

Mastering Image Organization



Taking Control of Your Photo Library in Adobe Photoshop Lightroom



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The screenshot shows the Adobe Photoshop Lightroom 3 interface. The main area displays a grid of photo thumbnails. A specific photo in the center-left of the grid is selected and enlarged at the bottom of the screen. The left sidebar lists collections, including '2007', '2008', '2009', '2010', and '2011', with several sub-folders under '2011'. The top menu bar includes 'Library', 'Develop', 'Slideshow', 'Print', and 'Web'. Various panels on the right side provide metadata and editing tools, such as the 'Histogram' panel showing a peak at ISO 100 and f/16, and the 'Metadata' panel which is currently set to 'Quick Develop' mode.

Contents

Part I

Setting Up Lightroom and Your Computer's File System 3

Six Steps to Achieving Image Organization Nirvana 4

Some Fundamentals: The Difference Between Browsing and Cataloging 5

Organization - Setting Up Lightroom 6

Storing Images on Your Computer 6

Part II

Organizing Folders, Creating a Naming Convention, and Tagging Images 11

Organizing Folders 11

Naming Conventions 12

Creating a Filenaming Preset 12

Saving a File Naming Preset 14

Other Data That Can be Applied During Import 14

Part III

Creating Collections, Adding Attributes, and More on Metadata 17

Collections 17

Rating, Flagging and Labeling 19

Keywording and Metadata 21

More on Maintaining Image Organization 21

Spawning Additional Versions from Your Original Master Photographs 22

Part IV

Storage, Backup and Archiving 25

One Catalog or Many? 25

Traveling with Lightroom on a Laptop 25

Backup and Archive 25

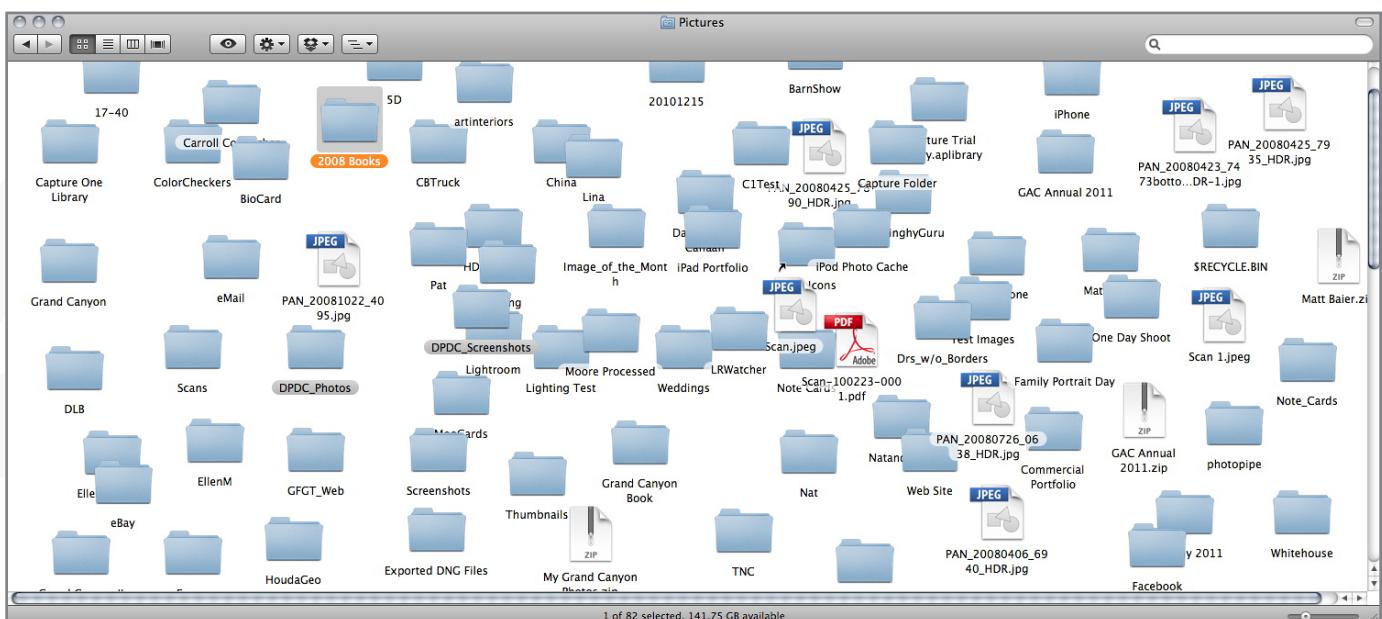
Spanning Multiple Drives 25

Conclusion 27

Part I

Setting Up Lightroom and Your Computer's File System

I know a lot of photographers who love working with Lightroom, especially because of its powerful ability to optimize tone and color. However, I am consistently hearing that the cataloging system is confusing and photographers are losing images as a result. This is a common problem especially if you are used to working with Adobe Bridge, Photo Mechanic or a similar file browser. If you have not taken the time to work with and understand Lightroom's Library capabilities, you are missing out on the huge organizational features that Lightroom offers.



If your desktop or folders look like this, you need help!

If you are working with a file browser like Adobe Bridge, you know that it provides a window to the file folders on your hard drive, and provides some nice features for tagging and creating collections; however, it still relies heavily on the computer's filing system for organizing your photos. The file system is great for organizing files into folder hierarchies, but is very limited when it comes to image organization. Here's an example:

Over time, maybe several years or more, you have collected all of your images into folders based on the name of a job, your client, or a project. You have also copied specific images into folders for your portfolio, or a presentation, duplicating the original. Or, maybe you have edited an original Raw file and output it in order to email to a colleague, saving the small email photo in yet another folder. In a couple of years you may have amassed hundreds of folders of images. Unless you have a great memory, locating an image when it comes time can be a real exercise in frustration - especially if you've renamed your files, output them in multiple file formats, and/or saved them to different folders. You can see

how over time this can become an ugly mess - you might be able to find the original, but where is the version that you spent an hour editing in Photoshop? Additionally, when it comes to building a safe archive of your work, you can't be sure that all of the images are properly backed up. Or even worse, you could end up throwing away original images that you thought you had saved copies of.

I think you get the picture. This type of ad hoc organization can quickly get out of control. Computer file systems were not built to do the organizational heavy lifting that a database can. This is why Lightroom, which is built on a database platform, is a much better choice for this type of work. But like any database, it takes careful organization and a great deal of consistency to fully take advantage of its features. Many photographers find the process confusing and time consuming. It may be at first, but once Lightroom is set up for your workflow, it becomes very easy to manage and the overall advantages become very apparent.

Here is a list of items that I use to keep my images in order and accessible. I'll follow up with more detail on each of these points to show how and why this structure works.

Six Steps to Achieving Image Organization Nirvana

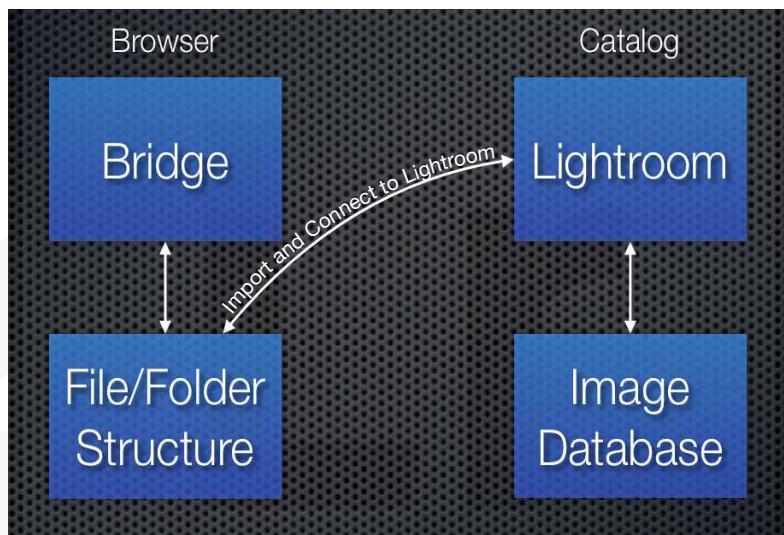
1. Make the folder structure on your hard drive for storing your photographs as simple as possible. Base the folder hierarchy on date: year > month > day.
2. Give every image file that comes off your camera or flash card a consistent name, and include the date in the filename. Don't name the image file after the location it was shot, the job, or the client. You can handle this type of organization later inside Lightroom's Library (in a much more efficient way).
3. Use Lightroom to organize your images and never rearrange them using the computer's file system, the Finder or Windows Explorer. You have to think of Lightroom as the hub for all of your image organization, optimization, and output. If you want to make changes to a folder's location, you make the change inside Lightroom, NOT at the desktop in the Finder or Windows Explorer.
4. Take full advantage of Lightroom's database capabilities for collections, keywords, metadata, rating, labeling, and flagging. This will make organizing and retrieving images much easier. It will allow you to arrange your images in any logical way you want: by job, client, event, etc.
5. Be very consistent. This is one of those left brain things that most creative people hate. Just consider that it is a short investment of your time to help minimize frustration going forward.
6. Instead of copying files from your camera or flash card to your computers desktop, **ALWAYS** use Lightroom to import your photographs. Lightroom's importer can rename

your images, store them in the folder of your choice on your hard drive and apply keywords and other data during the import process. Once the import process is set up, you will rarely have to think about it again.

