



Getting Started

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Digital photography has opened up a whole new level of control for photographers. Never before has it been so easy to exercise so much control over your photographic images. And yet, when many photographers start using digital tools, they don't know where to begin. In this part, we'll examine the first steps in establishing and implementing a digital workflow to help you start down the right path to optimizing your photographic images.

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Workflow Foundations

If you've ever worked in a wet darkroom (and a great many readers of this book probably started with digital and never set foot in a wet darkroom), you know that there is a normal order, or flow, to the work that must be performed to create an image. The paper is exposed from the negative, then slid into the developer where the image magically appears, then into a stop bath to cease the development process, and finally into a fixer to ensure a permanent image before the image gets washed and dried. When you're working with pixels in the digital darkroom, the process has more options and variables, making an unlimited number of possible paths for optimizing your images. Establishing a workflow provides an efficient method of working on your images to help ensure the highest quality possible.

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Understanding the Importance of Workflow

The term *workflow* has become a buzzword in the world of digital imaging, and with good reason. Many photographers feel overwhelmed when they set out to optimize some of their favorite digital captures. Besides not being sure where to begin, they don't know how the process should unfold.

Having a plan for your digital imaging workflow is important not only for making the process more efficient for you but also for ensuring the best quality in the image. Understanding the benefits of a consistent and optimized workflow will help you appreciate the importance of establishing one.

Quality

For most photographers, the quality of the final image is of paramount importance. The potential quality of the final image is directly determined by the quality of the original capture. So the first step in producing the best images in the digital darkroom is to make the best captures before you even sit down in front of the computer.

One of the first steps toward achieving that goal is to ensure that you have selected the largest/finest JPEG combination if using JPEG capture. Naturally, you might also consider using RAW captures for reasons to be discussed in a moment; a RAW file certainly provides the best possible quality. Although it may be tempting to opt for a lower JPEG size or quality level—because more of the smaller files will fit on a memory card—the trade-off for size is lower quality. If you decide to shoot with a small JPEG size or low-JPEG-quality level, you may regret it later if you capture a once-in-a-lifetime photo. The level of detail may not be adequate even for an excellent 5"×7" print. Memory cards have become relatively inexpensive, so buy several 1- or 2-gigabyte (GB) cards in order to have an ample supply of storage space and set the largest/finest JPEG quality available, or switch to RAW capture for peace of mind.

Also, be sure to take advantage of in-camera overrides (particularly when using JPEG or TIFF capture) to make images that are reasonably accurate in terms of exposure (brightness) and white balance, and pleasing in terms of color saturation and contrast. That's much less important when shooting in RAW capture, as you'll see, because you can modify most image parameters with Photoshop Elements 5, using the special software that's designed for adjusting RAW files. Still, it's worth developing serious photography habits and making the technically best possible images in-camera.

When reading the recommendation for using the RAW capture mode, you might have wondered, "What is RAW?" Not all digital cameras with built-in lenses provide a RAW capture mode, but all digital single-lens reflex (SLR) cameras do. Think of a RAW capture as the equivalent of a digital negative. When you choose a JPEG or TIFF capture mode, the camera processes the image and makes choices for you, and the result is the final JPEG or TIFF. But RAW capture results in a file that contains all the raw data and information off the camera sensors—with little or no in-camera processing. When you open a RAW file in Elements, the program launches a dialog box that enables you to make choices about how you want the image to look (how to process it). You will find that process to be extremely fun and rewarding as you see the kinds of results you can achieve with a RAW file. And because RAW is a digital negative, you can come

back to this file over and over again and process it differently each time. Maybe you will want one version that's grayscale, for instance, and another version that's full color.

Think of it this way—if you take a traditional negative to different store locations for processing, your photos developed by one store might come back looking slightly different than those from another store (depending on the processing choices and machine settings of each store)—but your negative is still intact and hasn't changed or been altered. The same is true of RAW. You can open it as many times as you want, process it differently each time, and then save the processed file as TIFF, JPEG, or any file format of your choosing. Elements preserves the original RAW file without changing the original data it contains. RAW is covered more thoroughly in chapter 3.

