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"Lesa did a great job on this book, and in my mind, it's the new Photoshop bible."
—SCOTT KELBY, EDITOR & PUBLISHER, *PHOTOSHOP USER MAGAZINE*

Photoshop CC

the missing manual®

The book that should have been in the box®

2nd
Edition
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Release



Lesa Snider
Foreword by David Pogue

Photoshop CC: The Missing Manual

Lesa Snyder



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Foreword

In the short but crowded history of consumer technology, only two products ever became so common, influential, and powerful that their names become *verbs*.

Google is one.

Photoshop is the other.

(“Did you Google that guy who asked you out?” “Yeah — he’s crazy. He Photoshopped his last girlfriend out of all his pictures!”)

It’s safe to say that these days, not a single photograph gets published, in print or online, without having been processed in Photoshop first. It’s usually perfectly innocent stuff: a little color adjustment, contrast boosting, or cropping.

But not always. Sometimes, the editing actually changes the photo so that it no longer represents the original, and all kinds of ethical questions arise. Remember when *TV Guide* Photoshopped Oprah’s head onto Ann-Margaret’s body? When *Time* magazine darkened O.J. Simpson’s skin to make him look more menacing on the cover? Or when *National Geographic* moved two of the pyramids closer together to improve the composition?

Well, you get the point: Thanks to Photoshop, photography is no longer a reliable record of reality. Photoshop is magic.

And now, all that magic is in your hands. Use it wisely.

Trouble is, Photoshop is a monster. It’s *huge*. Just opening it is like watching a slumbering beast heave into consciousness. Dudes, Photoshop has over *500 menu commands*.

In short, installing Photoshop is like being told that you’ve just won a 747 jumbo jet. You sit down in the cockpit and survey the endless panels of controls and switches. *Now what?*

You don’t even get a printed manual.

If there were ever a piece of software that needed the Missing Manual treatment, it was Photoshop.

The beast has been tamed at last by its new master, Lesa Snider: a natural-born Missing Manual author with Photoshop credentials as long as your arm.

She had worked on Missing Manuals, side by side with me in my office, for four years, in all kinds of editorial and production capacities. Today, when she’s not writing the bestselling Photoshop book (you’re reading it), she’s out in the real world, teaching Photoshop seminars, writing Photoshop articles, reviewing Photoshop for magazines, and generally serving as Photoshop guru to the masses.

The Missing Manual mantra runs through her blood: Make it clear, make it entertaining, make it complete (hence the thickness of this book). And above all, don’t just identify a feature: Tell us *what it’s for*. Tell us when to use it. (And if the answer is, “You’ll *never* use it,” tell us that, too.)

Now, I’ll be the first to admit that this book isn’t for everybody. In fact, it’s aimed primarily at two kinds of people: people who have never used Photoshop, and people who

have.

But seriously, folks. If you're new to Photoshop, you'll find patient, friendly introductions to all those nutty Photoshopy concepts like layers, color spaces, image resolution, and so on. And, mercifully, you'll find a lot of loving attention to a time-honored Missing Manual specialty — tips and shortcuts. As Photoshop pros can tell you, you pretty much *have* to learn some of Photoshop's shortcuts or it will crush you like a bug.

On the other hand, if you already have some Photoshop experience, you'll appreciate this book's coverage of Photoshop CC 2014's new features: Focus Area, perspective warp, new blur filters, new font features, smarter smart guides, 3D printing, and so on.

In 2013, Adobe announced that from now on, you must *rent* Photoshop, monthly or yearly. You can no longer buy it outright. One of the motivations, Adobe said, was a desire to create an ever-changing, ever-improving Photoshop. There wouldn't be one megalithic new version every couple of years. Instead, little enhancements would come along all year long, added as soon as they were ready.

So what are we to make of this “Photoshop CC 2014” thing? Are we back to yearly megalithic releases? Has Adobe abandoned its Photoshop Forever concept?

Yes and no. The company still plans to update Photoshop all year long. But it also plans to create the periodic “milestone” edition of Photoshop, a breather, a catch-up version that rolls in all the little changes (and a few more) since the last one. In part, this idea is a crumb thrown to people who write (and buy) books about Photoshop; nobody would be served well if Photoshop were a shape-shifting target forever.

In any case, get psyched. You now have both the most famous, powerful, magical piece of software on earth *and* a 900+-page treasure map to help you find your way.

The only missing ingredients are time, some photos to work on, and a little good taste. You'll have to supply those yourself.

Good luck!

— *David Pogue*

David Pogue is the founder and anchor columnist for YahooTech.com, having been groomed for the position by 13 years as the tech columnist for the New York Times. He's an Emmy-winning TV correspondent (CBS News and NOVA on PBS), a Scientific American columnist, and the creator of the Missing Manual series.

The Missing Credits

The Missing Credits

About the Author



Lesa Snider is on a mission to teach the world to create — and use! — better graphics. She's an internationally acclaimed speaker, a stock photographer, and the founder of the creative tutorial site PhotoLesa.com. Lesa is the author of The Skinny Book series of ebooks (www.theskinnybooks.com) many video-training workshops (www.lesa.in/lesacl) and the coauthor of *iPhoto: The Missing Manual*. She writes a regular column for *Photoshop User*, *Photographic Elements Techniques*, and *Macworld* magazines. Lesa is also a long-time member of the Photoshop World Dream Team of instructors and can be spotted teaching at many other conferences around the globe. You can connect with her online on Facebook (www.facebook.com/PhotoLesa), YouTube (www.lesa.in/ytvideochannel), Twitter (@PhotoLesa), and PhotoLesa.com.

During her free time, you'll find Lesa at the dojo practicing Muay Thai kickboxing, with her husband at a sci-fi convention dressed up in her *Star Trek* best, or cooking Italian meals. Email: lesa@photolesa.com.

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May the creative force be with you all!

— *Lesa Snider*

Introduction

Congratulations on buying one of the most complicated pieces of software ever created! Fortunately, it's also one of the most *rewarding*. No other program on the market lets you massage, beautify, and transform images like Photoshop. It's so popular that people use its name as a verb: "Dude, you Photoshopped the *heck* out of him!" You'd be hard-pressed to find a published image that *hasn't* spent some quality time in this program, and those that didn't probably should have.

The bad news is that it's a tough program to learn; you won't become a Photoshop guru overnight. Luckily, you hold in your hot little hands a book that covers the program from a *practical* standpoint, so you'll learn the kinds of techniques you can use every day. It's written in plain English for normal people, so you don't have to be any kind of expert to understand it. You'll also learn just enough theory (where appropriate) to help you understand *why* you're doing what you're doing.

NOTE

Prior to Photoshop CC, Adobe offered *two* versions of the program: Photoshop Standard and Photoshop Extended, which included extra features such as 3D tools. But they *combined* those two versions into Photoshop CC, so you get all the features.

What's New in Photoshop CC 2014

Adobe has added some incredibly useful new features to Photoshop CC 2014, especially where productivity is concerned. Graphic designers will be especially pleased with all the new features and timesaving goodies, although there's also a lot of good stuff for photographers, too.

Perhaps the first thing you'll notice is that Adobe redesigned most of the program's dialog boxes to accommodate Retina displays (Apple's super-high resolution monitors, called HiDPI on PCs), so they're noticeably shorter and wider (they're also a darker gray and the buttons are *square*, so they look more Windows-like than Mac-like in their design).

Here's a quick overview of all the new stuff (don't worry if you don't yet understand some of the terms used here — you'll learn them as you read through this book):

- **New blur filters.** This version of Photoshop CC sports two additions to the Blur Gallery family of filters that let you simulate motion in a photo that doesn't have any (or that doesn't have enough). The Path Blur filter lets you create the appearance of motion along a path that you draw — it can be straight or riddled with curves — and then fine-tune the blur's direction, angle, speed, and even how *much* blurring occurs at the path's start and end points. And the Spin Blur filter lets you put an incredibly realistic spin on any object by using a simple set of on-image controls. Both filters let you customize how blurry the object appears.
- **Typekit access, font searches, and instant font previews.** One of the great benefits of having a subscription to Adobe's Creative Cloud service (see the box on [Meet the Creative Cloud](#)) that it gives you access to hundreds of fonts via the online font service Typekit (www.Typekit.com). In this version of the program, you can get to these fonts right from Photoshop's font family menu and — once you install them (which is incredibly easy) — you can use them in *any* program on your machine that sports a font menu. Also new in the realm of text is the ability to search all your installed fonts by typing part of a font's name (or attribute) into the font family menu. And when a type layer is active, you can point to any font in the font family menu and Photoshop previews your existing text in that font, right there in your document.
- **Better smart guides.** These incredible layer alignment helpers are now turned on automatically, and now show you a *lot* more info about the spacing in your document. When you have the Move or Path Selection tool active, you can ⌘-click (Ctrl-click on a PC), and then point anywhere in your document to see distance measurements between the currently active layer's content and everything else in the document (even its edge). By Option-dragging (Alt-dragging) an object, you can both duplicate that layer and see the distance between the duplicate and the original object *as you drag*.
- **Sync layer comps and access them in smart objects.** Layer comps let you create multiple versions of an image or design without having to duplicate the document. New in this version of the program, you can update layer comps by syncing them with the layers you updated (a big timesaver when you make a global change to your project), plus you can access a document's layer comps after you've placed it into *another* document as a smart object — *without* opening (editing) the smart object.
- **Linked smart objects.** Instead of embedding smart object content into your documents, you can now *link* them to external content. This is great news for both

designers and photographers who routinely combine large files into a single document. You can now also convert an embedded smart object into a linked one, or vice-versa. The Properties panel, Info panel, and status bar can all display handy info about linked smart objects, as well as help you fix any broken links (caused by renaming or moving the linked file on your hard drive) and update any content that you changed while the Photoshop document that contains it was closed. Finally, the new Package command copies the Photoshop document *and* all its linked content so you can easily hand the whole shebang off to someone else.