Some Fundamentals: The Difference Between Browsing and Cataloging

In order to understand how Lightroom handles your image files, it's worthwhile knowing how it differs from a file browser like Adobe Bridge. Once you understand this, it will become clear why it is easy to lose images in the Lightroom catalog, which is a very common problem faced by new users - a problem that you obviously want to avoid.

As mentioned earlier, file browsing applications simply look into the folder that they are



Adobe Bridge and other file browsing applications present thumbnails of the images that reside in a folder that the browser is pointed at. With a cataloguing system like Lightroom, images need to be imported into the catalog/database. A database record is made for every imported image and a link is established between the Lightroom record in the catalog and the original image that resides on the computer's hard drive.

pointed at to present thumbnails of the files that reside there. On the other hand, a catalog requires that images are imported into the catalog's database. When images are imported into Lightroom several things happen:

- The catalog (Lightroom) creates a database record of the photograph.
- A thumbnail of the photograph that was imported is generated and attached to the image's record.
- Any metadata embedded in the image file is also imported and attached to the record, eg: Exif data from the camera with information about camera exposure, camera model, lens used, etc.

- Lightroom establishes a link between the catalog record and the original file on disk. It is necessary for Lightroom to know where the original resides so that when you optimize/edit the file in Lightroom's Develop panel, Lightroom has access to the full image data in order to work.

Another distinct advantage to using a catalog vs a browser is that the original image can be disconnected from the catalog, but the catalog still will retain a record of the photo with its thumbnail and all its metadata. With a browser, if the image file is removed from the folder that the browser is pointed at, the browser will show no record of it - to the browser, the file simply does not exist unless it sees it in the folder.

Imagine that you have thousands of images in Lightroom and many of your older images reside on a hard drive that you have disconnected from your computer - maybe you have

put the drive in your safety deposit box. Lightroom still retains a record of the disconnected images. If you search for an image that is “offline”, it will still come up in a search. Once you find it, Lightroom shows the name of the drive that the photo is on. Connect the drive to your computer to bring the image back “online” so that you can edit it. Additionally, adding metadata, like IPTC, or keywords can be done with offline images.

Organization - Setting Up Lightroom

Hopefully now some of the organizational advantages of using Lightroom have become clear. But how do you set up your naming and storage process, so that your files aren’t scattered all over your computer and turning into a big unorganized mess?

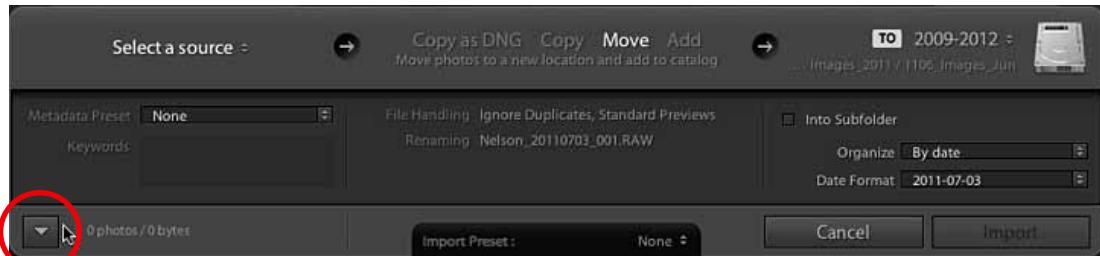
What I am about to describe is my method for organization. I have a little over 100,000 image files (a big collection, but not that big in the scheme of things). These files span back to 1996 when I started taking digital photographs. I have been able (with some work) to put my library in order so that it is painless for me to locate a file when I need to. I am not suggesting that you follow my methods verbatim. Everyone works differently, so feel free to make your own variations as you like. I’ll try to be clear on why I have set up my system the way I have, and I am hoping that you can glean from this some good ideas for your library that will make working with catalog of photographs a lot easier.

Storing Images on Your Computer

I mentioned earlier that using Lightroom to import photographs to your computer is the process that you want to follow. Prior to doing that you need to define a space on your computer to store your images. I find it best to dedicate a large drive just for my photos--in fact, I have six. Four of them are stacked in a Burley eSATA drive tower that is dedicated to my photo library. This may be overkill for you. That’s OK. You just want to have a single consistent place where your images are stored. As your library grows, you can add additional storage space.

The easiest, most straight-forward method for storing images is to put them into a folder hierarchy based on date. Start with a folder for the current year. Inside it I have twelve folders for each month, and in the month folder I have folders for the days that I take pictures. At this point you may be thinking, “Yeah, but I want a folder named for my client or the name of the person I photographed, or whatever.” Don’t worry about that right now. Lightroom is going to address those organizational issues from within its catalog. Right now you just want to create a place where you can dump your photographs, but in a simple and orderly fashion. I name my drives based on the years that the photographs were taken, like “2009-2011”. This drive has three top level folders, one for each year - no fuss, no muss!

When you are ready to load photos, either attach your camera or a card reader to your computer and launch Lightroom. When Lightroom launches go to “File > Import Photos...”

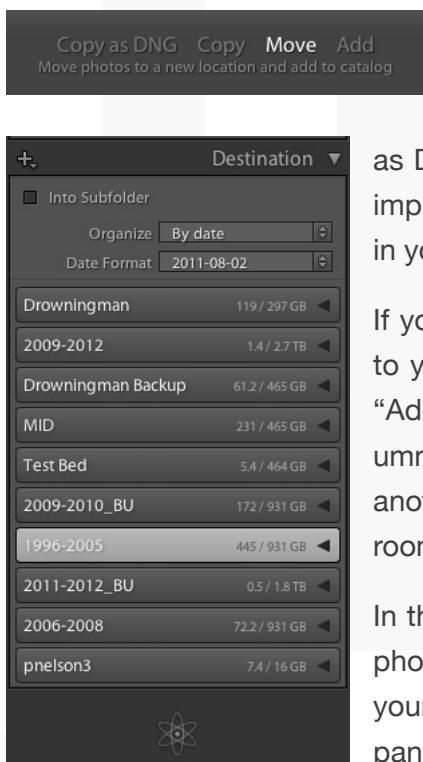


When you open the Import dialog box, if it looks like this, click the button in the lower left corner so that you can see thumbnails of all the images you are importing.

The Import dialog box opens. (If you are not seeing the full dialog box with thumbnails, push the down facing arrow button in the lower left corner.) The controls in this import dialog box are extensive, and you will want to spend a little time here understanding how they work. Once you have your import process set up, bringing images into Lightroom will become very easy.



In the left column you will find a list of locations for all the source material that you might want to import. This shows a list of all of the hard drive volumes you have connected to your computer as well as any flash cards or cameras you might have attached. On the right are all of the tools for controlling what happens to the images as they are being imported. The very first thing you should understand is where your images are going to land once you have copied them off of your camera or flash card. If you have plugged in your camera or a card reader (with card installed), you should see the name of the item listed at the top of the left hand column. If you select it, you will see thumbnails of the images that are currently resident in the camera or on the card.



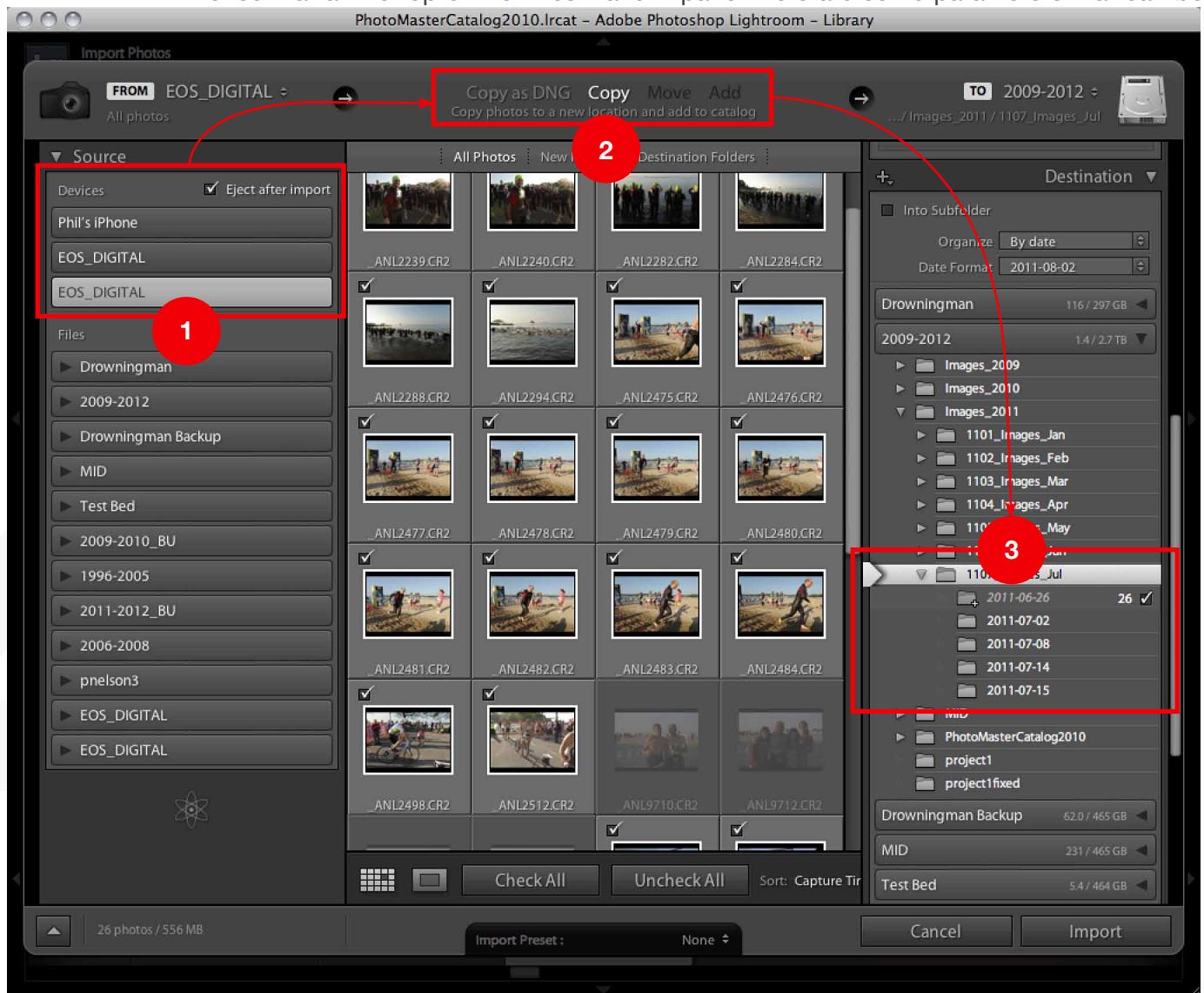
In the middle top of the import dialog box you will see that there are several methods for importing images into Lightroom. If you are working with a camera or flash card only two of the options are available, “Copy as DNG” or “Copy”. “Copy as DNG” will convert the file to a DNG while it’s importing. Otherwise the file type will remain the same as what you recorded in your camera, ie: Raw or JPG.