After you bring the images into your digital darkroom, a proper workflow helps ensure optimal image quality for professional results. When you have a plan for your workflow, it means you're thinking about the order in which you're performing adjustments and the methods you use to make those adjustments. These are both key factors that affect the quality of the final image, and having a plan focused on optimal quality will give you much better results than adjusting your images in a haphazard fashion.

For example, one of the factors often used to determine overall image quality is the amount of detail visible in the image (Figure 1.1). To ensure minimal detail loss, you can certainly exercise caution when making your adjustments, but a proper workflow will also help in this goal.

Note: Quality can be a subjective factor in many images, especially when using unique photographic methods or special effects. Although the definition of optimal quality can vary by photographer or even by photographic image, your workflow should focus on maintaining the quality and aesthetics of your original image as you captured it, while producing an improvement in the final result.



As you are fine-tuning the workflow you use to optimize your images, consider the effect of the particular methods you're using, as well as the order in which you perform particular tasks, to see whether you can improve the image quality in any way. Throughout this book we'll share methods for achieving exactly those high-quality results with your digital workflow.

Efficiency

Although image quality tends to be a chief concern for most photographers (as it should be), efficiency is also important. As much as most photographers love working with their images—seeing them transformed from good captures to remarkable images—generally they don't want to sit in front of the computer all day. They'd much rather be out taking new pictures.

By developing a general workflow, you can work much more efficiently. You won't have to stop and think about what the next step is. Although certain images will certainly require extra attention, and at times you will need to try various techniques before achieving the desired results, an established workflow you are comfortable with will make the work of perfecting your images go relatively quickly.

**Figure 1.1**

Maintaining maximum detail in an image is one of the factors commonly considered to represent good quality, and is a key concern when the image includes relatively dark shadows. A proper workflow will help you maintain detail and quality in your images. (Photo by Gabby Salazar)

When Tim teaches workshops on digital imaging (see www.timgrey.com for a schedule of upcoming appearances), it may take an hour to fully discuss the details of one particular adjustment, whereas making the adjustment as part of your normal workflow may require mere seconds or a few minutes at most. However, the time spent understanding how the adjustment works is well worth it. When you're familiar with the tools available in Elements, you're able to use them much more efficiently. Similarly, throughout this book we'll be presenting methods for working with the various tools to optimize your images. It may take some time for you to fully grasp all the details, but by taking the time to truly understand how the tools work, you'll be much more efficient without compromising the quality of your images.

Consistency

Another benefit of a consistent workflow is—no surprise here—consistency. This relates to the two previous topics: by maintaining a consistent workflow, you'll ensure consistent quality in your images and ensure a familiarity that will improve your efficiency. When you find a workflow that works, that workflow (with obvious variations as needed for specific images) will work well for all of your images.

Note: Keep in mind that an established workflow doesn't define absolute rules of what adjustments you must make to all of your images, but rather provides a road map that guides you through the best way to approach your images for optimization.



In effect, if it makes sense to establish a workflow for optimizing your images (and we certainly think it makes a lot of sense), it makes sense to be consistent in your use of that workflow. In other words, make a plan and stick to it in order to achieve the maximum benefits.

Establishing a Workflow

Because you're reading this book, we're assuming you already appreciate the value of establishing a workflow for optimizing your digital images. We also assume you aren't completely comfortable with the process you're currently using or you are new to Elements 5. As you work your way through this book, that will change.

As you start toward creating a workflow that works for you, we strongly recommend making duplicate copies of a couple of favorite images that could use some work and going through the process of experimenting with the adjustments that will form the foundation of your workflow. Because they're just copies of your images, you don't have to worry about whether you produce a good final result, and you can focus on practicing the steps involved and figuring out what works best for you.

