



5 Best Ways To Avoid Losing Your Photographs In Our Digital World

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Presentation – ccullens.com/backup

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North Haven Camera Club

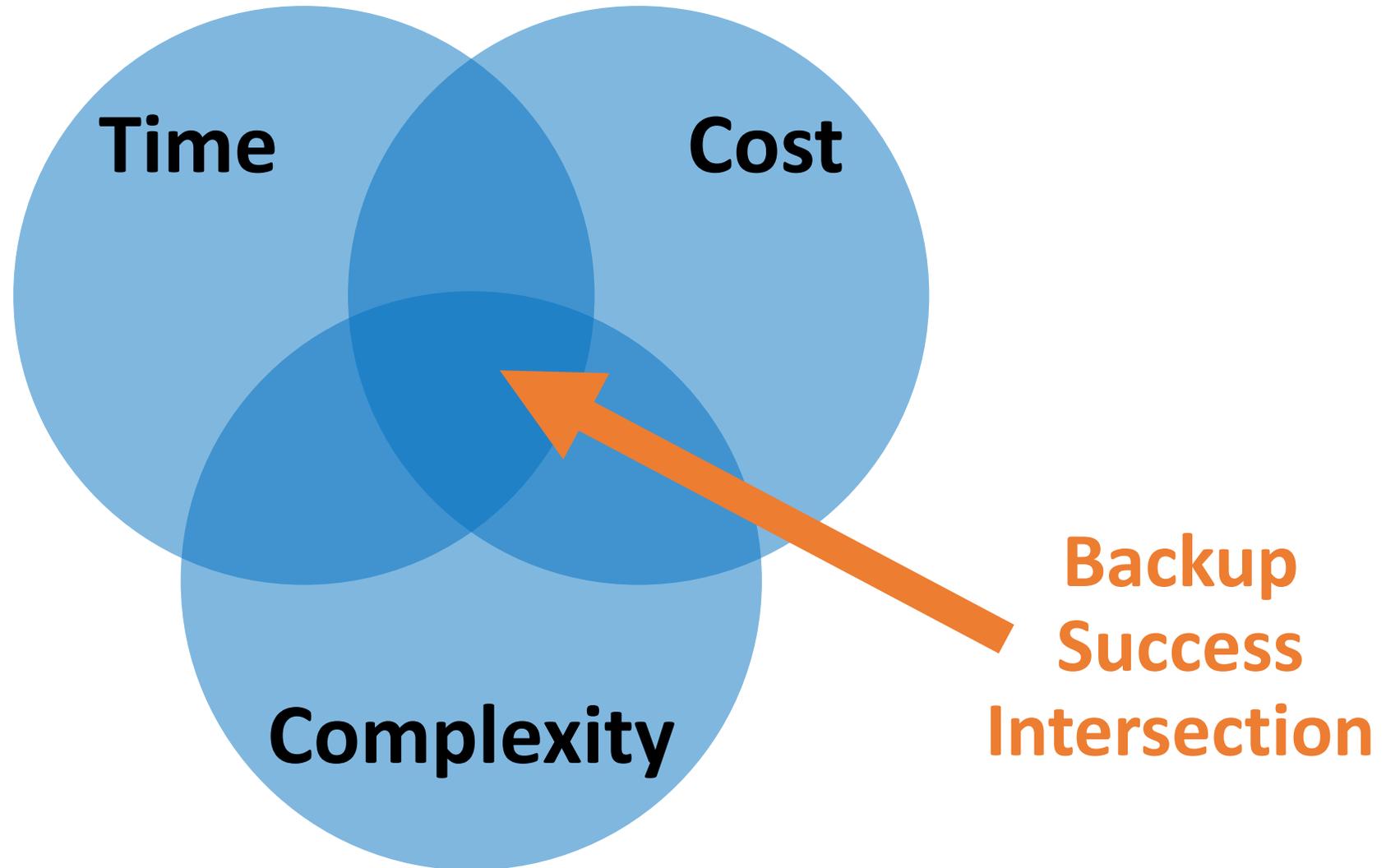
Agenda



1. Finding your photos
2. Sharing your photos
3. External portable hard drive
4. Internet cloud storage services
5. Multiple computers with multiple hard drives, plus cloud

Why don't we backup enough?

Backing up photos is preserving memories



Preserving Memories Facts

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 the loss will be

Agenda



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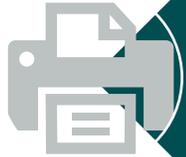
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Photos Exist In 5 Forms



Computer and digital media

- SD cards, USB flash drive, internal & external drives



Printed

- Prints, framed photos, holiday cards, books



Cloud

- Over the internet somewhere in the “cloud”