If you choose to import images that already reside on a hard drive attached to your computer, the other two options will become available, “Move” and “Add”. First choose the source folder from the Source list in the left hand column. Choosing “Move” will copy your images from their current location to another location that you define. “Add” simply adds the images to the Lightroom catalog from their current source location without moving them.

In the right hand column, you need to tell Lightroom the destination for your photos when they are imported. If you have a storage device dedicated for your photo library, you need to navigate to it in the list under the “Destination” panel. Or, if you have dedicated a specific folder for your photographs, you

need to select it under the “Destination” panel before importing.

Notice that at the top of the “Destination” panel there are some parameters that can be



Lightroom's Import Dialog with thumbnail images showing. - 1-First select a source from the left (typically your flash card). 2-Then select a copy method. 3-Define the destination for your imported images. Notice that when Organize by Date is chosen and the Date Format is set to 2011/07/29, Lightroom organizes the images into folders based on the date the photograph was taken, even if the flash card holds pictures taken on different dates. Lightroom will create a folder for the date if it does not already exist.

set. Of particular note is the “Organize” option. If you choose “By Date”, you can set up an import process that will automatically organize your images on your computer using a folder hierarchy based on date. Once this is set up, you don’t have to think about where your files are going to land every time you import. Let me explain some of the options when “By Date” has been selected:

A new menu appears providing a choice of date formats. This can be a little confusing at first. Any date format that contains a forward slash, “/”, indicates that Lightroom will automatically build sub folders. So the format, “2011/07/30” will create a folder for the year, “2011”, into which it will place a folder for the month, “07”, and then in the month folder it

will build a folder for the day, “30”. Lightroom will drop all of the images that were photographed on July 30th, 2011 into the “30” folder. Just remember to select the destination storage device before importing. Lightroom will do the folder organizing for you.

Date Format Menu		
	2011/07-30	Hierarchy based on year and day
	2011/2011-07-30	<i>Day folders for the days the photos were taken placed inside a year folder</i>
	2011/July 30	
	2011/07	Hierarchy based on year and month
	2011/Jul	<i>Month folders for the months the photos were taken placed inside a year folder</i>
	2011/July	
	2011/07/30	Hierarchy based on year, month, and day
	2011/July/30	<i>Day folders for the days the photos were taken placed inside a month folder, placed inside a year folder</i>
	2011/2011-07/2011-07-30	
<input checked="" type="checkbox"/>	2011-07-30	Day Folder
	2011 Jul 30	<i>Day folders for the days the photos were taken placed wherever the user decides</i>
	2011 July 30	
	20110730	

The Date Format menu provides twelve different options for folder hierarchy and folder naming. Menu items with a “/” will nest one folder inside another.

If a year, month, or day folder does not exist, Lightroom will create the folder if you are importing an image that was taken on a date for which there is no folder. If the folder already exists, Lightroom will put the file in the appropriate folder.

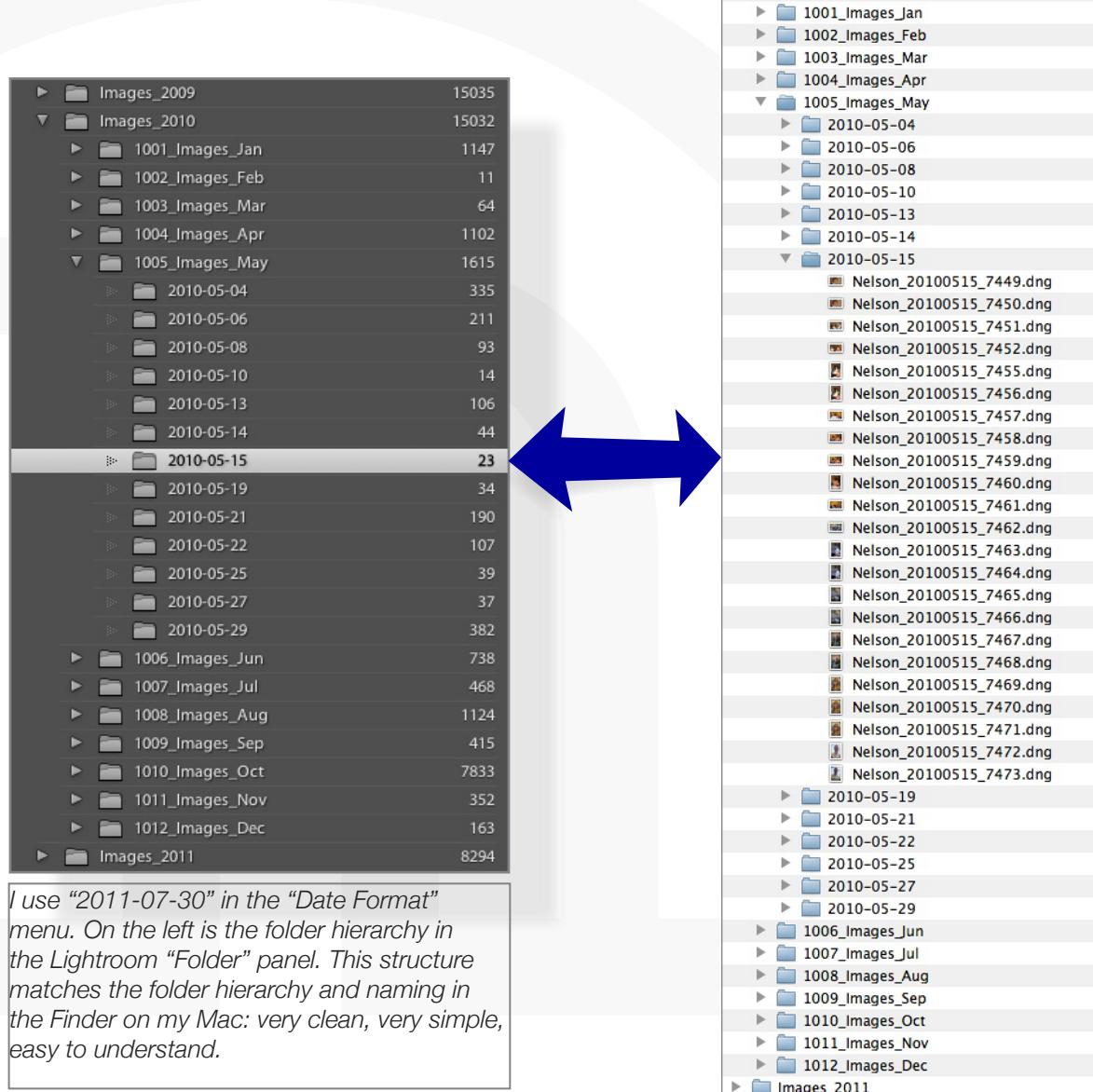
If your camera or flash card contains images that were photographed on multiple different days, Lightroom will sort them accordingly, ensuring that the images land in folders that match the day that the picture was taken even if they were taken on different days.

Under the “Date Format” menu there are numerous options. I would suggest being careful to *not* choose an option that uses the month’s proper name, since sorting months by name will not sort in the proper calendar order, ie: “April, August, December...” is the alphabetical sorting based on the month name vs “January, February, March...” which is standard date sorting.

Once your import is complete, Lightroom will organize your folder hierarchy under the “Folder” panel in the left hand column of the Library. This makes it very easy to locate a set of photographs taken on a particular day. From here, you will be able to create more granular organization that will make it easy to pinpoint a particular file when you need it, to collect images based on a job, or a client, or event, or whatever you want. All the organizational stuff that you might be doing already or tempted to do with the computer’s file system will turn your image organization into a big mess. In Lightroom’s Library, organization is possible while maintaining complete order of your image catalog as well as the

folder hierarchy on your computer. We'll get into a lot more of these organizational features in the third part of this paper.