- **Select in-focus areas with Focus Area.** This new command summons a dialog box that *automatically* selects the in-focus parts of an image. It does a great job if the photo has a strong focal point and a blurry background, and the dialog box includes a couple of sliders and brushes that you can use to fine-tune the selection. You can also send the selection straight over to the Refine Edge dialog box for more tweaking.
- **Better color blending with content-aware tools.** All of Photoshop's content-aware tools now work faster and do a better job of blending colors, especially when you use them in an area that's a gradient (think skies, water, and so on). These days, instead of having adaptation *presets* for the Patch and Content-Aware Move tools, you get a Structure and a Color field that let you enter precise settings for more realistic blending. Adobe also updated the Fill command's Content-Aware option to perform better blending, and it now includes a Color Adaptation checkbox.
- **Editable scripted patterns.** Scripted patterns are a fantastic way to create new textures and backgrounds, although editing the JavaScript that powers 'em was a real pain. Now, choosing one of the eight built-in scripts summons a dialog box that lets you easily customize the pattern's density, size, and color variations. You can apply scripted patterns to paths, too, as well as save your customizations as handy presets that you can use again later.
- **Perspective warp.** This command lets you change the perspective of an image, but only in *certain areas* that you specify. By drawing a grid atop your image, you can warp that area to make stuff like buildings and flat surfaces look *correct* (in other words, straight instead of angled).
- **Editable masks for Camera Raw's Graduated and Radial filters.** Camera Raw's Graduated and Radial filters are perfect for applying gradual changes to a photo in a linear or circular fashion (respectively). And you can now edit the masks made by both filters by using a brush. (Camera Raw is discussed throughout this book, but the bulk of the coverage is in [Chapter 9](#).)
- **Export web graphics with Generator.** To the delight of web designers worldwide, the new Generator feature lets you *instantly* export web graphics that you've designed in Photoshop — and even create subfolders to organize them — just by using certain layer names. You've got to try this feature to believe it.
- **3D printing.** You can now print 3D objects on a local 3D printer or send your file off to a 3D-printing service from *inside* Photoshop. The print preview that you get is incredible and even shows you the areas Photoshop filled in to make the object solid enough to print. If you go the printing-service route, the preview even estimates how much the project will cost. [Chapter 21](#) helps you get started working in the increasingly popular realm of 3D.

There are also *tons* of little changes in Photoshop CC 2014, the direct result of Adobe's

customer-feedback initiative called Just Do It (JDI). Here's a list: You can unlock a background layer by single-clicking its padlock icon (hooray!); you can turn the Color panel into a Color Picker that's *always* open; you no longer have to unlock a background layer to add a vector-based layer mask to it; you can create gradients with a single color stop; and the process for syncing your settings to the Creative Cloud is simpler and now includes workspaces, keyboard shortcuts, and menu customizations. You can also export 3D color lookup tables for use in Adobe's pro-level video editing apps; and the Copy CSS command now understands inner-shadow layer styles. When using the Liquify filter, you can pin the image's edges down so they don't get warped. The Brushes panel displays the last 30 brushes you used at the top of its panel for quick access, and uses a special highlight color to let you know when you've modified a brush's settings. There's also an Experimental Feature Manager tucked inside Photoshop's preferences that lets you access "not yet ready for prime time" features that Adobe periodically releases.

Unfortunately, Adobe removed some useful panels because they were Flash based, including the Mini Bridge, Kuler, and Adobe Exchange panels (though, as [Other Color Scheme—Generating Tools](#) explains, you can download Kuler from the Adobe Add-On website as an HTML-based panel). The Oil Paint filter also went the way of the dodo bird in this version due to outdated code (easy come, easy go!).

FREQUENTLY ASKED QUESTION: MEET THE CREATIVE CLOUD

Dude, what the heck happened to Photoshop CS7? What on earth does “CC” mean?

Great question. After CS6, Adobe decided to stop shipping boxed, perpetually licensed versions of their products. These days, your only option is to subscribe to — and then download — the software.

Using a service called the Adobe Creative Cloud, you can subscribe on an annual or monthly basis to one or all of Adobe’s products. For example, a single-app Creative Cloud subscription for Photoshop CC costs about \$20 a month and gives you access to both Mac and PC versions of the program that you can install on up to two machines (say, a desktop and laptop). If you use two or more Adobe programs (say, Photoshop and InDesign), it’s cheaper to subscribe to *all* of their products for about \$50 a month which, as of this writing, includes 24 programs and services (both Mac and PC versions) — including access to Adobe Typekit and the ability to share your projects via Behance (see the box on [Sharing Images on Behance](#)). That said, Adobe offers a special subscription geared toward photographers wherein you get Photoshop *and* Photoshop Lightroom for a slick \$10 per month (visit www.lesia.in/pslrfor10 for details). These prices may change, of course, so check with Adobe for current pricing.

Whichever option you choose, you simply subscribe, and then download the software to your machine using the Creative Cloud application. After that, your Adobe software phones home once a month via the Internet to validate your account; if Adobe can’t validate your account, your software stops working (along with your fonts). In other words, if you don’t pay, you don’t get to use the software (though there is a 30-day grace period if, for whatever reason, your computer can’t connect to the Internet).

Once you’re a Creative Cloud subscriber, you get 20 GB of storage space, which you can use to host websites and sync documents between computers and tablets (think iPads), and to back up documents or share them with others (regardless of whether those folks have Creative Cloud subscriptions). You also get the ability to sync custom settings to the Cloud so they’re accessible on other machines: When you subscribe to the Creative Cloud and then install Photoshop, your Adobe ID appears in the Photoshop menu (the Edit menu on a PC) with a submenu that contains Upload Settings and Download Settings commands.

You can also sync documents to the Creative Cloud so you can access ’em on other computers (home and work, say). For example, you can designate a folder on your hard drive, and then any items you put into it automatically sync to the Creative Cloud. Subscribers also get their hands on new features as soon as Adobe rolls ’em out; the Creative Cloud app notifies you of the update and you can install it whenever you want. With larger updates, such as the Photoshop CC 2014 update, you install a whole new copy of the program. If you don’t need the older version, just delete it from your machine folder to reclaim some hard drive space. However, if your workflow depends on a feature that was changed or removed, you may want to keep it around. (To learn the current version number of your copy of Photoshop CC, choose Help → System Info.)

Adobe will continue to sell and support Photoshop CS6 for a while; but that’s the last licensed copy you’ll ever get (and there’s nothing wrong with keeping it on your machine if you already own it — in fact, it’s a good idea). Like it or not, we’re now in the era of rental software. (To get the most from your Creative Cloud subscription, check out your author’s ebook, *Making the Most of Adobe’s Creative Cloud* at www.theskinnybooks.com.)

If you’re in North America or the United Kingdom, you can purchase a Creative Cloud subscription through Adobe.com, Amazon.com, or Staples.com. Folks in other countries should go through Adobe.com.

And that, dear friends, is why the program is now called Photoshop Creative Cloud, a.k.a. Photoshop CC 2014.

About This Book

Adobe has pulled together an amazing amount of information in its online help system (see online Appendix B, available from this book's Missing CD page at www.missingmanuals.com/cds), but despite all these efforts, it's geared toward seasoned Photoshop jockeys and assumes a level of skill that you may not have. The explanations are very clipped and to the point, which makes it difficult to get a real feel for the tool or technique you need help with.

That's where this book comes in. It's intended to make learning Photoshop CC tolerable — and even enjoyable — by avoiding technical jargon as much as possible and explaining *why* and *when* to use (or avoid) certain features of the program. This friendly, conversational approach is meant to appeal to beginners and seasoned pixel pushers alike.

Some of the tutorials in this book refer to files you can download from this book's Missing CD page on the Missing Manuals website (www.missingmanuals.com/cds) so you can practice the techniques you're reading about. And throughout the book, you'll find several kinds of sidebar articles. The ones labeled “Up to Speed” help newcomers to Photoshop do things or understand concepts that veterans are probably already familiar with. Those labeled “Power Users' Clinic” cover more advanced topics for the brave of heart.

NOTE

Photoshop CC functions almost identically on Mac and Windows computers, but for the sake of consistency, the screenshots in this book were all taken on a Mac. However, the keyboard shortcuts for the two operating systems are different, so you'll find both included here — Mac shortcuts first, followed by Windows shortcuts in parentheses, like so: “press ⌘-A (Ctrl+A).” The locations of a few folders differ, too; in those cases, you get the directions for both operating systems.

About the Outline

This hefty book is divided into six parts, each devoted to the type of things you'll do in Photoshop CC:

- **Part 1.** Here's where you'll learn the essential skills you need to know before moving forward. **Chapter 1** gives you the lay of the land and teaches you how to work with panels and make the Photoshop workspace your own. You'll also find out the many ways of undoing what you've done, which is crucial when you're learning. **Chapter 2** covers how to open and view documents efficiently, and how to set up new documents so you have a solid foundation on which to build your masterpieces. **Chapter 3** dives into the most powerful Photoshop feature of all: layers. You'll learn about the different kinds of layers and how to manage them, the power of layer masks, and how to use layer styles for special effects. **Chapter 4** explains how to select part of an image so you can edit just that area. In **Chapter 5**, you'll dive headfirst into the science of color as you explore channels (which store the colors that make up your images) and learn how to use channels to create selections; you'll also pick up some channel-specific editing tips along the way.