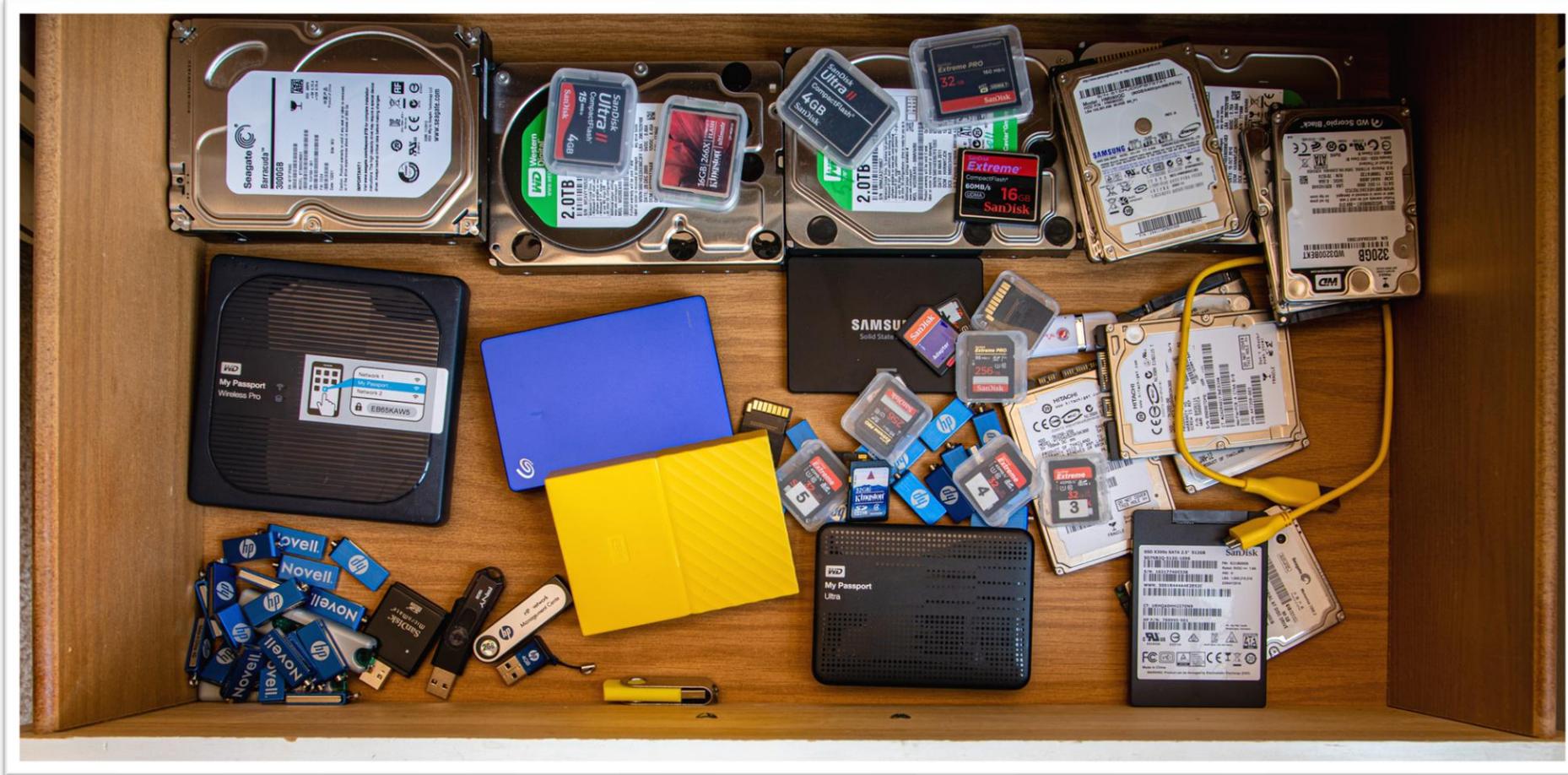
Optical

- CD, DVD, Blu-ray



Historical

- Prints, Negatives, Slides – Need converted to digital



Finding your photos

Consistency reduces the complexity of finding a photo
- location, organization style & labeling