To review: In the Import dialog box, select the source in the left column, select the copy method at the top of the dialog box, then select the destination volume or folder. If using "Organize By Date" and one of the Date Formats, Lightroom will take care of the rest, creating the necessary folders for your imported images. If you are consistent with this process, all of your photographs will be stored in a hierarchical folder system based on the date the photograph was taken. This is a simple way for your computer's file system to store your images, one that provides a very basic and organized structure so that you always know where your files are located (not scattered around in different folders with names that might be meaningless). This simple structure provides Lightroom a means for tracking your images, and it is within the Lightroom catalog that you will be able to further organize your files into logical groups, make searches that can find files rapidly, and give you some peace of mind because you will know where your images are and that they are always accessible.



Part II

Organizing Folders, Creating a Naming Convention, and Tagging Images

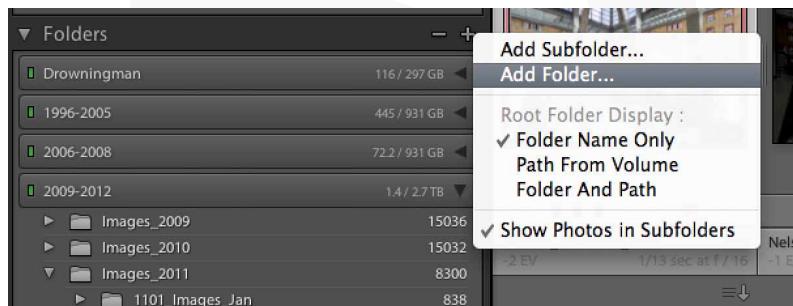
First: An Important Consideration for Organizing Files and Folders

Resist the temptation to move your image files in the finder or windows explorer! This is the major cause of lost files in the Lightroom catalog and the biggest problem that most new Lightroom users face. If you move a file at the desktop level, you will disconnect it from the record in Lightroom's database, and then you will struggle to figure out in Lightroom why you cannot edit your image. The file system on your computer knows nothing about how Lightroom works and won't be able to update Lightroom if you move a folder of images to a different location. On the other hand, Lightroom knows all about your computer's filing system, so if you rearrange your files and folders inside Lightroom, then Lightroom will instruct the Finder and Windows Explorer to move the files and folders accordingly and will maintain the connection with the original photo file and the record of the file in Lightroom. **If you need to rearrange your files or folders, do it in Lightroom.**

Organizing Folders

Inside the folder panel, it is possible to move files around by dragging and dropping. Moving an image from one folder to another can be achieved simply by locating the image in Grid view and dragging the thumbnail over the destination folder in the Folder Panel. Creating a new folder in Lightroom is also possible. At the right of the Folder Panel is a menu. It looks like a "+" sign. Under this menu are commands for making new folders.

Creating new folders in Lightroom is very easy. Simply select "Add Folder..." or "Add Sub-



Create a new folder by selecting "Add Folder..." using the "+" menu at the top of the "Folder" panel.

"folder..." from the menu at the top right of the Folder Panel. This will create a new folder in Lightroom as well as within your computer's file system.

Equally important to a consistent method for storing your photographs is a standard convention for naming them. We will look at this next.

Naming Conventions

Naming conventions are just as important as a solid filing structure. Often you may want to name a file after a job or client or give it a name that describes the image content. From an organizational standpoint, this is a bad idea. Using Lightroom's keywording, general metadata, and collections can really help with organizing your images based on content, job or whatever, without having to put this information in the filename. These features allow you to name the image files in a very consistent way and still find them if we want to run a search based on a job or person you photographed or the content of the image. Let me explain.

The name of an image file should contain a “unique identifier”. In other words, the name should not be shared by any other image file. Creating a method for naming your images with a unique identifier is quite simple and can be applied during the import process. Here is the structure of my file naming convention:

Lastname_YearMonthDay_FileNumberSuffix

Example: “Nelson_20110730_2345”

The date is based on a reverse notation from what we commonly use in the US. This is important because when sorting your files, you want them to sort by year first, month second, and day third. FileNumberSuffix is a product of your camera naming scheme. Typically the name coming off of a digital camera looks something like this, “_ANL2345.CR2”. The number suffix pulls the last four numeric digits (before the file extension) from the camera’s file name. The combination of the date and the number suffix will create a unique identifier for each image. This works 100% of the time, if you avoid the following:

- Do not reset the file numbering in your camera every time that you insert a new flash card (this is a setting in most DSLRs).
- Shooting with two cameras that happen to be recording the same suffix number on the day you are shooting. (If you are in this position, you can insert the camera serial number before the suffix number when building the naming preset or simply reset one of the camera’s numbering back to zero.)

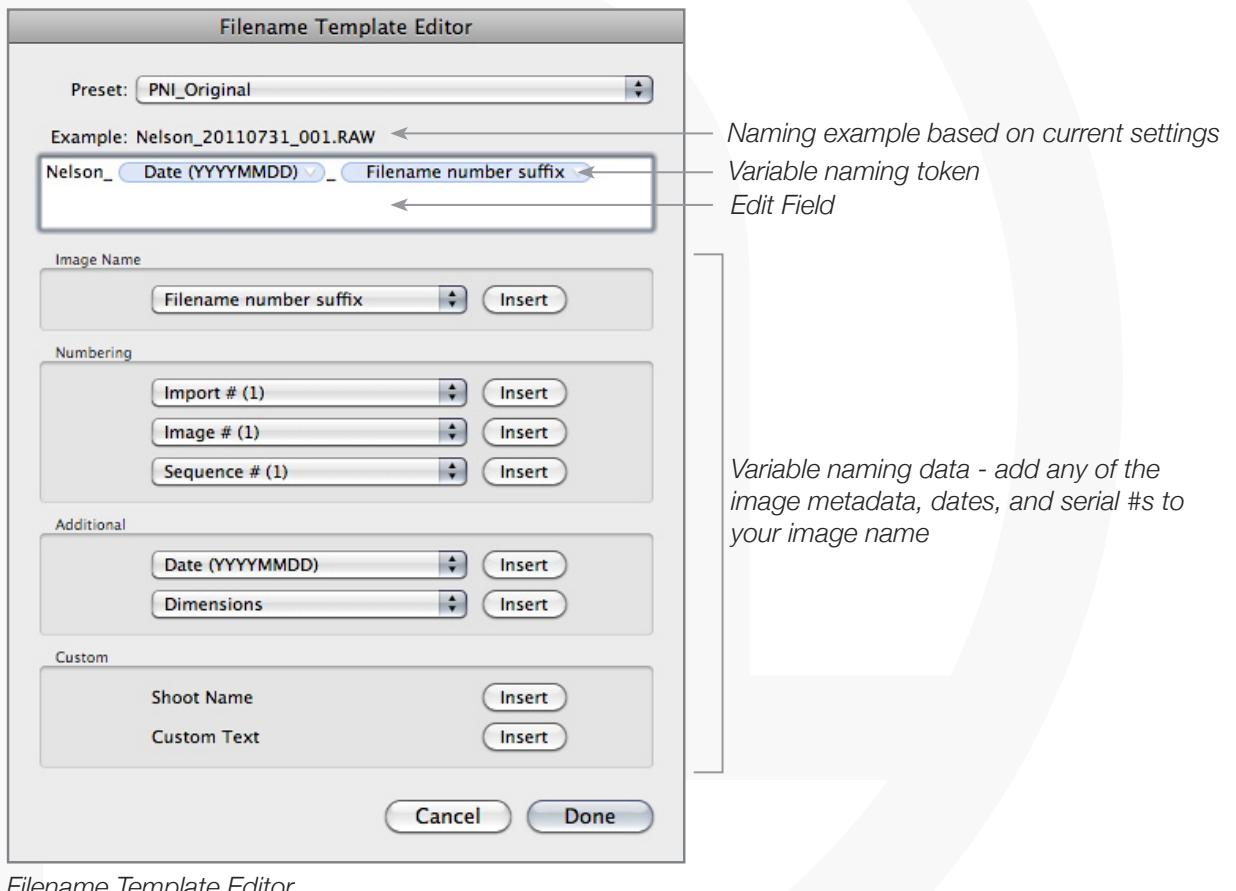
Putting your name at the beginning of the file name identifies that the image as yours. This can be helpful if you are sending photographs to an art buyer, and she has a pile of them from different photographers on her desktop. It helps identify your photograph quickly.

Creating a Filenaming Preset

So how do you set up a naming preset? If you have never created a naming preset in Lightroom, this is how it is done. We’re going to set this up right inside the Import dialog box.