NOTE

In this book, the word “select” is used *only* to refer to the act of creating *selections*. In most other instances, the word “activate” is used instead, as in “activate the layer” or “activate the Crop tool.”

- **Part 2. Chapter 6** starts off by explaining the various ways you can crop images — both in Photoshop and in Camera Raw — and then demystifies resolution so you’ll understand how to resize images without reducing their quality. In **Chapter 7**, you’ll learn how to combine images in a variety of ways, from simple techniques to more complex ones. **Chapter 8** covers draining, changing, and adding color, arming you with several techniques for creating gorgeous black-and-white images, delicious duotones, partial-color effects, and more. You’ll also learn how to change the color of almost anything.

Chapter 9 focuses on color-correcting images, beginning with auto fixer-uppers, and then moving on to the wonderfully simple (yet powerful) world of Camera Raw and the more complicated realm of Levels and Curves. **Chapter 10** is all about retouching images to change reality and is packed with practical techniques for slimming and trimming. This chapter also covers using the various content-aware tools to remove objects or scoot them from one spot to another, as well as how to use the Puppet Warp command to move just your subject’s arms and legs. **Chapter 11** explains what sharpening really is, and covers *which* sharpening method to use *when* to make your images look especially crisp.

UP TO SPEED: WHAT DOES “64-BIT” MEAN?

The cool phrase in computing circles for the past few years has been “64-bit.” While that term may sound pretty geeky, it’s actually not that intimidating: 64-bit programs (a.k.a. “applications” or “apps”) simply know how to count higher than 32-bit programs.

So what does that mean in practice? 32-bit programs can open and work with files that are up to 4 gigabytes in size — which is huge. But 64-bit programs can open files that are *way* bigger than that, as long as your computer’s operating system can handle 64-bit apps. (Mac OS X 10.5 [Leopard] and Microsoft Windows Vista [the 64-bit version, anyway] and later are up to the task.)

64-bit programs can also make use of more memory than their 32-bit counterparts, which is crucial when you’re working with big honkin’ files. For example, the 64-bit version of Photoshop lets you use more than 4 gigs of RAM, which makes it run faster. (You can change how your machine’s memory is allotted by tweaking Photoshop’s preferences as described on [The Missing Credits—The Missing Credits](#).)

Older versions of Photoshop were available in both 32-bit and 64-bit versions, but Photoshop CC is available *only* in 64-bit (even on Windows computers), which is great news if you work with large files. And since most third-party plug-ins (**Chapter 19**) and filters (**Chapter 15**) now work in 64-bit mode, there’s little reason to cast a single glance backward. That said, you can still share Photoshop files with both Mac and PC folks, just like you always have.

- **Part 3.** This part of the book is all about creativity. **Chapter 12** explains the many ways of choosing colors, and teaches you how to create a painting from scratch. **Chapter 13** focuses on using the mighty Pen tool to create complex illustrations and selections, along with how to use Photoshop’s various shape tools. **Chapter 14** teaches you the basics of typography, and then moves on to creating and formatting text in Photoshop. You’ll find out how to outline, texturize, and place photos inside text, among other fun-yet-practical techniques. **Chapter 15** covers the wide world of filters, including how to use smart filters; you’ll come away with at *least* one practical use for one or more of the filters in every category.
- **Part 4.** In **Chapter 16**, you’ll learn about printing images, beginning with an explanation of why it’s so darn hard to make what comes out of your printer match what you see onscreen. You’ll discover the programs different color modes and find out how to prepare images for printing, whether you’re using an inkjet printer or a commercial

printing press. **Chapter 17** focuses on preparing images for the Web, walks you through the various file formats you can use, explains how to protect your images online, and explains how to export web graphics using Generator. Rounding out the chapter is info on using the Slice tool on a web page design, and step-by-step instructions for creating animated GIFs.

- **Part 5.** This part is all about working smarter and faster. **Chapter 18** covers actions (which help you automate tasks you perform regularly), and explains how to create gorgeous watermarks. **Chapter 19** covers installing and using plug-ins (small programs you can add to Photoshop), and recommends some of the best. **Chapter 20** teaches you how to edit videos in Photoshop and create stunning video portfolios, **Chapter 21** gets you started creating and working with 3D objects and text, and **Chapter 22** explains how to use Adobe Bridge for some slick organization and batch-processing tricks.
- **Part Six: Appendixes.** Appendix A covers installing (and uninstalling) Photoshop. Appendix B offers some troubleshooting tips, explains Photoshop's help system, and points you to resources besides than this book. Appendix C gives you a tour of the mighty Tools panel. And Appendix D walks you through Photoshop CC's 200+ menu items. All the appendixes are available from this book's Missing CD page at www.missingmanuals.com/cds.

For Photographers

If you're relatively new to digital-image editing or you've always shot film and are taking your first brave steps into the world of digital cameras, you'll be amazed at what you can do in Photoshop, but it can also be a bit overwhelming. By breaking Photoshop down into digestible chunks that are most important to *you*, the learning process will feel less daunting. (There's no sense in tackling the whole program when you'll only use a quarter of it — if that much.)

The most important thing to remember is to be patient and try not to get frustrated. With time and practice, you *can* master the bits of Photoshop that you need to do your job better. And with the help of this book, you'll conquer everything faster than you might think. As you gain confidence, you can start branching out into other parts of the program to broaden your skills.

Here's a suggested roadmap for quickly learning the most useful aspects of the program:

1. **Read all of Chapters **Chapter 1** and **Chapter 2** (or at the very least skim them).**
These two chapters show you where to find all of Photoshop's tools and features, and explain how the program is organized. You'll learn how to open, view, and save images, which is vital stuff to know.
2. **If your photos aren't on your computer already — and you don't use Photoshop Lightroom — read **Chapter 22** about Adobe Bridge.**
Bridge is an amazingly powerful image organizer and browser that can help get your images onto your computer. It takes care of importing, renaming, and even backing up your precious photos. That said, if you use Lightroom, you can skip the Bridge chapter.
3. **If you shoot in raw format (see the box on **Raw versus JPEG**) and need to color-correct your images in a hurry, read the section in **Chapter 9** on editing in Camera Raw (**Correcting Images in Camera Raw**).**

That chapter includes a whole section on practical editing techniques you can use in Camera Raw, and a quick reference that points you to where you'll find other Camera-Raw techniques throughout this book.

4. If you *don't* shoot in raw and you need to resize your images before editing them, read **Chapter 6**.

That chapter explains resolution and how to resize images without reducing their quality.

5. Proceed with Chapters **Chapter 8**, **Chapter 9**, and **Chapter 10** to learn about color effects, correcting color and lighting, and all manner of retouching (retouching portraits, moving and removing objects, and so on), respectively.
6. When you're ready to sharpen your images, read **Chapter 11**.
7. Finally, when you want to print your photos, read the section on printing with an inkjet printer in **Chapter 16 (Printing on an Inkjet Printer)**.

The chapter walks you through the printing process.

That's all you need to get started. When you're ready to dive further into Photoshop, pick back up at **Chapter 3**, which covers layers, and then move on through the book as time permits.

The Very Basics

This book assumes that you know how to use a computer and that, to some extent, you're an expert double-clicker and menu opener. If not, here's a quick refresher:

To *click* means to move the point of your cursor over an object onscreen, and then press the left mouse or trackpad button once. To *drag* means to click an object and then, while still holding down the mouse button, move the mouse to move the object. To *double-click* means to press the left button twice, quickly, without moving the cursor between clicks. To *right-click* means to press the right mouse button once, which produces a menu of special features called a *shortcut menu* (a.k.a. *contextual menu*). If you're on a Mac and have a mouse with only one button, you can simulate right-clicking by holding down the Control key while you click.

Most onscreen controls are pretty obvious, but you may not be familiar with *radio buttons*: To choose an option, you click one of these little empty circles that are arranged in a list.

You'll find tons of keyboard shortcuts throughout this book, and they're huge timesavers. If you see a sentence like, "Press ⌘-S (Ctrl+S) to save your file," that means to hold down the ⌘ key (or Ctrl key, if you're using a PC), and then press the S key, too; then let go of both keys. (This book lists Mac keyboard shortcuts first, followed by Windows shortcuts in parentheses.) Other keyboard shortcuts are so complex that you'll need to use multiple fingers, both hands, and a well-placed elbow. And sometimes you'll combine keystrokes with clicking. For example, to ⌘-click (Ctrl-click on a PC) means to press and hold the ⌘ (or Ctrl) key and then, while still pressing the key, click your left mouse button.

If you're comfortable with basic concepts like these, you're ready to get started with this book.

About → These → Arrows

In this book (and in all Missing Manuals, for that matter), you'll see arrows sprinkled

throughout each chapter in sentences like this: “Choose Filter → Blur Gallery → Tilt-Shift.” This is a shorthand way of helping you find files, folders, and menu items without having to read through painfully long, boring instructions. For example, the sentence quoted above is a short way of saying this: “At the top of the Photoshop window, locate the Filter menu. Click it and, in the list that appears, look for the Blur Gallery category. Point your cursor at the words **Blur Gallery** (without clicking) and, in the resulting submenu, click Tilt-Shift” (see **Figure 1**).

