Improving Digital Photography Workflow:
Streamlining Archiving and File Management

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The advantages of a streamlined workflow: Productivity & Security
Goals of this workshop

- Get you to evaluate your current workflow
- For both safety and efficiency
- Not to "convert" you to any particular system or program

Stages of image processing

- Capture
- Download
- Sorting
- Renaming
- Creating folders
- Processing images
- Using images files
- Archiving / backup

Capture

What format(s) do you use?

- RAW only – Can be difficult for non-photo editing programs to read
- .jpg only – Choosing not to use RAW capture for workflow
- RAW and .jpg – Has several advantages but does add to workflow

Even if you only "process" RAW files a smaller .jpg file is easier for PS Bridge or other browsers to view. Some browsers cannot view RAW files. Keeping a small, unprocessed .jpg file with your "real" file makes some tasks faster.

Download

Many methods just don't erase the card as you are downloading! Keep card with data intact until (at least) a temporary backup is completed.

Temporary backups after downloading:

Create a copy of the image files which will not be on the same computer or same physical location as the original file. This allows you to erase your memory card and be able to sleep at night.

Keep a simple log of this temporary backup so if you need to replace the data (think short term) you can find the files.

Sorting

Delete unnecessary images so you are not processing them and wasting drive space. Consider other uses before hitting the delete key including stock or where part of the image is valuable. Making numerous in-camera dupes (a common film practice) is unnecessary with digital images. Just make sure you keep the best images.

Renaming

One of the primary reasons for renaming images is to avoid accidentally overwriting an old image with a new photo that has cycled around and has the same file name. I know 9,999 images seems like a lot but it will happen.

If you have two of the same cameras (make or model) change the coding prefix in one camera so that it does not match the other. This will also help to avoid overwriting images in the short term during initial downloads.

Renaming image files is also important because two (or more) images that start in different folders may end up in the same location years later (think about preparing a slide show presentation and moving images into one folder).

- Use a system that makes sense to you
- Use the batch renaming feature
- Remember to rename the preview .jpg file at the same time

Renaming: Stock vs. Commercial

You may need to develop different styles of file naming for different uses.

- Stock example: LSC#####, sequential number after code
- Commercial example: dirt_0709_###, sequential number after company name and date

Creating Folders

Considerations when creating folders

- Easy to use
- Easy to find folders
- Expandable…possibly onto multiple disks

Folder suggestions

- Use subfolders
- Consider use; stock or client
- Commercial use
- Client type
- Client name
- Specific job

For commercial clients consider starting folder with date in yymmdd format. This way if job folders are placed as sub-folders within a client's main folder they will stay in chronological order.

For stock use create manageable stock categories. Give consideration on how the folder will grow in the future. Although it my need to be divided to keep the overall folder size manageable put some thought into your folder divisions.

For example: Avoid "flowers", use "roses" or "yellow roses" instead.
Remember the system is for you so sort by how you think!

Processing Images

One technique that can speed workflow is creating a master processed file that will have many uses as we need them. This is a variation of the film concept of scanning once for many uses. By making our color adjustments, dust clean-up and other alterations (other than size and sharpening) to one file we avoid repetition each time we need this file for a different use.

Each time we need this image file we open the master processed file, MAKE A DUPLICATE, close the original (or at the very least minimize the file) and then work of a duplicate of the master processed file. Even if you make a tragic, un-fixable mistake you can always go back and make another duplicate of the MPF.

We can also tag the MPF file with important information in the metadata. This way as we make copies the data will be included.

There is no need to "process" any image file until it is needed (exception possibly for keyword or caption information that may be forgotten or to aid in searching).

Once file is processed save it in same location. This makes it easier to find. Save the image (with the layers) as a .tif or .psd file. You can crop the file but don not resize the image at this stage. We will leave this until we actually need the photo. Also, don't sharpen the image since this is best done once the output size is known.

Benefits of master processed file

- Avoid duplication of work in most cases
- Keeps everything in same location
- Avoid overwriting files

Using image files

In most cases there is no need to process image files until they are needed. Metadata can be applied at time of download (better memory and search capabilities) or later at the time of use. Metadata can also be added at this stage.

