Going with the Digital Flow
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Those of us shooting digital images are increasingly aware of the importance of a disciplined workflow to ensure high-quality results. Let's review the basic steps and suggest a process that can make the digital workflow effective and enjoyable. We want to ensure that we properly handle the digital images from the time of capture to their ultimate use. In this column, we'll address the first several steps of the workflow – capture, archive, and organize. Other topics will be addressed in later columns.

Image Capture

If you are using a digital camera, you are probably already checking to make sure that you have plenty of batteries and media chips before you set out to shoot. For long trips, you will need a separate download device (a laptop or digital wallet). Consider the choices you will make regarding the image resolution and the white balance camera settings…will you need your camera's manual to help with those settings? And remember that the electronics in today's camera are sensitive to heat and dust...take the proper precautions to ensure reliable operation.

Of course, digital capture can also be the result of a scan of a negative, slide, or print. Some of the best "digital" photographers don't own a digital camera.

Downloading and Archiving

There are times when you'll chose to print images directly from the chip (either at a photo lab or using a printer equipped with a media reader). But in order to edit, archive, and organize the images properly, you'll need to download them to your computer.

Before the download, consider using the LCD screen on the camera to delete any obvious errors. If an image is questionable, go ahead and download it and evaluate it later. Depending on your download software, you may have the option of renaming your images during the download process (e.g. Jim Portrait 001 through 008). That makes sense if all of the images are of a common subject.

During the download process, the images will be copied to a folder on your computer. You are usually able to specify the name and location for that folder. Consider using *today's date* as a temporary folder name.

It is very important to copy the downloaded images immediately to CD (or DVD, or external disc drive). These are your precious "negatives"...preserve them in their original state, just as you would your film images. Copy them to CD - without opening or editing the images (very important). And resist the temptation to completely fill the CD to its

limit of 700 MB…I have encountered software errors that rendered an entire CD unreadable because of a glitch while appending files to a nearly-full CD.

After burning the CD, make sure it reads properly...better to discover this sooner than later. With your archival CD complete, take a few minutes to make a second copy for offsite storage. Want to be really thorough? Use a different brand of CD media for the second copy. Longevity of CDs is a topic of debate these days...using high-quality media and making new copies every few years is about the best you can do. Do you have an image that you want to keep for posterity? Have an archival-quality print made and put it away in a safe place...that's how the picture of your great grandparents made it all these years!

Why be so insistent upon backing up the original image files? Because the computer glitch that can destroy your digital image is much more likely to occur than the flood or house fire that can destroy your film collection. Have you ever deleted or overwritten a valuable file by mistake? Ever had your computer crash without having a full backup?

Also, when you delete the images from your camera's media chip, perform that process in the camera...not on the reader or other device. The file formats can differ. When erasing all images from the chip, it's better to use the *format* function instead of the *delete* function in your camera. It gives your media chip a fresh start.

Organizing your images

Both Windows XP and MAC computers offer built-in software to help organize your photos (My Pictures in XP and iPhoto on the MAC). Take the time to explore their capabilities. They may be sufficient for your needs...saving you the expense and learning curve of additional software.

If you need more capability, there is a wide variety of browser/organizer software on the market. When time is money, professionals use these packages to speed up the review and edit process...especially when handling hundreds of images from a shoot. Packages like Photomechanic, Photoshop CS/Elements File Browser, Adobe Album, and ACDSee are just a few of the choices. Want to try a free one? Picasa 2 is getting a lot of attention these days (www.picasa.com).

These packages have features that allow you to tag images with key words (e.g. family, sports, project name). You can then retrieve images by those tags, independent of their file names and folder location. Limited editing tools (cropping, levels, red-eye removal) and project templates (slides shows, album pages, email prep) are often included. While I own several of these packages, I rarely use them for organizing my images. *My Pictures* and a thoughtful folder structure work best for me...your mileage may vary.

Now, let's turn our attention back to your images…residing in the *today's date* temporary folder. It's time to move them to permanent folders with more meaningful names.

If you haven't already decided upon a folder structure, here are some things to consider. Do you want to organize your work chronologically? by event? by category? or maybe some combination? Compare the requirements of a landscape photographer who takes 30 images per month with the demands of a press photographer who shoots hundreds of images per day.

Having tried a few different approaches over the years, I'm happy to share my method with you. It mimics the organizational structure I use with my film work while adding the extra flexibility that digital storage offers.

I differentiate my work by two major areas…images that are related to an *event* (e.g. Christmas 2004) versus images that are related to a *category* (e.g. Architecture).

I give the *event* folders names like *Family Reunion Aug 04* and I place them in a master folder called *2004 Jul – Dec*. Photoshop editing is performed on the images within the folders. Over time, it is quite easy to create a small library of these master folders on CDs, make contact sheets of each folder for quick reference, and keep the images offline.

The *category* image folders serve as a catch all for images not tied to an event. They have names like *Architecture, Panorama Projects*, *NCPS Projects, Flora, Fauna*, and *Sunsets*. When I have completed a project (e.g. a print for the Member Show), I copy the entire project to a CD for offline storage.

But what if you took a great sunset shot during the *Family Reunion Aug 04*? One approach is to make a copy of the sunset image and place it in the *Sunsets* folder. If you have enough disc space, it's a fast and easy solution. But if you plan to retrieve images by multiple tags (e.g. tagging your favorite Yosemite shot by "landscape" "Yosemite trip July 03" and "mountain scenes"), maybe you'll be best served with one of the packages discussed earlier.

Once you have moved your images to their permanent folders, you can delete the *today's date* folder to clean things up a bit. Now you can turn to the images and begin your editing and output preparation.

Summary

We have reviewed the first steps in the digital workflow. Image editing and managing the output/printing process are steps that deserve a separate discussion. But the initial steps of downloading, archiving, and organizing are the necessary foundation for a manageable and successful workflow. Have fun and good shooting!