1. If you have not opened the Import dialog, do so now. Choose “File > Import Photos...”

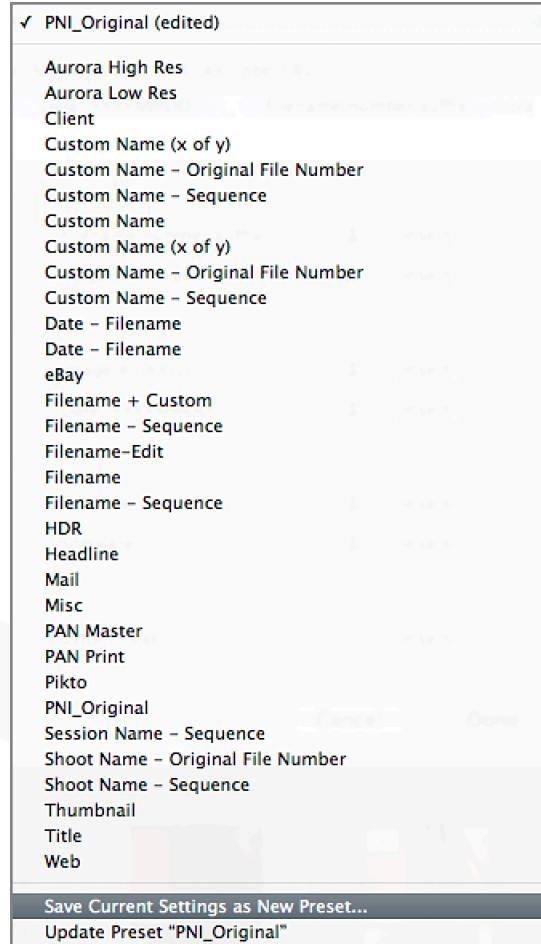
2. In the right hand column, open the “File Renaming” panel.
3. Under the “Template” menu, pull down to the last item, “Edit”. This opens the “Filename Template Editor” where you can construct a file naming preset.
4. In the edit field under “Example”, you can type text or place naming tokens. The tokens are variables based on the individual file’s metadata and are controlled and inserted using the menus in the sections below the “Example” field. To create the naming convention described above, do the following...
5. Make sure the edit box is empty and then type your last name followed by an underscore.
6. In the area labeled “Additional” select “Date (YYYYMMDD) from the menu and click “Insert” to the right of the menu. This will place the date token (in year-first notation) after your name and the underscore.
7. Type another underscore.
8. In the “Image Name” section choose “Filename Number Suffix” from the menu and click Insert. This will place the number suffix token after the underscore.
9. Above the edit box you should see an example of your newly constructed filename. If it’s not displaying what you expected, try going back and rebuilding it from step 4.



Saving a File Naming Preset

At the top of the “Filename Template Editor” is the “Preset:” menu. More than likely, it currently says “Custom”. You want to save this naming convention as a preset so that you can use it over and over. To do that you need to give the naming preset a title.

1. Pull down the “Preset:” menu all the way to the bottom and select “Save Current Settings as New Preset...”. A “New Preset” dialog box will open asking for a name for your preset.
2. Give your preset a name and click “Create”. Next to “Preset:” at the top of the template editor dialog box you will see the name of your new preset. Any time you are using Lightroom and you need to name your files, you will be able to call up this preset from a naming menu.
3. Click the “Done” button to close the “Filename Template Editor”. In the “File Renaming” panel in the import dialog box you will see the name of your naming preset next to “Template” and an example of how the file name will look at the bottom of the panel.



*“Preset” Menu - This list shows the presets in **my** catalog. When you first start creating naming presets you will only see a few presets listed under the menu.*

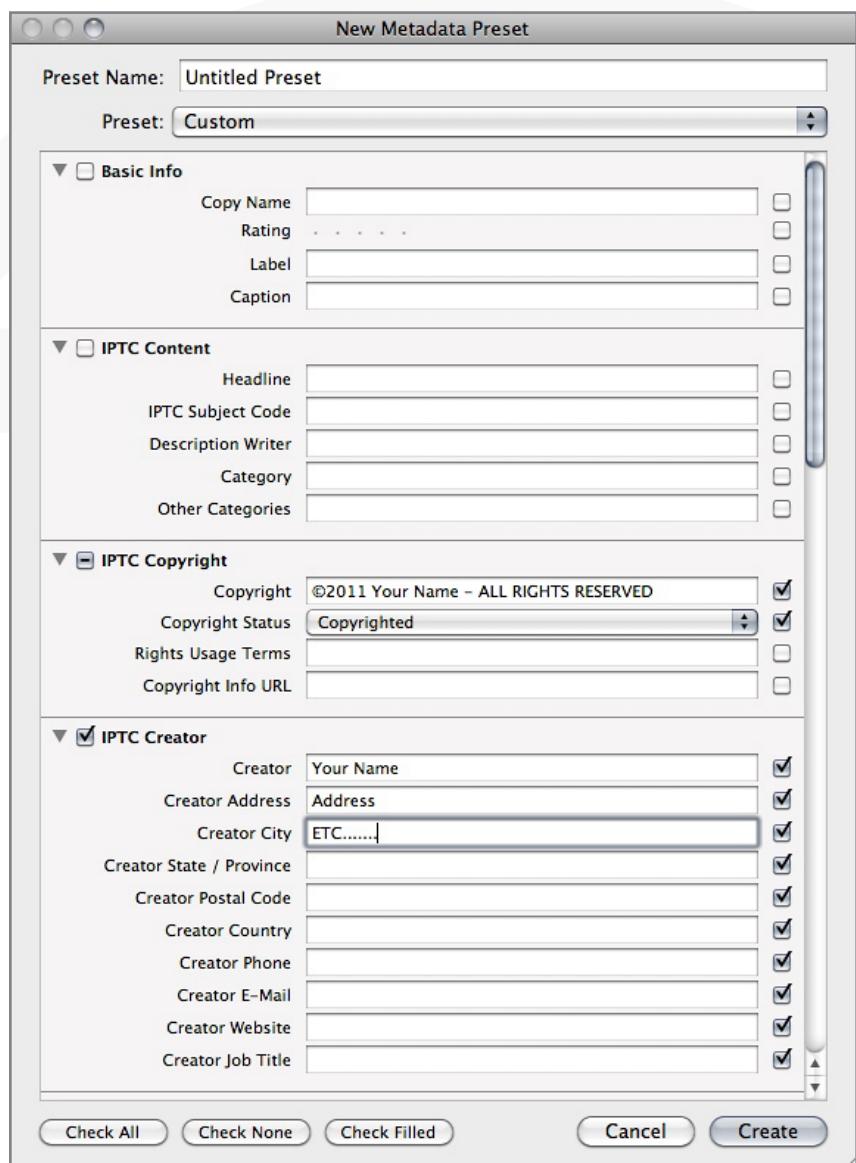
Another panel in the right hand column of the Import Dialog Box is named, “Apply During Import”. This panel provides a way to attach keywords and other important metadata to your photographs when you are importing them. The data that you apply on import can be used later to locate images using Lightroom’s search capabilities. The more accurate metadata that you apply to an image, either while importing or later, the easier it will be to locate an image.

Other Data That Can be Applied During Import

The Metadata menu provides access to a large dialog box that shows many of the standard data types that can be attached to your photo. Entering data into any of these fields and saving the entries as a preset will allow you to attach the same data every time you import. So what kind of data do you want to attach to your files when importing? Typically, anything that identifies you as the photographer and copyright owner. Create a metadata preset with your contact information and copyright. This is information that you will want

attached to all of your images as soon as possible, right? If you haven't done this, give it a try.

1. Open the menu next to "Metadata" and select "New". When the "New Metadata Preset" dialog box opens you will see that there are a LOT of fields that can be filled in. You don't need to fill in all of these. The important ones are the IPTC fields for Copyright and Creator. This is the data that you want to make sure is attached to all of your image files.
2. Fill in the IPTC fields for Copyright. Make sure that the menu for Copyright Status says, "Copyrighted" (if it's your picture and not in the Public Domain). Fill in the other data as well. For copyright type in "©2011 Your Name or Business". If you have copyright terms on defined on a website page, put in the URL to the page.



"New Metadata Preset" dialog box where you can add metadata that is saved as a preset that can be applied to any images when you import them.

3. Fill in your Creator information, name, address, etc.
4. Make sure the the check boxes next to each entry is checked.
5. At the top of the dialog box, select "Save Current Settings as New Preset..." under the "Preset:" menu.

Once you have completed this, every time you import new photographs, you simply need to select the Metadata preset to apply your name and copyright information to imported files. It couldn't be any simpler.

The last piece of data that you might want to attach to your incoming photographs is keywords. For this, Lightroom provides an edit field in the "Apply When Importing" panel. Simply type in keywords that describe the photos you are importing separated by a comma, and the keywords will be applied. You always have the option to change and modify the metadata that is applied when you are importing or after import in Lightroom's Library module.

OK, so that's a lot of information on the import process. Initially, you will need to take a little time to set up your presets and save them, but once this is done, importing images becomes a real breeze. If you do this consistently, you will be setting up your Lightroom Library in an orderly fashion that will make locating and working with your photographs very easy.

In the third part of this article, we will review many of the great organizational features that the Library module offers, and it will become very clear why setting up your filing system, naming conventions, and metadata will work to your advantage.

Part III

Creating Collections, Adding Attributes, and More on Metadata

In the previous two parts of this lesson, I explained some fundamental approaches to setting up an organized image library. This is kind of mundane stuff and not a lot of fun, but you have to trust me when I tell you that if you have followed these steps, you will avoid extreme frustration when you can't find an important image.

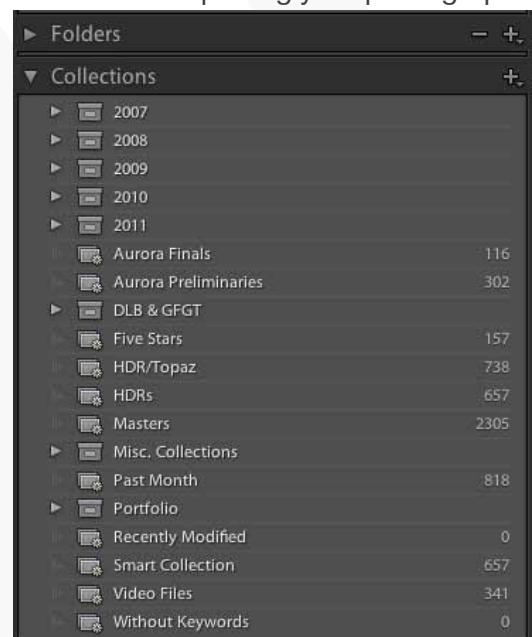
1. Dedicated a single storage space for all your photographs
2. Built a folder hierarchy based on the date your photographs were taken
3. Created a naming convention that includes the date (in year, month, day notation) and added the image sequence number to create a unique identifier for each picture
4. Continue to use Lightroom's import features to import your photographs into the Lightroom catalog.