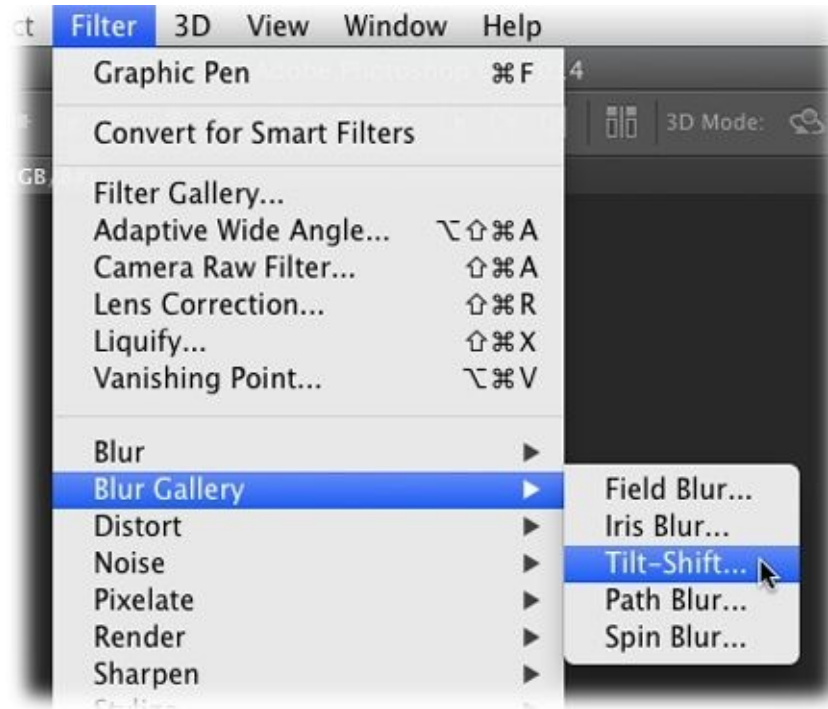


Figure 1. Choosing Filter → Blur Gallery → Tilt-Shift takes you to the menu item shown here.

About the Online Resources

As the owner of a Missing Manual, you've got more than just a book to read. Online, you'll find example files so you can get some hands-on experience. You can also communicate with the Missing Manual team and tell us what you love (or hate) about the book. Head over to www.missingmanuals.com, or go directly to one of the following sections.

Missing CD

This book doesn't have a CD pasted inside the back cover, but you're not missing out on anything. Go to www.missingmanuals.com/cds to download sample files and the book's appendixes. And so you don't wear down your fingers typing long web addresses, the Missing CD page also offers clickable links to all the websites mentioned in this book.

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Errata

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Part 1. The Basics

Chapter 1, *Photoshop CC Guided Tour*

Chapter 2, *Opening, Viewing, and Saving Files*

Chapter 3, *Layers: The Key to Nondestructive Editing*

Chapter 4, *Selections: Choosing What to Edit*

Chapter 5, *Understanding Channels*

Chapter 1. Photoshop CC Guided Tour

Photoshop CC is bursting with fabulous features that'll help you edit and create your very own digital masterpieces. If this is your first foray into the world of Photoshop, all these features will be new to you. If you're an experienced pixel pusher, there are some surprises waiting for you, too. If you're upgrading from Photoshop CS5 or earlier, Adobe introduced *major* changes to the work environment back in CS6 — like a brand-new color theme — and while these changes make Photoshop easier to use, they take some getting used to.

This chapter gives you a solid foundation on which to build your Photoshop skills. You'll learn how to work with the Application Frame, and how to wrangle document windows and panels. Once you've gotten them placed just right, you'll learn how to save your setup as a custom workspace. If you're a beginner, the section on using Undo commands and history states will teach you how to fix mistakes and back out of almost *anything* you've done. Finally, you'll learn how to fine-tune Photoshop's behavior through preferences and built-in tools (called *presets*) that let you personalize your experience even more. Let's dive in!

Meet the Application Frame

When you launch Photoshop CC for the first time, you're greeted by the *Application Frame* shown in **Figure 1-1**. This frame confines all things Photoshop to a single resizable, movable window. You can grab the whole mess — documents, panels, and all — and drag it to one side of your screen (or better yet, to another monitor) so it's out of the way. And if you open more than one document, they're displayed in handy tabs that you can rearrange by dragging.

Chances are, you'll either love the Application Frame or hate it. If you're on a computer running Windows, you're used to programs looking and behaving this way. But if you're on a Mac and you're coming from an older version of Photoshop (like CS3), this arrangement may feel odd; in that case, you can turn off the frame by choosing Window → Application Frame to make Photoshop switch to the floating-window view used in older versions of the program. (PC folks are stuck with the frame.)

NOTE

In Photoshop CC, you'll spot a special button at the bottom of each document window that looks like a rectangle with a curved arrow inside it. Clicking it uploads the current document to Adobe's portfolio-sharing community site *Behance* — a great way to get critical feedback on projects. To learn more about Behance, see the box on **Sharing Images on Behance** and check out your author's ebook "The Skinny on Behance" at www.theskinnybooks.com.

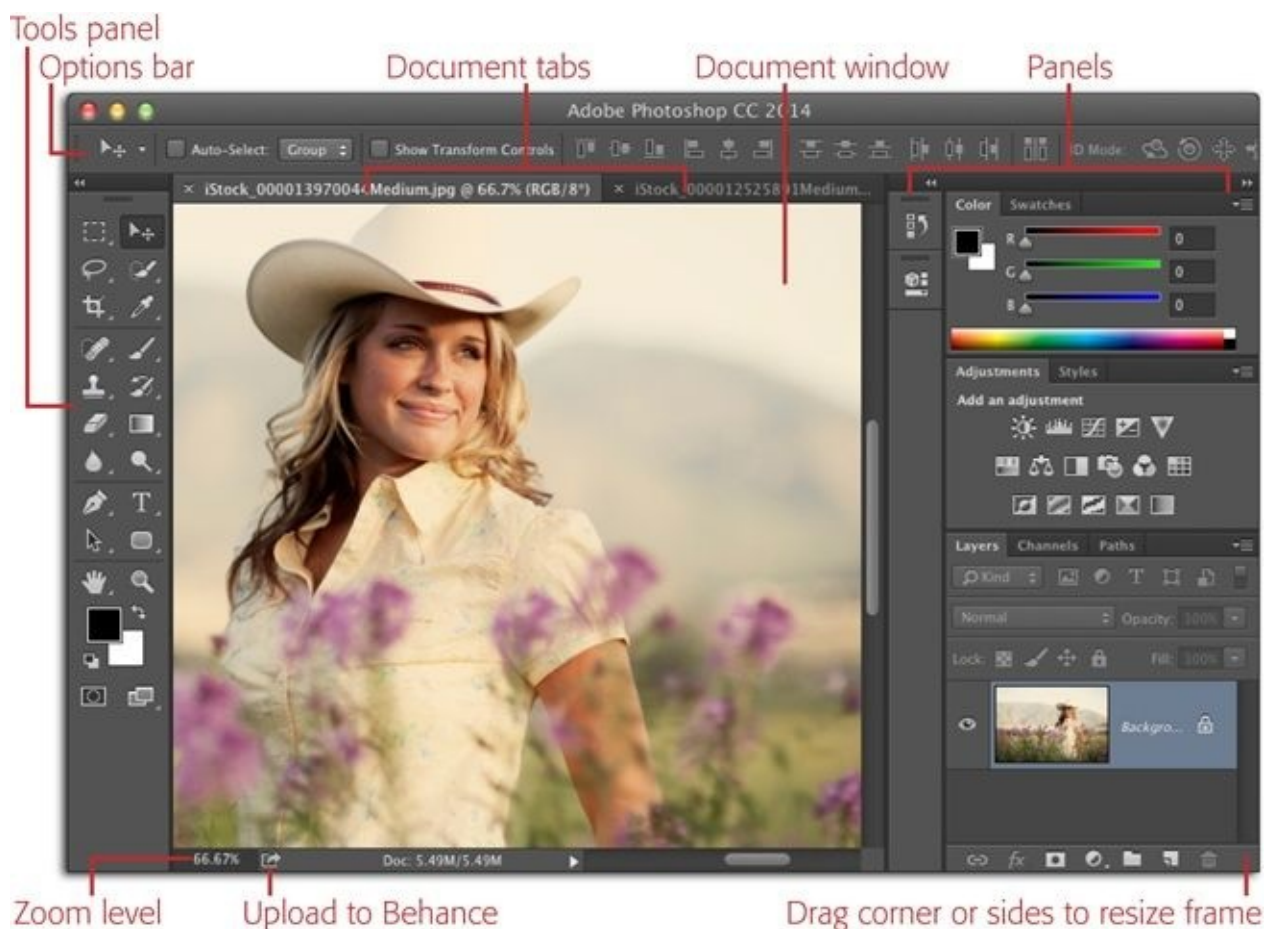


Figure 1-1. You can open several images at once; just click a document's tab to summon it for editing. Photoshop stores the tools and adjustments you'll use most in the panels on the sides of the Application Frame; a full introduction to panels starts on page 3. (Figure 1-9 on page 14 explains how to make your Tools panel have two columns like the one shown here.)

NOTE

Adobe reduced clutter back in Photoshop CS6 by removing the Application bar, which used to house extras like guides, grids, and rulers, as well as several menus. As you learn in the next few pages, those items are now sprinkled throughout the Tools panel, the View menu, and the Window menu.

Also, if you use Photoshop *alongside* other programs, the box on [Hiding vs. Quitting](#) explains how to get Photoshop out of the way *without* quitting it.

The Almighty Options Bar

Lording over the document window is the Options bar ([Figure 1-2](#), top), which lets you customize the behavior of nearly every item in the Tools panel. This bar automatically changes to include settings related to the tool you're currently using. The Options bar also includes the workspace menu, which lets you change the way your Photoshop environment is set up (you learn about workspaces on [Customizing Your Workspace](#)).