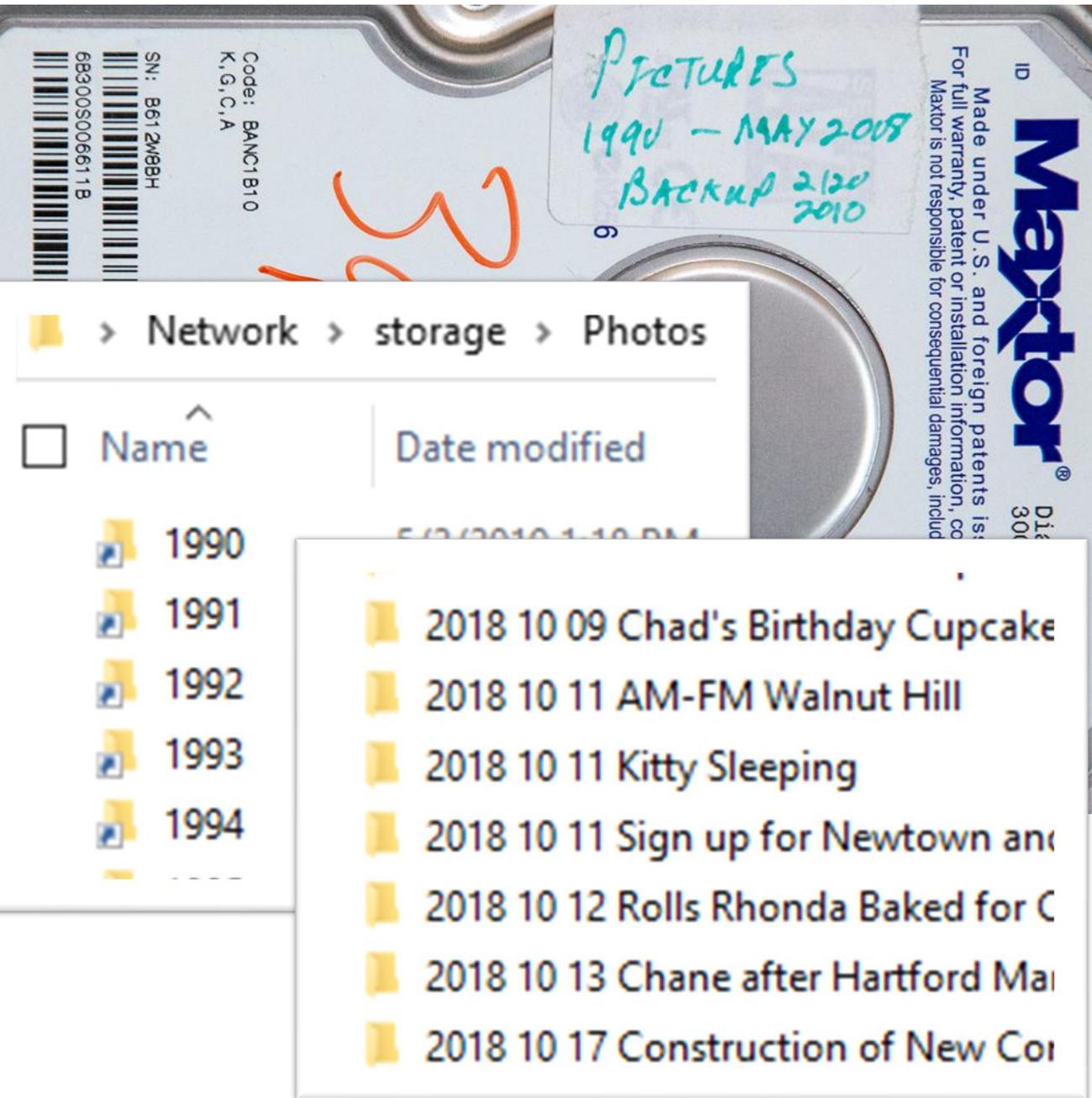


Consistent Location

To know where to start looking

You must know where to look to
find media to search

- Location, Location, Location ...
- Knowing the location is more important than the actual folder
- Tell others the location
- More than 1 location is OK, more than 3 locations does not work



Consistent Organizational Style To find a specific area

Organization Style Hints

- Label media by occasion or date
- Name folders clear, yet verbose
- Printed info and lists
- Format as JPG, RAW, TIFF, DNG
- Use future usage plans to make choices (what is 80% of the usage)
- Automatic or manual

What is Metadata

Your camera automatically adds over 100 items on metadata

You should add metadata to help humans find photos, like

Description

City, State, Country

Keywords

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 100 other items	

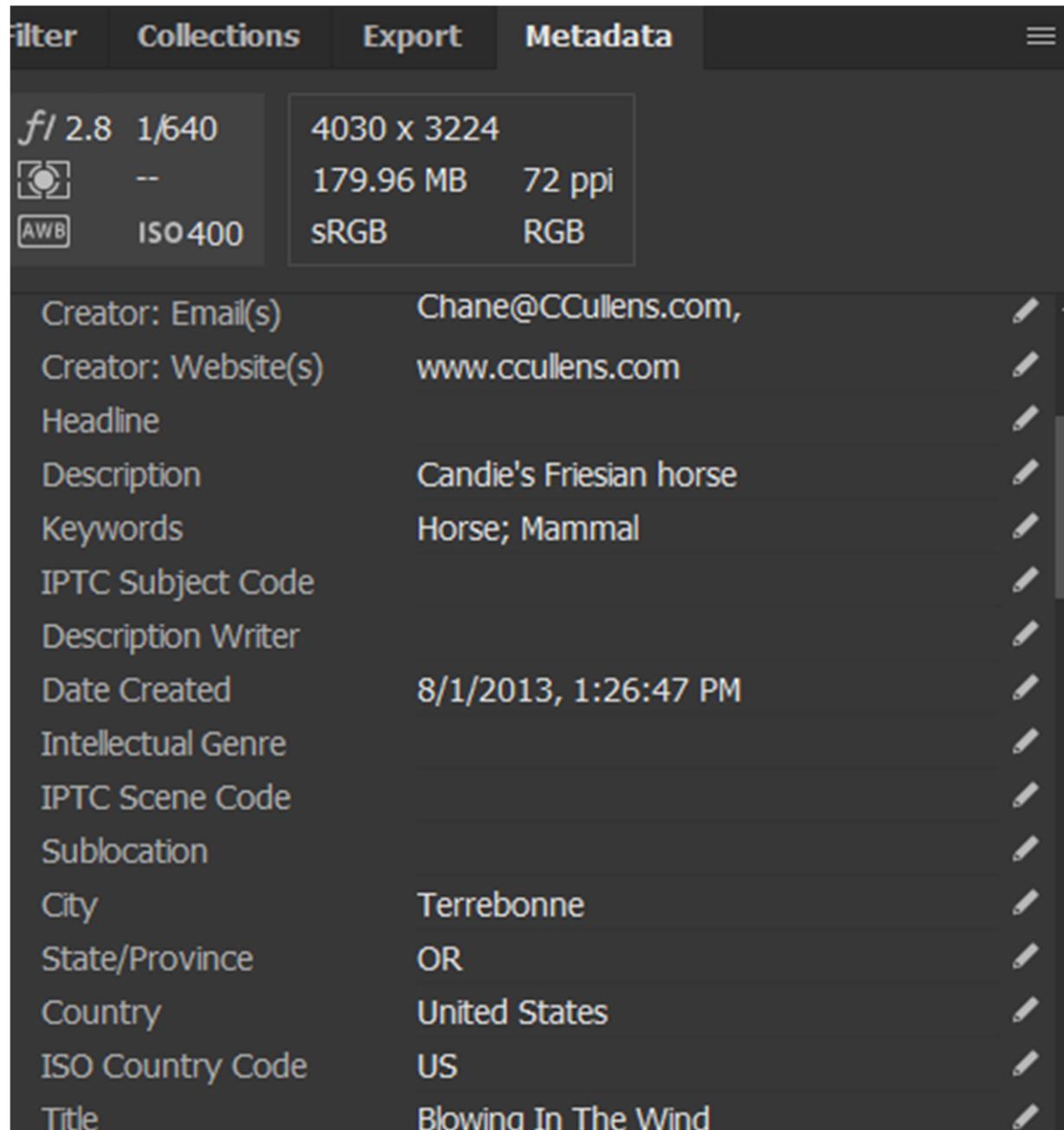
Consistent

Metadata Style

To search for a specific photo

Metadata Style Hints

- Metadata
 - What your camera adds – date, model, lens, settings, GPS coordinates?
 - What you add - Title, Keywords, City, State
- How to add more
 - During and after Download
- How to search
 - Adobe Lightroom, Adobe Bridge & Windows or Mac file explorers



filter	Collections	Export	Metadata	
<i>f/</i> 2.8	1/640	4030 x 3224		
	--	179.96 MB	72 ppi	
	ISO 400	sRGB	RGB	
Creator: Email(s)	Chane@CCullens.com,			
Creator: Website(s)	www.ccullens.com			
Headline				
Description	Candie's Friesian horse			
Keywords	Horse; Mammal			
IPTC Subject Code				
Description Writer				
Date Created	8/1/2013, 1:26:47 PM			
Intellectual Genre				
IPTC Scene Code				
Sublocation				
City	Terrebonne			
State/Province	OR			
Country	United States			
ISO Country Code	US			
Title	Blowing In The Wind			