In Part III of this post, I am going to cover the features of Lightroom's Library module that will help tag, collect, and search for your images. I will also discuss some of my personal organizational thoughts that you can take advantage of.

Collections

Throughout Parts I and II, I mentioned on several occasions that putting your photographs in folders based on job title, or client or shoot location is a bad idea. Without being overly repetitive, I have to say once more that a computer's file system stinks at this kind of organization because eventually you are going to have images scattered all over the place. You will forget where they are, and you will end up tearing your hair out in frustration. So let's look at creating some collections in Lightroom, and you will instantly understand the power of using Lightroom as your cataloging system.

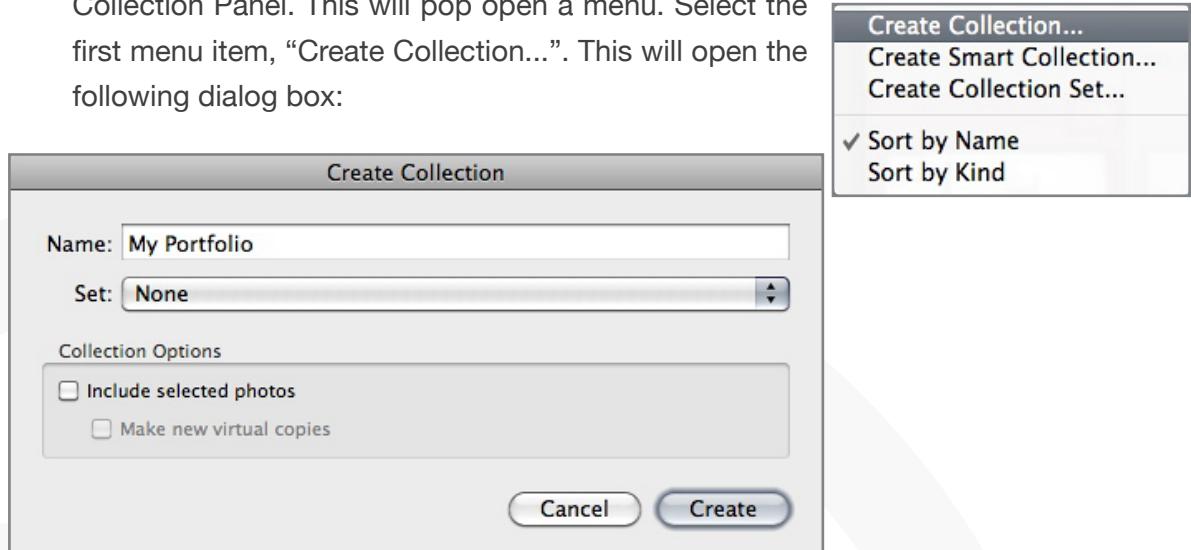
Just under the Folder Panel in the Library is the Collection panel. If it is not open, click the triangular turn-down button to the left of the word, "Collection". If you are working with Lightroom for the first time, then you will probably see a set of "Smart Collections". Let's ignore those for the time being.



Lightroom's Collection Panel - these are my current collections. Some are collection sets, and some are smart collections

Let's suppose that you want to create a collection of images for your portfolio. These images have been created over the span of several years and exist in different folders on your computer. So let's create your portfolio here in Lightroom by building a portfolio collection.

1. To start, make sure you are in Grid view. (You don't have to be in Grid view to make a collection, but it makes it easier.)
2. To create a collection, click the "+" icon to the right of the word, "Collection" in the Collection Panel. This will pop open a menu. Select the first menu item, "Create Collection...". This will open the following dialog box:



3. Here you can give your Collection a name. Call it "My Portfolio". Leave "Set" at "None".
4. Under "Collection Options", you have several choices for how the Collection is built. If you have already selected the images that you want in the Collection, checking "Include selected photos" will automatically include those photos when the Collection is built - for now leave this unchecked. If you select "Make new virtual copies", then Lightroom will populate the new Collection with Virtual Copies of the selected images.
5. When these parameters are set the way you want them, and you have given your Collection a name, click Create. The "Portfolio" Collection will now appear in the Collection panel. To the right of the Collection name, Lightroom displays the number of images that are in the Collection.

The "My Portfolio" Collection now appears in the Collection Panel

Now that the Collection is built, you can start dragging images into it. The images that you include can exist in any folder. Go to the Folders Panel and navigate through the different folders that you have imported and locate photographs that you want in your portfolio. When you find one, simply drag its thumbnail over the Collection name, "Portfolio", and let go. Drag and drop as many images as you want into your portfolio. When you click on the Portfolio Collection, you will see all of the images that you have included in the collection. So what's the difference between doing this in Lightroom vs making a folder of portfolio

Rating
Pick Flag
Label Color
Label Text
Folder
Collection
Publish Collection
Published Via
Any Searchable Text
Filename
Copy Name
File Type
Any Searchable Metadata
Title
Caption
Keywords
Searchable IPTC
Searchable EXIF
Any Searchable Plug-in Metadata
Capture Date
Edit Date
✓ Camera
Camera Serial Number
Lens
Focal Length
Shutter Speed
Aperture
ISO Speed Rating
Flash State
GPS Data
Country
State / Province
City
Location
Creator
Job
Copyright Status
Has Adjustments
Develop Preset
Treatment
Cropped
Aspect Ratio

A Smart Collection can search against a lot of different metadata.

images using the Finder or Windows Explorer?

In Lightroom, the images in a Collection are nothing more than pointers back to the folder where the original file resides. No additional files are created when you drop an image into a Collection. Additionally, you can put the same image into numerous different Collections. Lightroom also provides an easy way to navigate from an image in a Collection to its folder.

1. Select a Collection while in Grid view
2. Right click on one of the thumbnails
3. Select the item, “Go to Folder In Library”, and Lightroom will jump to the folder where the original image resides.

Notice also that under this menu there is an option to take you to the original photo in the Finder or Windows Explorer - an easy way to navigate directly to the file if you have to.

Collections are a great way to organize your images in distinct ways without ever effecting the organization of your images on your computer. Keep the file system structure simple and let Lightroom do all the organizational work.

In addition to working with Collections, you can make Collection Sets and Smart Collections. Collection Sets provide a way to nest related collections together. Imagine having a Collection Set of multiple projects that you have worked on for a single client. Smart Collections do all of the image collecting for you based on a criteria that you define. The criteria can be based on any of the metadata embedded in an image. You could build a Smart Collection that finds all the images shot with a particular camera, or all images shot with a specific ISO setting, or all images shot in Yosemite with a 24mm lens. Check the list to the left to see how extensive the search criteria can be.

Rating, Flagging and Labeling

After a shoot, more than likely you will want to import your images and then step through them and select the good ones and toss out the junk. Lightroom provides great tools for this.

Lightroom’s rating system is based on tagging images with 1 to 5 stars. So you might open up the grid or loupe views and step through your photos tagging the keepers with a star. This is pretty simple stuff. The real value of a rating your images is being able to filter the view so you see just the keepers while all the other images are hidden.

Flagging images works in a similar way. Images can either be flagged as keepers or flagged as rejects. If you flag a bunch of rejects, Lightroom has a very nice feature for tossing the rejects out. Lightroom can also filter by flagged images in a similar way that it filters by star rating. One of the major differences between the two is that star ratings are global; that is, if you star rate an image in a collection, it will also be starred with the same rating in every other collection in which it resides and in its folder. Flags are local. If you flag an image in a collection, it will only be flagged in that collection and nowhere else.

Labeling is another way that you can mark an image. There are five different colored labels that can be applied to an image. The meaning of the label is determined by you. So, for example, if you want all your HDR photos labeled yellow, you can create an HDR label. Like



ratings and flags, labels also can be filtered. If you have consistently labeled all of your HDR images you can use Lightroom's filtering system to show just the HDRs.

To apply a filtering attribute to an image first go to Grid View, then make sure that Lightroom's Toolbar is showing. If it is not, select "View > Show Toolbar" or type the letter, "T". The Toolbar will appear under the Grid. In the Toolbar, you should see the buttons for Flagging, Rating, and Labeling. If you don't see these or only see some of them, use the menu to the far right of the Toolbar (down-facing triangle) to show all of them.

Now make sure that the Filter Bar is showing. If you don't see it above the Grid, go to "View > Show Filter Bar" or type the backslash key, "\". When you first reveal the Library Filter, it looks like this:



The Library Filter Bar provides three methods for filtering your images:

1. by Text search - that could be by filename or just about any textual metadata attached to the file.
2. by Attribute - Star Ratings, Flags, and Labels are attributes
3. by Metadata - this is a method for filtering that is different than searching by text, in that it lets you layer one search criteria on top of another. For example: Filter pictures taken with a certain camera with a particular lens at 100 ISO that are jpgs taken in New York City.

To activate any of these methods, simply click on it. You can use any combination of methods simultaneously to dial in a filtered search.