Unfortunately, the Options bar's labels are fairly cryptic, so it can be hard to figure out what the heck all those settings do. Luckily, you can point your cursor at any setting to see a little yellow pop-up description called a *tooltip* (you don't need to click — just don't move your mouse for a couple seconds).

TIP

If the tooltips drive you crazy, you can hide 'em by choosing Photoshop → Preferences → Interface (Edit → Preferences → Interface on a PC) and turning off Show Tool Tips.

When you first install Photoshop, the Options bar is perched at the top of your screen, but it doesn't have to stay there. If you'd rather put it somewhere else, grab its left end and drag it wherever you want, as shown in [Figure 1-2](#), middle. If you decide to put it back later (also called *docking*), just drag it to the top of the screen and, when you see a thin blue line appear ([Figure 1-2](#), bottom), release your mouse button.

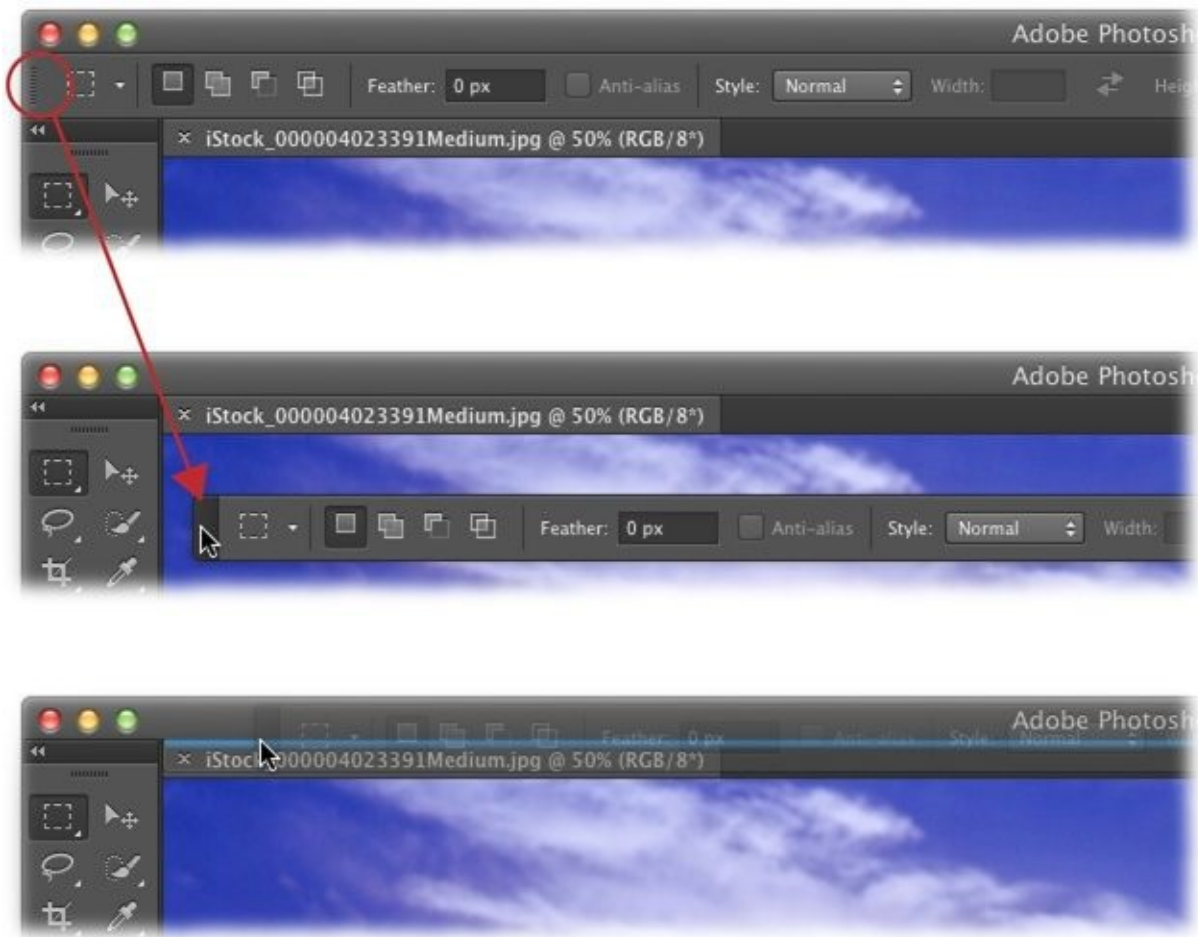


Figure 1-2. Top: The Options bar is customization central for whatever tool you're currently using. But it doesn't have to live at the top of the screen; you can undock it by dragging the tiny dotted lines circled here. Middle: Once you've freed the Options bar, you can drag it anywhere you want by grabbing the dark gray bar on its far left. Bottom: To redock the Options bar, drag it to the top of your screen. Once you see a thin blue line like the one visible here, release your mouse button.

TIP

If a tool seems to be misbehaving, it's likely because you changed one of the Options bar's settings and forgot to change it back. These settings are *sticky*: Once you change them, they *stay* that way until you change them back. [Figure 1-17](#) explains how to reset a tool to its factory-fresh settings.

NOTE

Adobe recently added the ability to *shrink* the Options bar to a narrower version, which is handy if you've got a small screen. Skip to [Changing Photoshop's Appearance](#) for the scoop.

Swapping Screen Modes

Photoshop includes three different *screen modes* for your document-viewing pleasure. Depending on what you're doing, one will suit you better than the others. For example, you can make an image take up your whole screen (with or without the menus and Options bar), hide Photoshop's panels, and so on (see [Figure 1-3](#)). To give each mode a spin, you first need to open an image: Choose File → Open, navigate to where an image lives, and then click Open.

TIP

You can free up precious screen real estate by pressing the Tab key to hide the Options bar and panels (pressing Shift-Tab hides all the panels *except* the Tools panel). This trick is a great way to get rid of distractions when you're editing images, especially if you have a small monitor. To bring the panels back, press Tab again or mouse over to the edge of the Photoshop window where the panels *should* be; when you move your cursor away from the panels, they'll disappear again.

It's a snap to jump between modes. Just press the F key repeatedly — unless you're in the middle of cropping an image or using the Type tool (if you are, you'll type a bunch of Fs) — or use the Screen Modes menu at the bottom of the Tools panel (circled in [Figure 1-3](#), top). These are your choices:

- **Standard Screen Mode** is the view you see when you launch Photoshop for the first time. This mode includes menus, the Application Frame, the Options bar, panels, and document windows. Use this mode when the Application Frame is active and you need to scoot the whole of Photoshop — windows and all — around on your monitor (except for undocked panels or free-floating windows).
- **Full Screen Mode With Menu Bar** completely takes over your screen, puts your document in the center on a dark gray canvas or frame, and attaches any open panels to the left and right edges of your screen. This mode is great for day-to-day editing because you can see all of Photoshop's tools and menus without being distracted by the files and folders on your desktop. The dark gray background is also easy on the eyes and a great choice when color-correcting images (a brightly colored desktop can affect your color perception).

TIP

You can change Photoshop's canvas color anytime by Control-clicking (right-clicking on a PC) the canvas itself. From the shortcut menu that appears, choose from Default (the dark, charcoal gray you see now), Black, Dark Gray, Medium Gray, or Light Gray. If none of those colors float your boat, you can pick your own by choosing Select Custom Color to open the Color Picker, which is explained on [Choosing Individual Colors](#).

- **Full Screen Mode** hides all of Photoshop's menus and panels, centers the document on your screen, and puts it on a black background. (If you've got rulers turned on, they'll still appear, though you can turn 'em off by pressing ⌘-R [Ctrl+R]). This mode is *great* for displaying and evaluating your work or for distraction-free editing. And the black background really makes images pop off the screen (though the next section shows you how to change it to another color).



Figure 1-3. The many faces of Photoshop: Standard Screen Mode (top), Full Screen With Menu Bar (bottom left), and Full Screen (bottom right). You can edit images in any of these modes, though some give you more screen real estate than others. The Screen Modes menu (circled) lives at the bottom of the Tools panel. Figure 1-9 on page 14 tells you how to switch to a two-column Tools panel like the one shown here.

Changing Photoshop's Appearance

While the dark gray interface colors introduced in CS6 are supposed to be easier on the eyes and help you see the colors in images more accurately, you may disagree. You may also want to increase the size of the text labels in the Options bar and panels. Fortunately, you can change several aspects of the program's appearance by choosing Photoshop → Preferences → Interface (Edit → Preferences → Interface on a PC), as **Figure 1-4** shows.

The next section tells you how to customize Photoshop's look and feel even *more* by opening, closing, rearranging, and resizing panels. Read on!