Searching Metadata - Adobe Bridge Edit -> Find

The screenshot shows the 'Find' dialog box in Adobe Bridge. The 'Source' field is empty. The 'Look in' field contains '2019', with an orange arrow pointing to it from the text 'Folder 2019'. The 'Criteria' section has two rows: the first row has 'Keywords' selected, 'contains' as the operator, and 'Building' as the search term, with an orange arrow pointing to it from the text 'Building & Vietnam'; the second row has 'All Metadata' selected, 'contains' as the operator, and 'Vietnam' as the search term. The 'Results' section has a 'Match' dropdown set to 'If all criteria are met', and two checked checkboxes: 'Include All Subfolders' and 'Include Non-indexed Files (may be slow)'. At the bottom are 'Find' and 'Cancel' buttons.

Find

Source

Look in 2019

Criteria

Keywords	contains	Building	-	+
All Metadata	contains	Vietnam	-	+

Results

Match If all criteria are met

- Include All Subfolders
- Include Non-indexed Files (may be slow)

Find Cancel

Folder 2019

Building & Vietnam

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4. Internet cloud storage services

5. Multiple computers with multiple hard drives, plus cloud

Printing as Backup

Sharing them with friends and family provides “offsite” backup

Photos 4x6 ...

Books, Calendars ...

Framed

Exhibits

Donations



Photography Club as Backup

Competitions

- Club, Interclub, NECCC
- Digital and print

Exhibits

- Prints

Club Web Albums



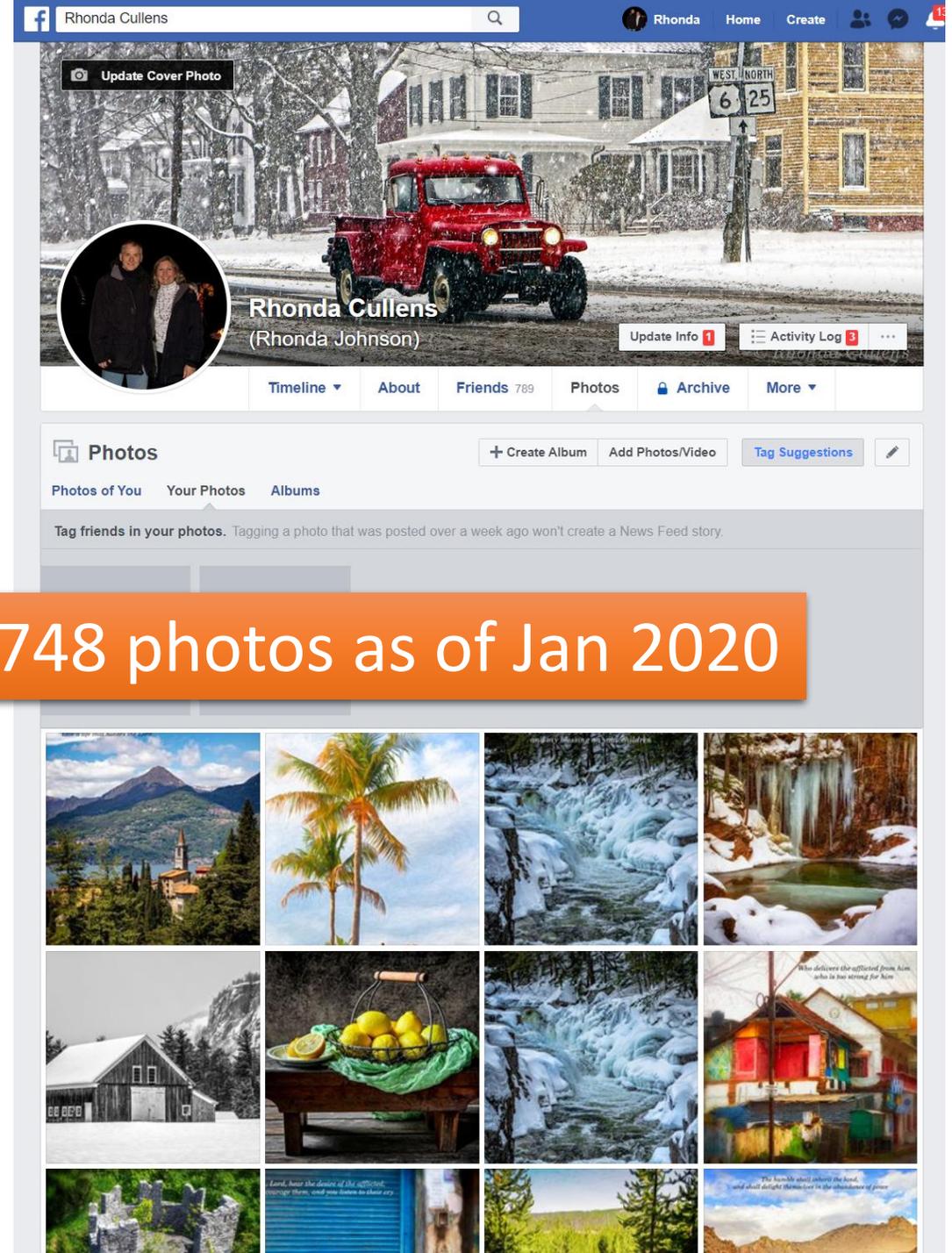
Social Media

A great free passive preservation method

Facebook

Instagram

Twitter ...