Clicking on “Attribute” reveals the different Attribute buttons. Clicking on any of these will filter for the chosen attribute. In this illustration, images that have one star or greater will be filtered and displayed in the Grid.

One last note on filtering. If you have selected a Collection or folder, the filtering system will only filter the Collection or folder. If you want to look through your entire catalog, go to the top of the left hand column in the Library and in the Catalog Panel select “All Photographs”. As your catalog grows, you will be amazed at how quickly Lightroom can pull up a picture you are looking for out of thousands of images.

Keywording and Metadata

Keywording and metadata was discussed a bit in Part II when we were importing images. In the Library you have a lot of options for adding and modifying keywords and controlling metadata. A lot of this is self explanatory, so I’m not going to go into it in detail. The more you add keywords and accurate metadata to your photographs, the easier it will be for you to locate an image using Lightroom’s filtering system. Think of being able to very quickly locate all the pictures of a certain subject, as opposed to slogging your way through a bunch of folders looking at thumbnails hoping to find the image you are looking for.

Also consider what happens when your image leaves your hands and is used by a client or placed on the web. You want to make sure that you have your copyright and contact information attached to every file. You never know; someone might really like your image and want to contact you for more work.

Let’s face it, being diligent with tagging keywords and other data to your files is a pain in the butt. Thankfully, Lightroom makes the process a little bit easier. So if you are not a masochist, take advantage of Lightroom’s presets - Lightroom has presets that you can customize for just about everything. Take a little bit of time to set up a metadata preset that will inject your copyright and contact information into your files when you import them.

More on Maintaining Image Organization

In Part II, I introduced some thoughts on naming conventions. One component of the name is the date the picture was taken. So why should I care if the date is in the name?

There will be times, for one reason or another, that an image file will inadvertently be removed from its folder. You’ll see the file sitting there on your desktop, scratch your head, and wonder how it got there. But one thing you won’t have to concern yourself with is where that image belongs. If the date is in the filename, then you automatically know that it belongs in the folder based on the date. It’s as simple as that.

You may not think that this will ever happen. I guarantee it will, and you will be happy that you have a naming convention and folder structure that will keep you organized. This

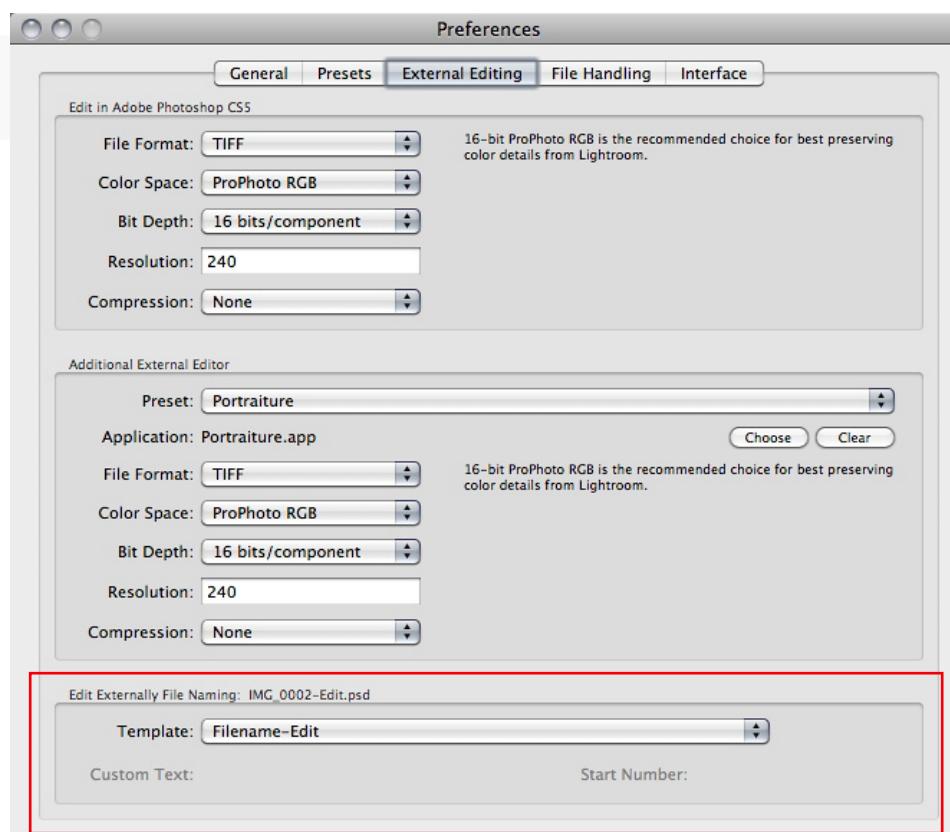
brings up another consideration. DON'T EVER RENAME YOUR FILES BY REMOVING YOUR NAME, THE DATE, AND THE SEQUENCE NUMBER. These are the elements that your filing structure is built on and that uniquely identify each image.

Spawning Additional Versions from Your Original Master Photographs

If you shoot Raw images as so many photographers do, at some point you will need to spawn off a JPEG, TIFF, PSD or some other version of the file. Lightroom has great facilities for sending your original images to Photoshop and other image editors. All photographers are going to want to do this. How you handle it can make a big impact on whether your image catalog stays organized or not. Here is a method for creating different versions of an image while keeping your Lightroom catalog organized.

Always keep the original image (Lightroom refers to it as the Master) and all its offspring in the same folder.

When naming the offspring, append a descriptor to the end of the file name while maintaining the original "Name_YYYYMMDD_0001" naming convention. For example: You make a PSD from your original Raw file. The .psd extension will differentiate the original Raw file from the Photoshop edit. Here's another: Using Lightroom's "Edit In" feature, you perform some filtering and layering functions in Photoshop that Lightroom can't handle. When



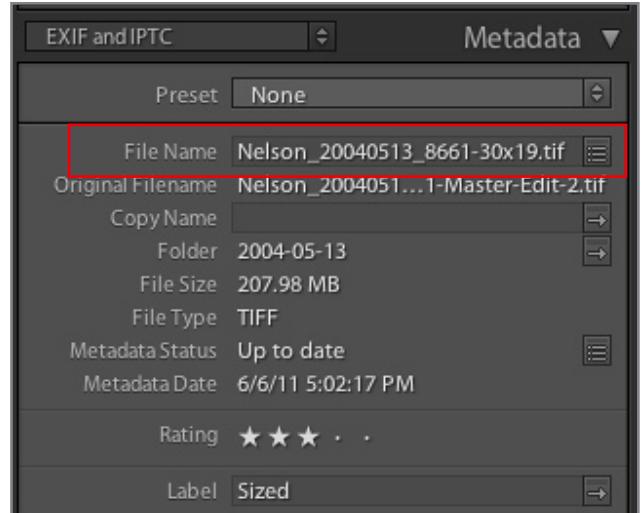
Lightroom's External Editing Preferences - you can define the naming convention for images that you send from Lightroom to other applications for editing. In this example, a naming present was made that appends the word "-Edit" to the end of the file name.

you are done you save and close in Photoshop, and the edited version is returned to Lightroom. Depending on how you have set up Lightroom's Preferences, the file that is returned will have a name based on the External Editing File Naming. **Make sure that the naming present that you define keeps the original file name and appends a descriptor to the end of it.**

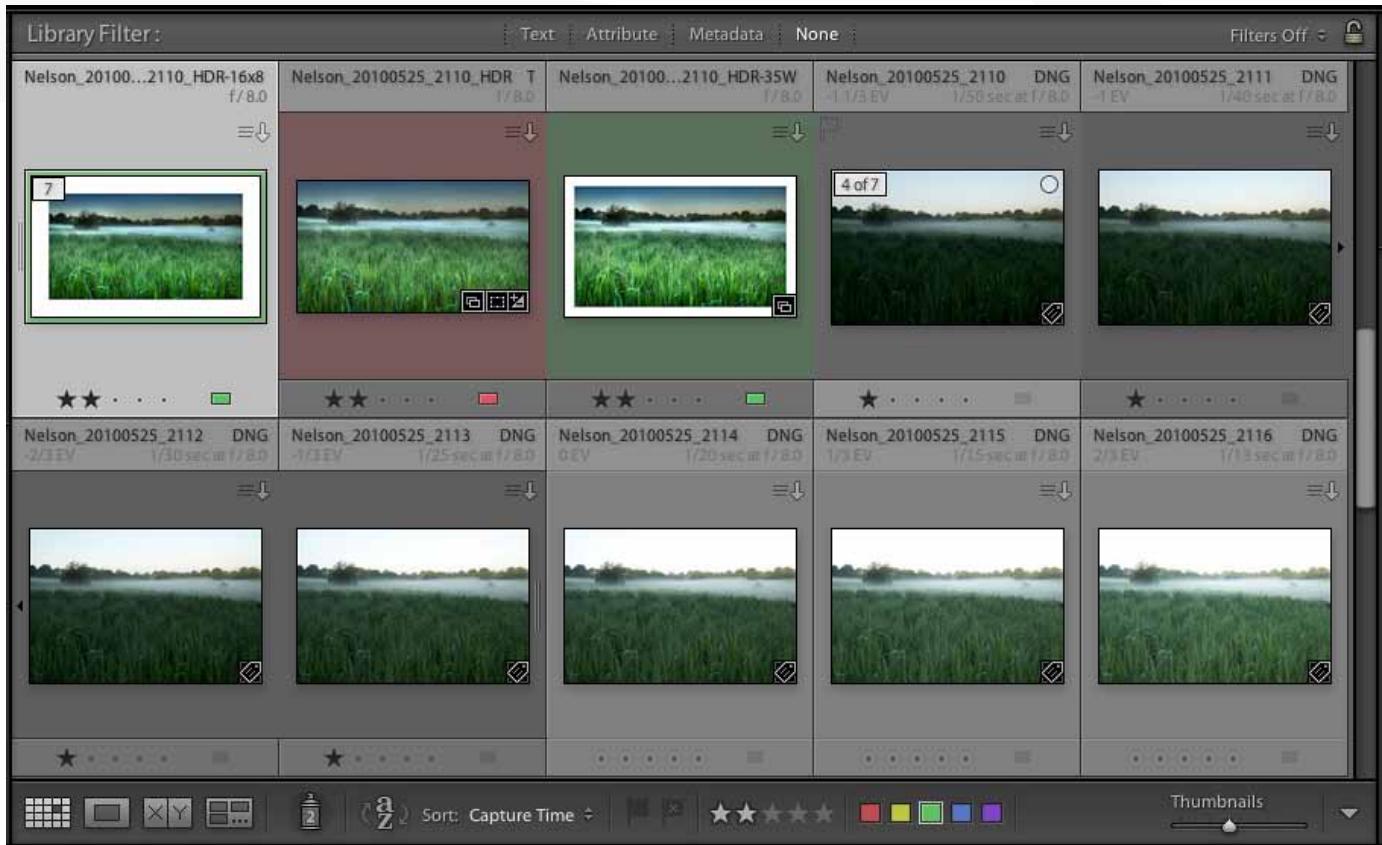
In Lightroom's Library at the top of the IPTC Metadata Panel, you can edit the filename (yes, if you change the name here, Lightroom will change the name on disk in the Finder or Windows Explorer). When editing the filename, you sim-