Note: Although this chapter is about establishing a workflow for your images, you won't find details of a specific workflow here. That's because this entire book is about the workflow process, and by going through the book in its entirety, you'll learn what steps you need to include in your own workflow and in what order you'll likely apply them.



Determine Priorities

Your priorities in optimizing your images probably reflect the topics covered in the beginning of this chapter. In particular, you probably want to ensure maximum quality in your images while maintaining efficiency with your workflow. However, you may also have other priorities for your images, which you'll want to consider when fine-tuning your workflow.

The first step in establishing a digital workflow is to think about what is important to you and how you prefer to work. Some of this relates to overall strategies. For example, we strongly recommend becoming familiar with the Layers palette and using adjustment layers or separate image layers for all adjustments. We'll emphasize this approach throughout this book by using a layer-based method for every adjustment presented. Another aspect to consider is the general flow of your adjustments. Do you prefer to clean up dust and other blemishes before you get started or move right into tonal adjustments first? This book will present recommendations on what order you should use to make your adjustments and under which circumstances you should change that order.

Of course, your priorities will depend in large part on the type of work you're doing and the deadline under which you're operating. For example, photojournalists usually have speed as their utmost concern. For them, a workflow that focuses on methods to speed up the process of preparing images is optimal. For a nature photographer producing large prints, quality is the greatest concern, even if that means taking considerably longer to process an image. For a given photographer, the optimal workflow may even vary based on the particular project. The key is to define a workflow that meets your typical production needs but to remain flexible so you can revise your workflow based on changing needs.

One suggestion that may help you determine the basic structure of your workflow is to focus on solving the problem that requires the most significant adjustment first and work your way down from there (Figure 1.2). The specific problem you'd define as the greatest for a given image will obviously be different from one image to the next. Some images will have significant tonal problems because of an error in exposure, for example. Others will need major color correcting because of lighting issues or a problem with your white balance setting in the digital camera. For scans of older film, the biggest problem may be considerable dust or scratches on the original. In each case there is a logical order to correcting the image based on prioritizing which problems are of greatest concern.

Although the most serious problem for each image will vary, as you work on more and more images you'll find that most tend to have a similar order of priorities for problems that need to be fixed. For example, with digital captures we usually find that the color is pretty accurate, so any tonal adjustments tend to be the most significant adjustment we'll make. For that reason, we usually find that it makes sense to start with broad tonal adjustments, then move on to broad color adjustments, and then move on to fine-tuning adjustments.

All this talk about "problems" may lead you to believe that this book is all about working on your very worst images—or that we suspect you are a terrible photographer! That's not the case. In fact, the problems in an image may be minor. Often, you may open an image and think it really doesn't need any significant changes. That is the ideal starting point, because such an image allows you to explore how you can make a great photo breathtaking, rather than trying to salvage a bad photo. Even when the image starts off looking great, a proper workflow will help ensure that you can produce the best results possible from that image.



Figure 1.2 For many digital images, the tonal adjustments tend to be the most significant required. Therefore, a typical workflow may include basic tonal adjustments as the first step.

Focus on Results

Although workflow is all about a process, the real purpose of that process is to create the final result (Figure 1.3). Photographers typically capture images because they want to produce beautiful prints or other output to share with as many viewers as possible. We want that final output to be impressive, both because of the content of the image and because of the quality of the final display. As such, it is important that you are thinking about the final result when you're optimizing your images, as well as when you're figuring out your workflow in the first place.

We want to produce the best images possible, and a proper workflow will ensure that you are able to maintain that quality throughout the process. However, you should also consider your intent for the final appearance of your images. How you want your images to look at the end of the process can determine the steps you take to adjust the images during that process. For example, if you are preparing an image for a brochure and need it to be a real attention-grabber, you might boost the saturation and kick up the contrast. You may need to tone down the same image used for a restaurant menu to achieve a more subtle appearance. A general workflow that is layer based will provide the flexibility to adjust the image either way, but the actual process may be different for each.