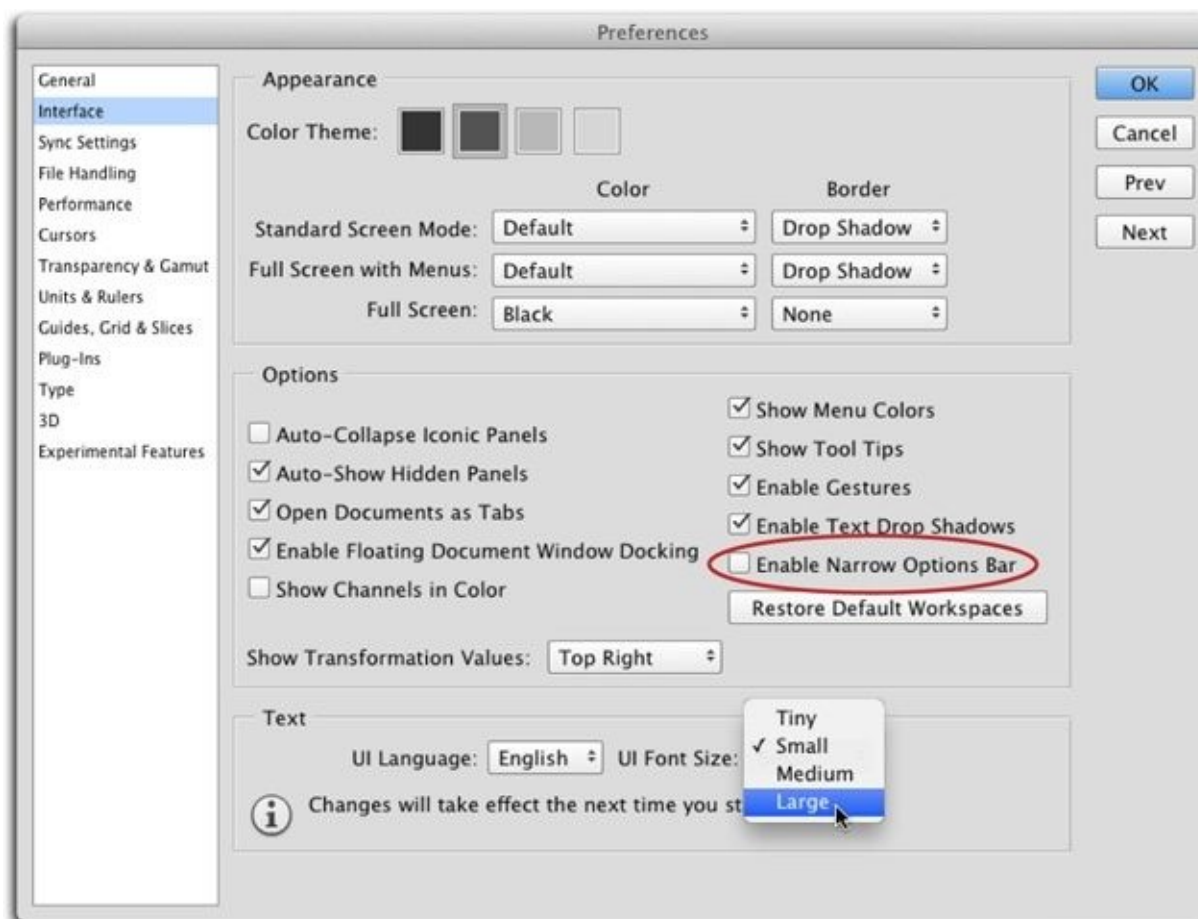


Figure 1-4. Not a fan of the dark gray color theme? Use these settings to pick something lighter (the light gray square reverts to CS5's color theme). To change Full Screen Mode's background color to something other than black, use the Full Screen drop-down menu. Photoshop also sports a narrow Options bar (circled), which is nice for small screens. If the text labels throughout the program have you squinting, make 'em bigger by using the UI Font Size menu shown here (then quit and restart Photoshop to make your change take effect).

UP TO SPEED: HIDING VS. QUITTING

If you need to do some work on your desktop or in another program, you can temporarily *hide* Photoshop, saving you the time and toe-tapping of quitting it and then *restarting* it again later.

On a Mac, press **⌘-Control-H** or click the yellow dot at the top left of the Application Frame to minimize the window (if you've changed your Appearance system preferences to Graphite, the dot is gray instead). Your workspace disappears, but Photoshop keeps running in the background. To bring it back to the forefront, click its icon in the Dock. You can also make Photoshop temporarily disappear by pressing **⌘-H**; the first time you do, a dialog box appears asking if you'd like to *assign* that keyboard shortcut to make it hide Photoshop instead of hiding text highlighting, guides, and so on. (To change it back, edit your keyboard shortcuts as explained in the box on [Customizing Keyboard Shortcuts and Menus](#), or delete Photoshop's preferences as described in the first Note on [Note](#).)

On a PC, you can minimize (hide) the program by clicking the minus button in Photoshop's upper right; Windows tucks the program down into your taskbar. To get it back, click its taskbar icon.

If your machine has at least 8 GB of memory (RAM), there's absolutely *no* downside to hiding Photoshop. However, if you're low on memory and your machine's fan is cranking away, then choose Photoshop → Quit Photoshop (File → Exit on a PC) instead.

Working with Panels

The right side of the Application Frame is home to a slew of small windows called *panels*, which let you work with frequently used features like colors, adjustments, layers, and so on. You're free to organize the panels however you like and position them anywhere you want. Panels can be free floating or *docked* (attached) to the top, bottom, left, or right sides of your screen. And you can link panels together into *groups*, which you can then move around. Each panel also has its very own menu, called (appropriately enough) a *panel menu*, located in its top-right corner; its icon looks like four little lines with a downward-pointing triangle and is labeled in **Figure 1-5**, left.

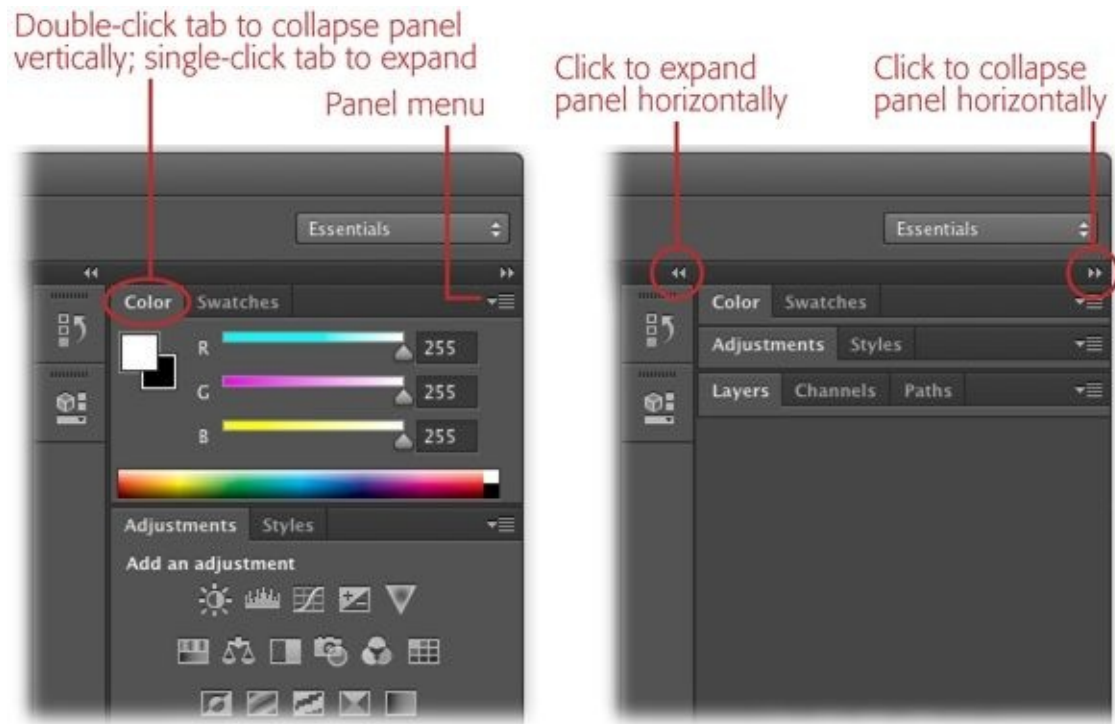


Figure 1-5. Here you can see the difference between expanded panels (left) and collapsed panels (right). Double-click a panel's tab to collapse it vertically, rolling it up like a window shade; single-click the tab again to expand the panel. You can also collapse a panel horizontally by clicking the right-pointing double arrows in its top right (circled, right), at which point it turns into a small button. To expand one of these buttons back into a panel, just click the left-pointing double arrows circled here (circled, middle).

Take a peek at the right side of your screen and you'll see that Photoshop starts you off with three docked panel groups filled with goodies it thinks you'll use a lot (there's more on docked panels coming up shortly). The first group contains the Color and Swatches panels; the second group contains Adjustments and Styles; and the third contains Layers, Channels, and Paths. To work with a panel, activate it by clicking its tab.

Panels are like Silly Putty — they're incredibly flexible. You can collapse, expand, move, and resize them, or even swap 'em for other panels. Here's how:

- **Collapse or expand panels.** If panels are encroaching on your editing space, you can shrink them both horizontally and vertically so they look and behave like buttons. To collapse a panel (or panel group) horizontally so that it becomes a button nestled against the side of another panel or the edge of your screen, click the tiny double arrow in its top-right corner; click this same button again to expand the panel. To collapse a panel vertically against the bottom of the panel above it, as shown in **Figure 1-5**, right, double-click the panel's *tab* or the empty area to its right; single-click the tab or

double-click the empty area to roll the panel back down. To adjust a panel's width, point your cursor at its left edge and, when the cursor turns into a double-headed arrow, drag left or right to make the panel bigger or smaller (though some panels have a minimum width).