MAKE A DUPLICATE OF THE MASTER PROCESSED FILE BEFORE CONTINUING. Have you noticed that this has been in bold print twice? I know photographers who play with either an original file or an original master processed file and think they will just use the "save as" command later. True this will work, but do you really want to risk accidentally hitting the "save" command instead?

As you process a file for a specific use, keep the root filename and add a suffix. For example use "lr" or "lowres" for a small sized .jpg low resolution email size file or place the client's name at the end of the file name. This way all of the files stay right next to the original, the master processed file and all other images processed using the original image. This makes the files easy to find and also helps to avoid duplicating your work (e.g. making two files sized for a slide show presentation).

Archiving & Backup

The best archive / backup system is useless if you don't use it! The system can and will depend on the volume of images, your type of photography and other factors. I don't believe there is a "best" system.

Threats

- Hard drive crashes
- File corruption
- Power surge
- Virus
- Theft

Different media types offer different levels of protection. One media may protect well from one type of threat but be vulnerable to another type. Because of this more than one

system and media type may be necessary. It all depends on how much you value your images.

Types of archive / backup media

- Internal hard drives
- External hard drives
- CD
- DVD
- Dedicated RAID systems
- Online storage

Internal hard drives

- Convenient
- Quick
- Easy to use
- Low cost
- High risk
- Vulnerable to most threats

External hard drives

- Portable
- Convenient
- Reasonably fast
- Easy to use
- Low cost
- Lower risk than internal drives
- More vulnerable if left connected to computer

CD – Compact Disk

- Safe from some threats (i.e. virus)
- Portable, easy to store off-site
- Inexpensive
- Longevity (don't count on more than five years)
- Susceptible to damage (scratching the surface)
- Compatibility with other equipment

DVD's

- Larger storage size than CD's
- Safe from some threats (i.e. virus)
- Portable, easy to store off-site
- Inexpensive, more cost effective than CD's
- Longevity
- Susceptible to damage
- More compatibility issues than CD's

CD / DVD considerations

- "Finalize" disks
- Don't use RW (re-write) disks
- Consider archival quality disks (100 – 300 year rating)
- Use for initial temporary backup and off-site storage
- Great protection against power surge, virus and theft (if off-site)

Other CD/DVD type storage

Other recordable disk technologies around the corner such as BluRay and HD-DVD. We all need to be ready to move with technology.

Dedicated RAID systems

- Immediate redundant backup system
- Can also be “striped” to increase speed (this does not create a backup)
- Vulnerable to theft, virus & power surge
- More expensive than external drives
- Proprietary systems
- Check for cost of replacement drives

Online storage

- Can be set to backup while you work
- Can be accessed off-site
- Expensive
- Slow
- Need to check reliability of company
- Likely to improve in the future

Type of Storage	Secondary Internal Hard Drive	External Hard Drive	CD’s	DVD’s	RAID System	Online Storage
Cost	$	$$	$$	$	$$$	$$$$
Threats Protection	Primary drive failure, Corruption	Primary drive failure, Corruption, Theft* Surge*	All threats*	All threats*	Primary drive failure	Varies (depends on backup status)
Threat Vulnerability	Theft, Surge,	Vulnerable when connected to computer	Age, Damage	Age, Damage	Virus, Corruption, Surge	Varies (depends on backup status)

* Protection valid only if removed from premises

Migrating data

Drag and drop everything method

- Slow (think hours)
- At the cost of HDD media can rotate backup drives

Migrate only new / altered images

- Faster
- Consider software for task
- If not using software must be organized to not forget files

Will's top 10 things you can do to improve your workflow

10) Learn to use batch renaming
9) Learn to batch process files
8) Learn to create and use actions
7) Strongly consider dual monitors
6) Calibrate your monitor
5) Learn to use keyword sets in bridge
4) Make a duplicate before you work on your master processed file
3) Continue to evaluate your procedures
2) Be ready to move with technology

And the number one thing you can do to improve your workflow is…
MAKE SURE YOU REALLY WANT TO DELETE THE IMAGE WHEN YOUR COMPUTER ASKS YOU,
"DO YOU REALLY WANT TO DELETE THIS IMAGE?"

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