Figure 1.3 For most photographers, the ultimate result of their digital workflow is a high-quality print they are proud to display for all to see.

As you think about the results you are trying to achieve, and the typical order of priorities in producing the best results, you'll get a sense of how you might organize the process of optimizing your images. Give some thought to the order in which you should be making your adjustments and the factors that are particularly important to you when it comes to your images. As you think about these topics, you'll start to get a sense of what a workflow means as well as determine a workflow that will be a good fit for you and your images.



Note: We are not suggesting that you need to write your own manual on how to apply a workflow to your images (especially because this book can guide you through the workflow process). Still, it might make sense to write the basic steps you think are important as you develop your own workflow. Also, be sure to see the appendix at the back of this book for a workflow guide you can use as you develop your own workflow.

Maintain Flexibility

Another important consideration for your workflow is flexibility. You want to be sure your workflow is making your image-optimization process more efficient and that it allows you to change your mind about what you want the image to look like.

A Flexible Attitude

One aspect of maintaining flexibility in your workflow is a state of mind. It is important that you don't get caught in the trap of always applying the same effects to every image. Each image is unique and deserves to be optimized based on what you judge to be the best result for that particular image. Some photographers apply the same adjustments with the same settings in the same order to every single image. This robotic approach to image editing would not demand too much of your time, but it also wouldn't ensure optimal image quality. Some images may be improved by those particular adjustments, while others may be harmed.

Even if you find that certain settings for some adjustments seem to work best for every image, keep in mind that the workflow you establish is a basic guideline for the general order in which you'll perform your adjustments. Don't think of your workflow as a rigid set of rules that dictate what steps should be taken and in what order.

Even after you've established a workflow that helps you achieve exceptional results with your images, don't be afraid to change the process around for a particular image. Some images will have unique problems that you need to address early in the workflow to maintain high quality. In other situations you'll simply want to depart from your typical workflow to produce a creative variation (Figure 1.4). Whatever the situation, you'll have to depart from your typical workflow to achieve certain goals. Treat your workflow as a guide for producing the best results with your typical images, but maintain the flexibility to change your process when you think it will benefit the final result.

Layer-Based Workflow

Another aspect of maintaining flexibility is ensuring that you'll be able to change your mind and revise the adjustments you've made to an image without reducing the image quality or causing an excessive loss of detail. Using layers to optimize your images will ensure that you always maintain this flexibility.

We strongly advocate using layers for all adjustments to your images (Figure 1.5). Layers are available when you select Edit And Enhance Photos (also called Full Edit) in Elements 5 but *not* available when you select Quickly Fix Photos (also called Quick Fix). Throughout this book you'll find techniques for applying many adjustments, all performed with adjustment layers whenever possible. When an adjustment layer doesn't provide the tools needed to achieve a particular change, we'll employ separate image layers with particular properties to use. As a last resort, when the particular technique doesn't lend itself to using an adjustment layer or empty image layer for the adjustment, create a duplicate of the background image layer for the purposes of applying the change.

By following this recommendation, you'll ensure that you maintain the original image data contained in the background layer. The result is that you can always return to the image and remove particular adjustments or fine-tune them if you've changed your mind about the adjustment itself. You may have experienced a situation where you've optimized an image and then opened it at a later date only to wonder what you were

thinking when you made the original adjustments. By working with layers, you can ensure that such situations don't represent a need to compromise the overall quality of the image, but rather represent opportunities to make the image even better than it was the first time you worked on it.



Figure 1.4 Even if you're happy with the way an image has turned out, you may later decide you'd like to stretch the creative limits of that image. Maintaining flexibility with your workflow helps ensure that you can always act on your creative ideas.