ply add a short descriptive notation to the end of the filename, something like this, "Name_YYYYMMDD_0001-12x24.psd". Now you have the original and a copy of it that you have modified. If you sort by filename in Lightroom's Grid, these two files come up in the sort next to one another.

This method of maintaining a master filename will ensure that your original master image and any edit that you made from the original stay together. This alone can save a huge amount of time when trying to locate a single file along with versions that you have spent time editing. By keeping the "Name_YYYYMMDD_0001" naming scheme on all your files, you will be able to easily locate every version of the original that you have created.



Use the Metadata Panel to edit the file name of an image that you have spawned from the original. In this case "-30x19" was appended to the name indicating that the file was sized for printing. This file resides in the folder with the original and all other files that variations of the original.



The master Raw file and versions of it are stored in one folder. In this example the file, "Nelson_20100525_2110" has a master edit file that is labeled in red and two sized files for printing that are labeled in green. Because all versions of the file are stored in one folder, they are easy to locate.

Here's another example of how this can be advantageous. Let's say that you have edited one of your original master Raw files in Photoshop. When completed, the newly generated file is saved back to the original folder with the master file in either, .psd, .tiff, or .jpg format. You like what you have done with the Photoshop version, so you decide to put it in your portfolio collection. Several months later, you are looking through the portfolio collection and decide that this image needs some additional work and you want to go back to the original master file to make the changes. By right clicking on the thumbnail of the file in the collection and selecting, "Go to Folder in Library", you will be instantly taken back to the folder where the original master and any other permutation of this file reside.

Now that you have a basic understanding of the power of Lightroom's organizational capabilities, explore the other features in the Lightroom Library.

Part IV

Storage, Backup and Archiving

One Catalog or Many?

This is always up for debate and depends on the type of work that you do and your personal preference. I am a strong believer if keeping a single master catalog. This provides me access to all of my images in one location, and I don't have to remember which catalog I put an image into when I am looking for it. For me, creating multiple catalogs requires an additional level of management (and potential confusion) that I want to avoid. I would suggest starting with a single master catalog. Once you are comfortable managing one catalog and then determine that your organization would be better with more, then create additional catalogs. But become familiar with managing one catalog first.

Traveling with Lightroom on a Laptop

Let's face it, you're not always at your desk. Hopefully you're spending more time shooting than sitting in front of your computer. So this presents an issue. What do you do with your images on your laptop if you adhere to working with a single Lightroom catalog?

While you are on the road, create a traveling catalog. Use this catalog exactly the way you use the catalog on your desktop system. Follow all of the naming and storage conventions that you use on your desktop computer. Organize, rate, edit your photographs while you are on the road. When you are done traveling, import your road shoot catalog into your master desktop catalog. You can do this using several different methods.

1. While you are on the road backup your catalog and all of your images to a portable hard drive. When you return home do a final backup, then attach the portable drive to your desktop computer, and import the road catalog into your master catalog. Make sure to copy the images from the backup drive to the drive connected to your desktop where you store all of your photographs.
2. If your laptop supports it, connect it to your desktop computer and start the laptop in "Target Disk Mode". Then import your road catalog into your master the same way as in #1.

Importing the catalog will not only import all of your images, but all of the metadata and edits that were applied to the images while you were on the road.

Backup and Archive

I'm sure that it is obvious to most everyone reading this that maintaining regular backups of your images is critical. **But remember to also backup your Lightroom catalog** along with your image files. Since the catalog contains information about your images, your collections, all of the presets you have created, you don't want to lose it if your hard drive crashes.

Here are some thoughts on backing up your image library:

Utilize a software application that will perform a backup of the folders that contain your images and the folder that contains your catalog. The software should perform incremental backups (copying only the files that have changed) to a second hard drive on a regular basis, like once every night. Applications like [ChronoSync](#), [SuperDuper](#), [Synchronize Pro X](#), and others are readily available.

On a regular basis copy your images and catalog to a third hard drive that you keep off-site at a friends house or in a safety deposit box. You want to make sure that if disaster strikes and destroys both your master drive and your backup, that you have an additional drive stored somewhere else away from where you work.

Right after importing images from your flash media or your camera and before you reformat the card, make a backup. You want to always have at least two copies of your original files.

Spanning Multiple Drives

Thankfully hard drives are inexpensive these days. That said, at some point the drive your photographs are on is going to run out of space, then what? Then it's time to find a larger drive. If you have a lot of images, it would make sense to dedicate a single or multiple drives for just your photographs. You want to make sure that if you are purchasing a drive for your images that you buy one that can hold far more images than what you currently have. This way, as you add new photographs, you have enough room so that you don't run out of space for a long time. The size of the drive that you purchase can be determined by this calculation:

size of the image file your camera creates \times the number of images that you shoot in a week/month/year

I shoot approximately 15 thousand images per year. My images are approximately 25MB. That means that I need at least 375GB of storage per year. Or, I can fit two to three years worth of images on a 1TB drive.

If your library of images is stored with a date hierarchy, and you need more than one drive to store all your images, consider breaking up your library by year. You might have one drive with photos from 2006 to 2008 and another from 2009 to 2011. Having your images stored by year makes it really easy to break your library up into logical chunks.

If you find that you need multiple hard drives for your image library consider a drive tower with multiple bays. These storage systems provide room for multiple removable hard drives with a single power supply and a single eSata (port multiplied) con-



MacGurus Burley Hard Drive Towers in two, four, and eight bay configurations.

nexion (depending on the number of drives that the tower supports) or Firewire or USB connections. They come in different configurations with as many drive bays as you will ever need.

Look for solutions from [MacGurus](#), [Promise](#), and others.

Storage towers that provide hot-swappable (removable bays) allow the user to pull a drive out of the tower while the computer is still running - very similar to ejecting a DVD and replacing it with another. You can also install drives of different sizes, so as your data grows, you can upgrade to larger hard drives. A multi-bay storage system for a photo library would provide ample room for saving years worth of work and having images online and accessible by Lightroom for editing. Since drives can be removed, these are great solutions for backing up one drive to another, especially for the drives that you want to keep off-site. I keep six drives in a safety deposit box and bring them home once a month for a quick backup and then take them back to the bank for safe keeping.

Another popular solution for storage is [Drobo](#). The Drobo system is designed to simplify data storage and backup. By simply having the Drobo attached to your computer, as long as it has more than one hard drive installed, it will backup and protect your files. The Drobo provides complete file protection. When a drive fails simply popping it out of the Drobo and replacing it with a new drive solves the problem. The file management is completely handled by Drobo in the background.

Conclusion

At the beginning of this paper, I listed six steps to making an organized library for your images.

1. Make the folder structure on your hard drive for storing your photographs as simple as possible. Base the folder hierarchy on date: year > month > day.
2. Give every image file that comes off your camera or flash card a consistent name, and include the date in the filename.
3. Use Lightroom to organize your images and never rearrange them using the computer's file system, the Finder or Windows Explorer.
4. Take full advantage of Lightroom's database capabilities for collections, keywords, metadata, rating, labeling, and flagging.
5. Be very consistent.
6. Instead of copying files from your camera or flash card to your computers desktop, ALWAYS use Lightroom to import your photographs.

Setting up your Lightroom catalog takes an investment in time, especially if you already have a lot of photographs that need to be organized. The investment will pay off! Think of it

like you are cleaning out your garage. When it is done and all organized, it's going to make you feel really good. You will have control of your library. And the great thing is, as long as you are consistent in the way that you work with your catalog, you will be able to sustain this system easily over many years as your library grows.

This system has worked for me and the photographers that I have helped. I sincerely hope that it works for you. If you like what you have read, or you have ideas, comments or questions, let me know.

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