16,748 photos as of Jan 2020

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Technology Tip

Deleted or Missing Files are often recoverable!



The most common loss is when the “index” to files has been damaged. Software and services find files even when the “index” is missing. Search for tools online.

External Hard Drive



- Works with any computer
- Lots of space for <\$100
 - 1TB, is enough for 30,000 RAW or 150,000 JPG
- Lasts 3+ years with everyday use
- Lasts 10+ years in storage
- Most include backup software
- Semi-fragile

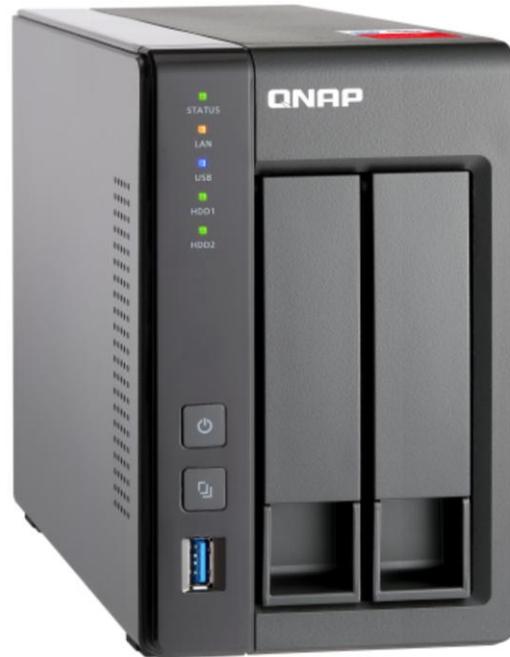
External Hard Drive

- ✓ Cheap
- ✓ Effective
- ✓ A great choice



Many size options - 1TB to 100TB+

Target twice current usage



Step 1

- Determine your space requirements
 - How many photos, cards, drives ... today
- Buy one twice this size, e.g. 4TB for \$60 at [Costco.com](https://www.costco.com)

Organize Now



Step 2

- Determine your organization style, date, folder naming ...
- Choose to use or not use any backup software
- Use for all new photos
- Next month copy old photos to the new drive

Repeat



Step 3

- Every month
- Copy your new photos to the external drive
- Copy any photos you edited to the external drive
- Extend your current photo workflow

After 5 Years Buy Another Drive



Step 4

- Every 3 to 5 years
- Repeat this process with a new hard drive
- Store the old drive, just in case something fails

Extra Effort Tip

Fire, Flood, Disaster ...

**Make of copy of the external drive
and give it to a friend for
safekeeping**

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What is the “cloud”?



A computer somewhere over the internet

For example,

Facebook data center in Prineville, Oregon
3 million square feet of computers & disk drives

Cloud Backup Services

Some space “Free” - Buy more space options

The big players

- **Microsoft OneDrive**
- **Apple iCloud**
- **Google Drive**
- **Dropbox**
- **Adobe (for Lightroom & Photoshop)**
- **Amazon Drive & Amazon Photos**

... there are dozens more choices

Software

Services include good software to choose what photos/files to upload

Dozens of online help videos

Considered failure proof

How to choose a cloud backup service

1

Avoid cloud backup if your internet service is slow

2

Decide if the free tier provides the space you need

3

Is it OK to leave your PC online for days to backup photos

4

Can the same solution be used for your phone and other devices

External Drive backup or Cloud backup

	External Drive	Cloud
Security	Physical security	Password protected
Availability	You must have the drive	Anywhere you have internet
Cost	One-time purchase	Annual purchase (higher)
Failure	New drive every 5 years	No data loss expected
Complexity	Low	Low to Medium
Time	Keep it simple	Keep it simple

The 3-2-1 rule can aid in the backup process. It states that there should be at least 3 copies of the data, stored on 2 different types of storage media, and one copy should be kept offsite, in a remote location (this can include [cloud storage](#))

Best Practices Bonus

- 1. If you are an Amazon Prime member use unlimited Amazon Photos**
- 2. Use private (non-shared) Facebook albums to store 10,000s of photos**

Amazon Photos - only for Amazon Prime members



Supported File Types

JPG, BMP, PNG, GIF,
most TIFF, HEIF ...

Nikon, Canon, Sony,
Olympus ...
RAW files & DNG

You do not have unlimited movie uploads

Software

Simple to use, yet
powerful

Just select a folder to
upload

Optional, choose how
much internet
bandwidth to use

Result

Search and find photos
quickly

Auto-indexed by
People, Places and
Things

Does not know the
names of people

Amazon Photos - Typical View

photos Chane

- Your Photos**
- Sharing
- Albums
- Stories
- People
- Places
- Trash
- Your Storage
- Your Apps

Sorted by date taken
Share Dec 27, 20

Uploaded all 2019 photos, 80,701 photos, 2 TB



FILTERS

Amazon Photos - Automatic People View

photos + Add Order Prints Chane

- Your Photos
- Sharing
- Albums
- Stories
- People**
- Places
- Trash
- Your Storage
- Your Apps