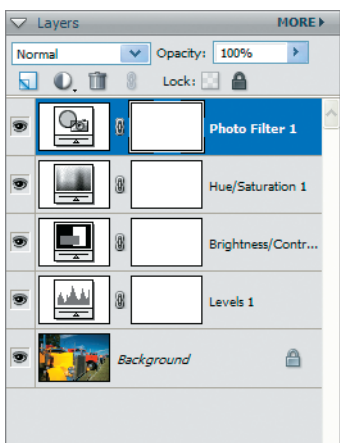


Figure 1.5

By using layers in your workflow, you'll maintain the flexibility to revise the adjustments you've made at any time without risking a loss of detail or quality in the image.

Revising Your Workflow

We recommend thinking of a digital imaging workflow as a living entity. That's not because we have some weird fascination with workflow, but because we realize that your typical workflow will change over time. You need to be comfortable revising your workflow to take advantage of new techniques you learn.

Nothing Is Permanent

A variety of factors may lead you to revise the way you work on your images. For starters, as you learn new image-editing techniques, you may want to incorporate them into your workflow. As you read more books, take workshops, or just talk to others who are also involved in digital photography, you'll discover new methods that provide a more efficient way to achieve similar results or a way to produce completely new variations of your images.

A general workflow provides the flexibility to incorporate new methods into the process of optimizing your images, because it is simply a guideline for general adjustments. However, in many cases you may develop a very specific workflow that will call for performing specific actions (with variable settings) in a specific order. To ensure that you are always able to achieve the best results, be willing to revise your workflow to incorporate new skills as you learn them.

Another factor that can change your workflow is changes in software. With each new version of Elements, or with the release (or discovery) of new plug-ins and filters, you'll find ways to add efficiency and creativity to your normal workflow.

The key is to be willing to revise your workflow when appropriate. If you learn a way to make your workflow more efficient or to provide even better results, by all means change your workflow to include such techniques.

Requirements Will Evolve

As you continue working with your images, you'll likely find that your own requirements will evolve. In our estimation, these changing requirements fall into two general categories.

The first category represents actual changes to the results you need to produce. For example, if you've been producing only ink-jet prints but now need to be able to prepare your images for offset press output, you may need to revise your workflow to be sure you're producing the best results for that type of output. If you create a website to share your images, you may also need to alter your workflow to include steps for preparing smaller versions of the images as well as thumbnail representations. Whatever the reasons, you'll likely find that the requirements placed on your images change over time, and you'll want to be sure your workflow is always ready to meet those demands.

The second category has to do with the likelihood that standards will get higher with time. If you've been working with digital imaging for any length of time, you can probably relate to this from your own experience. When the first photo ink-jet printers became available, most of us were thrilled with the quality they could provide. But if you compare that early output to what today's photo ink-jet printers are able to achieve, you'd consider those older models totally inadequate (Figure 1.6). What used to be considered excellent quality is now rated as garbage. As we see what is now possible, what used to be possible is no longer good enough.



Figure 1.6 Today's photo ink-jet printers produce considerably better quality than those of just a few years ago. Similarly, your capabilities will improve with time, and you may want to revise your workflow over time so you always meet or exceed your own standards.

Similarly, you'll likely find that your own standards increase over time. As you become more skilled in the optimization of your images, you may open older images and wonder how you ever let yourself print them because you know you can do so much better today. As such, your developing skills in image optimization will call for revisions to your overall workflow.

Creating a Workflow That Works

The workflow you use to optimize your images will continue to evolve over time. The most important step is to actually implement a workflow so it can evolve. Evaluate your images, consider the adjustments that are necessary to achieve the results you desire, and think about a logical way to apply those adjustments that will provide an efficient way to produce consistently high-quality results.

By taking the time to develop such a workflow, you'll ensure that the process is working for you, rather than creating a situation where you are working hard but not producing the consistent quality you desire. With a proper workflow—as you'll find throughout the rest of this book—you'll be able to unleash the great potential of the pixels in your images.