- **Add and modify panel groups.** You can open even *more* panels by opening the Window menu (which lists all of Photoshop's panels) and clicking the name of the one you want to open. When you do, Photoshop puts the panel in a column to the left of the ones that are already open and adds a tiny button to its right that you can click to collapse it both horizontally and vertically (just click the same button again to expand it). If the new panel is part of a group, like the Character and Paragraph panels, the extra panel tags along with it. If it's a panel you expect to use a lot, you can add it to an existing panel group by clicking and dragging the dotted lines above its button into a blank area in the panel group, as shown in [Figure 1-6](#).
- **Undock, redock, and close panels.** From the factory, Photoshop docks three sets of panel groups to the right side of your screen (or Application Frame). But you're not stuck with the panels glued to this spot; you can set them free by turning them into *floating* panels. To liberate a panel, grab its tab, pull it out of the group it's in, and then move it anywhere you want (see [Figure 1-7](#)). When you let go of your mouse button, the panel appears where you put it — all by itself.
You can undock a whole panel group in nearly the same way: Click an empty spot in the group's tab area and drag it out of the dock. Once you release your mouse button, you can drag the group around by clicking the same empty spot in the tab area. Or, if the group is collapsed, click the tiny dotted lines at the top of the group, just below the dark gray bar.
To redock the panel (or panel group), drag it back to the right side of your screen. To *prevent* a panel from docking while you're moving it around, ⌘-drag (Ctrl-drag) it instead.

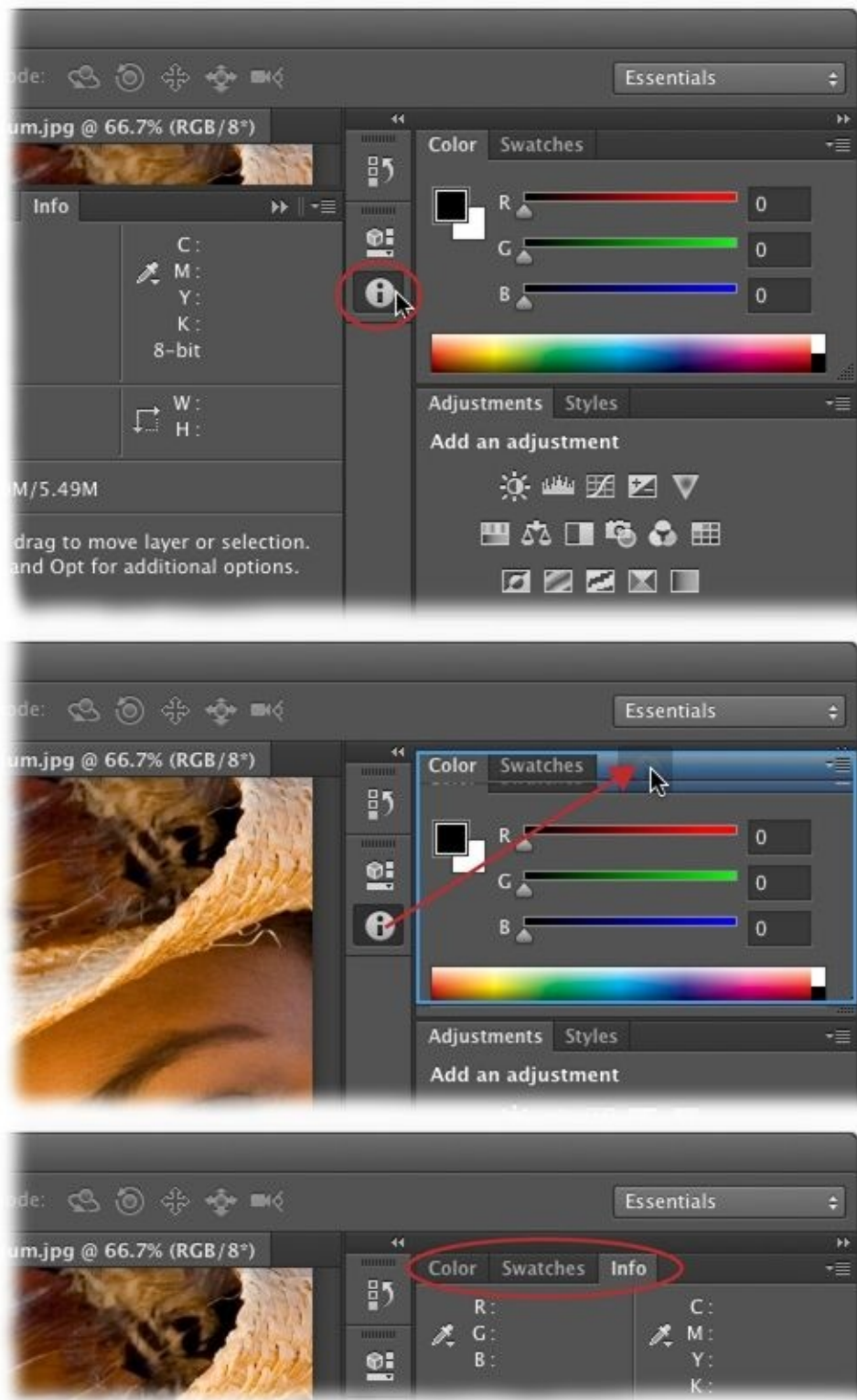


Figure 1-6. Top: When you open a new panel, Photoshop adds it to a column to the left of your other panels and gives it a handy button that you can click to collapse or expand it, like the Info panel's button circled here. The tiny dotted line above each button is its handle; click and drag one of these handles to reposition the panel in the column, add the panel to a panel group, and so on. If the panel you opened is related to another panel — like the Brush panel and the Brush Presets panel — then both panels will open as a panel group with a single handle. Middle: When you're dragging a panel into a panel group, wait until you see a blue line around the inside of the group before you release your mouse button. Here, the Info panel is being added to a panel group. (You can see a faint version of the Info panel's button where the red arrow is pointing.) Bottom: When you release your mouse button, the new panel becomes part of the group. To rearrange panels within a group, drag their tabs (circled) left or right. If the blue highlight lines are hard to see when you're trying to group or dock panels, try dragging the panels more slowly. That way, when you drag the panel into a group or dockable area, the blue highlight hangs around a little longer and the panel becomes momentarily transparent.

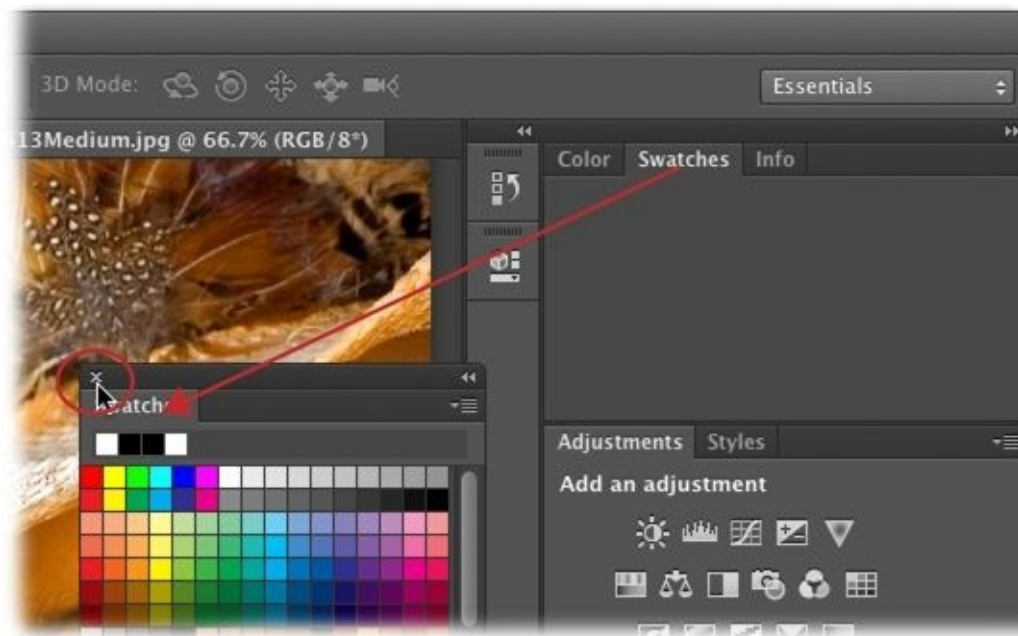


Figure 1-7. To undock a panel (or panel group), click the panel's tab (or a free area to the right of the group's tabs), and then drag the panel or group somewhere else on your screen. To dock it again, drag it to the right side of your screen — on top of the other panels. When you see a thin blue line appear where you want the panel (or group) to land, release your mouse button.

NOTE

The Timeline panel (which was called the Animation panel prior to Photoshop CS6) is docked to the *bottom* of your workspace, which is a docking hotspot, too. That said, Photoshop refuses to let you dock the Options bar down there.

To close a panel, click its tab and drag it out of the panel group to a different area of your screen (**Figure 1-7**); then click the tiny circle in the panel's top-left corner (on a PC, click the X in the panel's top-right corner instead). Don't worry — the panel isn't gone forever; if you want to reopen it, simply choose it from the Windows menu.

Getting the hang of undocking, redocking, and arranging panels takes a little practice because it's tough to control where the little rascals land. When the panel you're dragging is about to join a docking area (or a different panel group), a thin blue line appears showing you where the panel or group will go.

Customizing Your Workspace

Once you arrange Photoshop's panels just so, you can keep 'em that way by saving your setup as a *workspace*, using the unlabeled Workspace drop-down menu at the right end of the Options bar (see **Figure 1-8**). Straight from the factory, this menu is set to Essentials, which is a good general-use setup that includes panels that most people use regularly. The menu's other options are more specialized: 3D is designed for working with 3D objects (see **Chapter 21**), Motion is for video editing, Painting is for (you guessed it) painting, Photography is for working with photos, and Typography is for working with text. To swap workspaces, simply click one of these *presets* (built-in settings), and Photoshop rearranges your panels accordingly.

NOTE

Gone in this version of Photoshop is the What's New workspace, which used to highlight all the menu items that included new features. However, all is not lost: you can choose Help → What's New to visit Adobe's site and see a handy summary of features, listed by the year they were released (for example, Photoshop CC June 2014, and so on).