People

Amazon used Face Recognition to group people



Who's this?
1012 photos



Who's this?
707 photos



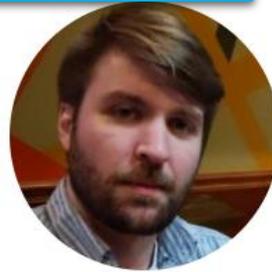
Who's this?
538 photos



Who's this?
224 photos



Who's this?
182 photos



Who's this?
115 photos



Who's this?
98 photos



Who's this?
97 photos



Who's this?
82 photos



Who's this?
81 photos



Who's this?
76 photos



Who's this?
63 photos



Amazon Photos - Automatic Search Filters

FILTERS

Media types

Photos 81k

Things

Plant 1.9k

Tree 1.1k

Sport 968

Water 810

Animal 750

Food 707

Filter on Things

Places

Sandy Hook, ... 2.3k

Bar Harbor, ... 2k

Newtown, CT 1.7k

Seaside, OR 1.5k

Beijing, CHN 1.1k

Amherst, MA 1.1k

Filter on Places

Amazon Photos - Find Chane & Rhonda eating in Da Nang

Your Apps Share May 8, 2019 — 7 items

FILTERS

Media types

Photos 8

Things Clear

Meal 8

Food 7

Cafe 2

Hat 1

People Clear

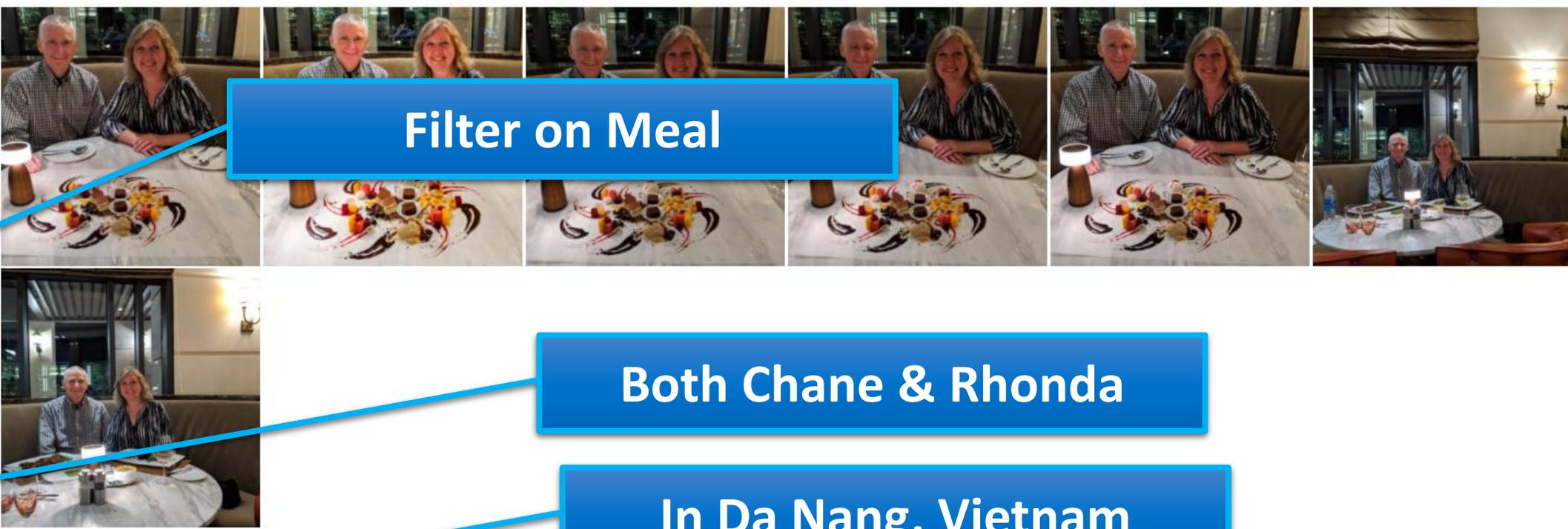
8

8

Places Clear

Da Nang, V... 8

Sandy Hook, ... 1



Filter on Meal

Both Chane & Rhonda

In Da Nang, Vietnam

Lightning fast on 80,000 photos

Amazon Photos - Find

Your Apps

Share May 8, 2019 — 7 items

FILTERS

Media types

Photos 8

Things

Clear

Meal 8

Food 7

Cafe 2

Hat 1

People

Clear

 8

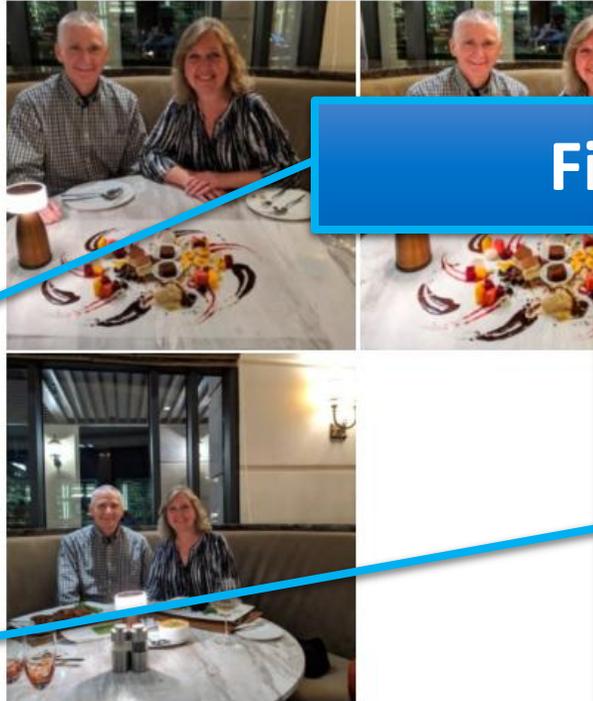
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Places

