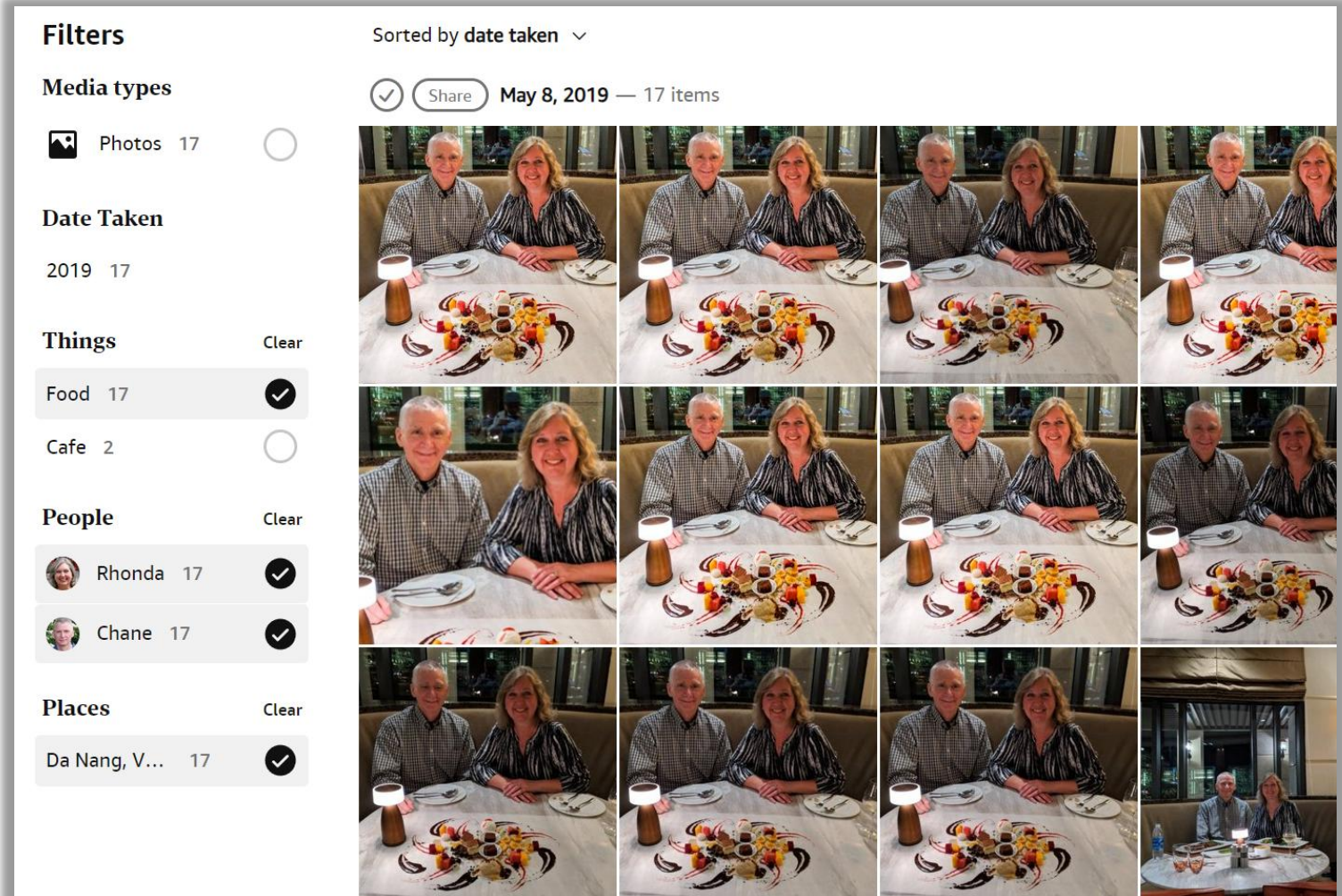
Search for “Things” or “Dates”

Search “Rhonda”
and “Chane”

Refined to

Location = Da Nang
Things = Food

Amazon “finds” common
things like: Plant, Tree,
Food, Sport, Car, Hat, Boat,
Road, Barn, Bird ...



Building a Visual Heritage

After decades of capturing photos, consider thinking about their future. A few ideas to consider.

And share it every year

Create an Annual
“Most Important”
Archive

Document
how to find
the
“important to
them” photos

“Them” includes
family, friends,
colleagues ...

Wikipedia.org: Wikimedia Commons
WordPress.org/photos/submit
Ask your favorite charity

Creating a
visual
heritage by
donating your
photos


?

Chane & Rhonda's


Annual "Most Important" Archive

is an online album we share with about 200 people. Based on our holiday newsletter.


Chane, Rhonda, Cody and Chad DEC 30, 2023 10:01:41 AM




CLICK TO OPEN FOLDER: 2023
1244 images




CLICK TO OPEN FOLDER: 2022
607 images




CLICK TO OPEN FOLDER: 2021
459 images



CLICK TO OPEN FOLDER: 2020
460 images




CLICK TO OPEN FOLDER: 2019
561 images




CLICK TO OPEN FOLDER: 2015
103 images 2 others


More 2023 Photos DEC 20, 2023 10:19:23 AM




CLICK TO OPEN FOLDER:
1 December 2022 - Christmas Delights in Wisconsin
33 images




CLICK TO OPEN FOLDER:
2 December 2022 - Snowy Travels Driving Home from Wisconsin
18 images




CLICK TO OPEN FOLDER:
3 January - New Year, New Display - Rhonda's Garden Stable
16 images




CLICK TO OPEN FOLDER:
4 February - Cody and Trisha Wedding Reception
32 images




CLICK TO OPEN FOLDER:
5 March - Blossoming Spring - Seeds, Bridges, and Patio in the Woods
24 images



CLICK TO OPEN FOLDER:
6 April - Art and Service - Book Fundraiser Benefits Lion's Club Charities
43 images



CLICK TO OPEN FOLDER:
7 April - Photography, Castles, and Rhonda's Birthday
25 images



CLICK TO OPEN FOLDER:
8 May - Lighthouses & Love - An Island-Hopping Anniversary in Cape Cod
29 images



Summary

Don't role the dice on your treasured photo archives