Clear

Da Nang, V... 8

Sandy Hook,... 1



Light

Amazon Photos - Summary

Highly recommended if you are already an Amazon Prime member

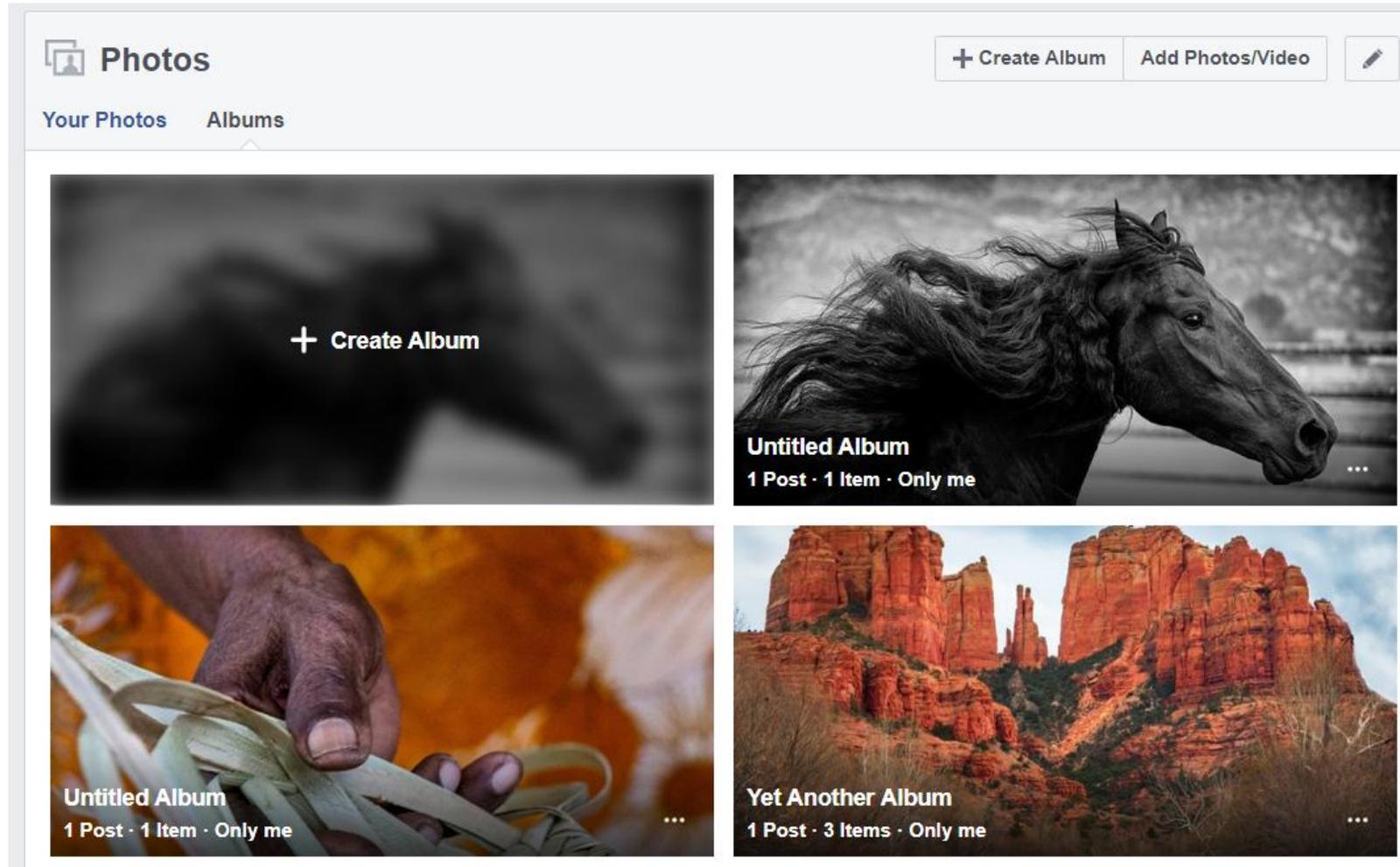
Just do it.



Facebook Photo Albums - Free, Free & Free!

Supported File Types	Software	Result
Photos - JPG, BMP, PNG, GIF or TIFF files	Drag and drop in Browser most common	It works! You should set your backup albums to Private
Movies - lots of formats, MP4, MOV, MPG ...	Lightroom addon	1,000 Photos per album
Download is a 2000 pixel JPG	Other software may exist	

A good backup for “Non-Facebook” users



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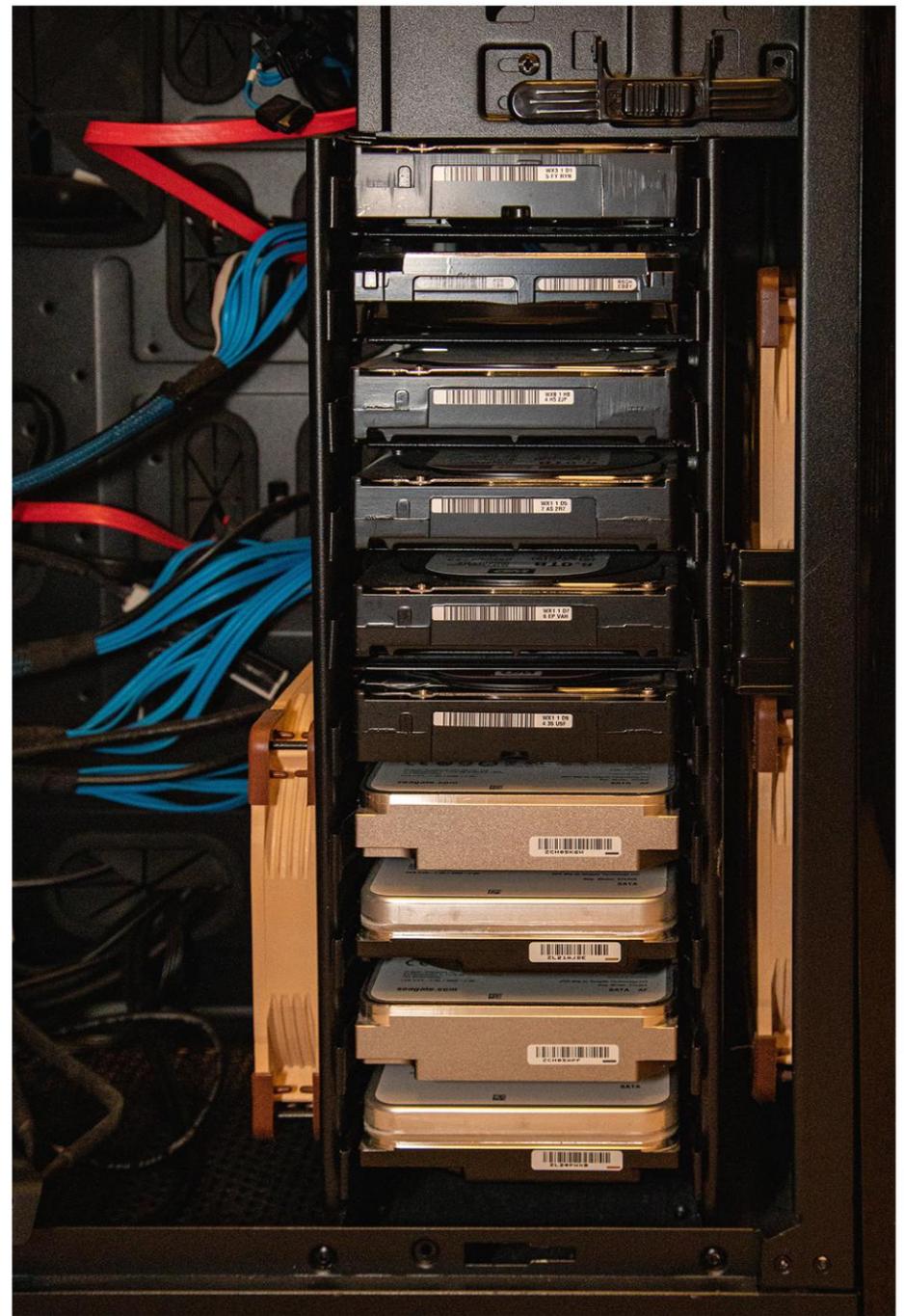


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Multiple computers
with multiple hard
drives, plus cloud

Don't do it!

Seriously, only do it if
you already know how



Everyday Tips

Travel

- Every night **copy** photos from camera to computer
- Travel greatly increases the risk of damage or loss

Delete

- Reduce complexity by **deleting** photos you don't need
- Simplify your life

Home

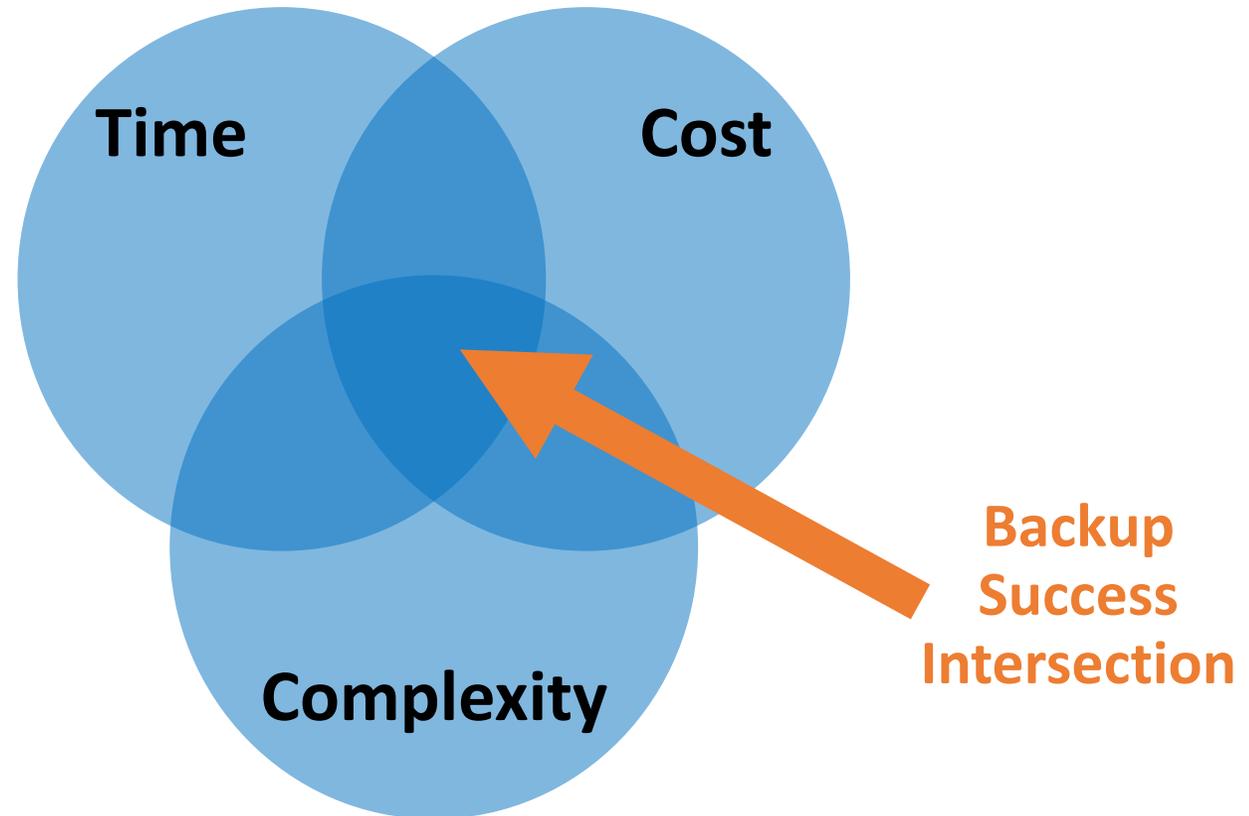
- Move photos to your computer often
- Don't encrypt your backup drives

Share

- Share your most important photos to passively create backups
- Let people enjoy them 😊

Summary

Match your needs to the “Backup Success Intersection”



Questions?

Chane Cullens – Chane@CCullens.com
Presentation – ccullens.com/backup