Figure 1-8. Most of the built-in workspaces are designed to help you perform specialized tasks. For example, the Photography workspace puts the Histogram and Navigation panels at the top right. Take the built-in workspaces for a test drive — they’ll undoubtedly give you customization ideas you hadn’t thought of! If you don’t see the Workspace menu and you’ve got the Application Frame turned on, point your cursor at the right side of the Photoshop window and, when it turns into a double-headed arrow, click and drag rightward to increase the frame’s size.

To save your own custom workspace, first open and arrange the panels you want to include. Next, click the Workspace menu and choose New Workspace. In the resulting dialog box, give your setup a meaningful name and turn on the checkboxes for the customizations you want Photoshop to save. In addition to panel locations, you can save any keyboard shortcut and menu settings you’ve changed (see the box on **Customizing Keyboard Shortcuts and Menus** for more on changing these items) — just be sure to turn on the options for *all* the features you changed or they won’t be included in your custom workspace. When you click Save, your workspace shows up at the top of the Workspace menu.

If you’ve created a custom workspace that you’ll never use again, you can send it packin’. First, make sure you aren’t currently using the doomed workspace. Then, from the Workspace menu, choose Delete Workspace and, in the resulting dialog box, pick the offending workspace and then click Delete. Photoshop will ask if you’re *sure*; click Yes to finish it off.

The Tools Panel

The Tools panel (**Figure 1-9**, left) is home base for all of Photoshop’s editing tools, and it’s included in all the built-in workspaces. Until you memorize tools’ keyboard shortcuts, you can’t do much without this panel! When you first launch the program, you’ll see the Tools panel on the left side of the screen, but you can drag it anywhere you want by clicking the tiny row of vertical dashes near its top (**Figure 1-9**, right).

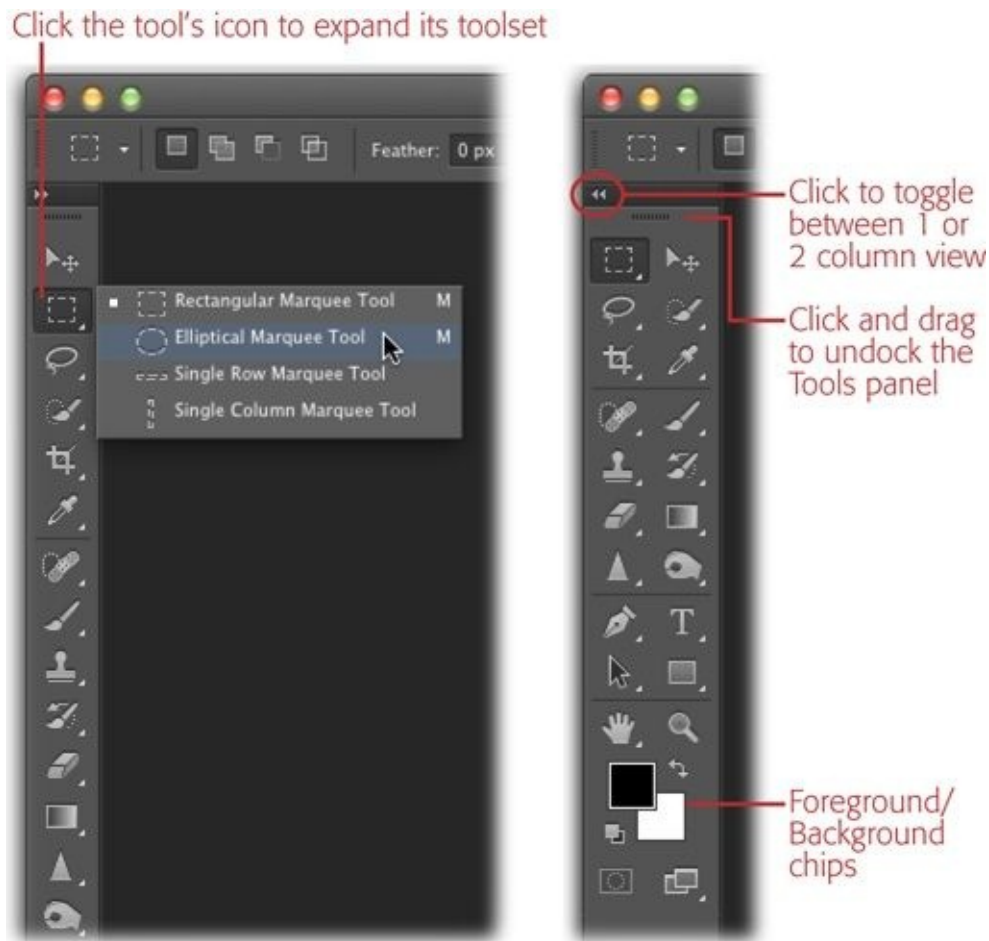


Figure 1-9. There's not enough room in the Tools panel for each tool to have its own spot, so related tools are grouped into toolsets. The microscopic triangle at the bottom right of each toolset's button lets you know it represents more than one tool (the Move and Zoom tools are the only ones that live alone). To see the other tools, click the tool's button and hold down your mouse button (or right-click the button instead); Photoshop then displays a list of the other tools it harbors in a fly-out menu, as shown here (left). Photoshop starts you off with a one-column Tools panel (left), but you can collapse it into two columns (right) by clicking the tiny double triangles circled here (click 'em again to switch back to one column). To undock the Tools panel, grab the dotted bar labeled here and drag the panel wherever you want it. You can dock the Tools panel to the left or right edge of your screen, or leave it floating free.

Once you expand a toolset as explained in [Figure 1-9](#), you'll see the tools' keyboard shortcuts listed to the right of their names. These shortcuts are great timesavers because they let you switch between tools without moving your hands off the keyboard. To access a tool that's hidden deep within a toolset, add the Shift key to the tool's shortcut key, and you'll cycle through all the tools in that toolset. For example, to activate the Elliptical Marquee tool, press Shift-M repeatedly until that tool's icon appears in the Tools panel.

TIP

If you need to switch tools *temporarily* — for a quick edit — you can use the spring-loaded tools feature. Just press and hold a tool's keyboard shortcut to switch to that tool, and then perform your edit. As soon as you release the key, you'll jump back to the tool you were using before. For example, if you're painting with the Brush and suddenly make an error, press and hold E to switch to the Eraser and fix your mistake. Once you release the E key, you're back to using the Brush tool. Sweet!

You'll learn about the superpowers of each tool throughout this book. For a brief overview of each tool, check out Appendix C, which you can download from this book's Missing CD page at www.missingmanuals.com/cds.

TIP

If you can't remember which tool an icon represents, point your cursor at the icon for a couple of seconds while keeping your mouse perfectly still. After a second or two, Photoshop displays a handy tooltip that includes the tool's name and keyboard shortcut.

Foreground and Background Color Chips

Photoshop can handle millions of colors, but its tools let you work with only two at a time: a foreground color and a background color. Each of these is visible as a square *color chip* near the bottom of the Tools panel (labeled in [Figure 1-9](#), where they're black and white, respectively). Photoshop uses your foreground color when you paint or fill something with color; it's where most of the action is. The program uses your background color to do things like set the second color of a *gradient* (a smooth transition from one color to another, or to transparency) or erase parts of a locked Background layer ([Restacking Layers](#)); this color is also helpful when you're running special effects like the Clouds filter ([Pixelate](#)).

To change either color, click its color chip once to open the Color Picker ([Choosing Individual Colors](#)), which lets you select another color for that particular chip. To swap your foreground and background colors, click the curved, double-headed arrow just above the two chips or press X. To set both color chips to their factory-fresh setting of black and white, click the *tiny* chips to their upper left (in a two-column Tools panel, they're at the lower left) or press D. Remember those two keyboard shortcuts (X and D); they're extremely handy when you work with layer masks, which are covered in [Chapter 3](#).

Common Panels

As mentioned earlier, when you first launch Photoshop, the program displays the Essentials workspace, which includes several useful panels. Here's a quick rundown of why Adobe considers these panels so important:

- **Color.** This panel in the upper-right part of your screen includes your current foreground and background color chips and, from the factory, a trio of sliders and a rainbow-colored bar that you can use to pick a new color for either chip. As you'll learn on [The Color Panel](#), you can now use this panel as a color picker that's always open!
- **Swatches.** This panel holds miniature color samples, giving you easy access to them for use in painting or colorizing images (and new in Photoshop CC 2014, the most recent swatches you've used show up in a handy row at the top of the panel). It also stores a variety of color libraries like the Pantone Matching System (special inks used in professional printing). You'll learn all about the Swatches panel in on [The Swatches Panel](#).
- **Adjustments.** This panel lets you create *adjustment layers*. Instead of making color and brightness changes to your original image, you can use adjustment layers to make these changes on a *separate* layer, giving you all kinds of editing flexibility and keeping your original image out of harm's way. They're explained in detail in [Chapter 3](#), and you'll see 'em used throughout this book.
- **Styles.** *Styles* are special effects created with a variety of layer styles. For example, if you've created a glass-button look by adding several layer styles individually, you can

save the whole lot of 'em as a *single* style so you can apply them all with one click. You can also choose from tons of built-in styles; they're discussed starting on [The Styles Panel](#).

- **Layers.** This is the single most important panel in Photoshop. Layers let you work with images as if they were a stack of transparencies, so you can create one image from many. By using layers, you can adjust the size and opacity of — and add layer styles to — each item independently. Understanding layers is the *key* to Photoshop success and nondestructive editing; you'll learn all about them in [Chapter 3](#).
- **Channels.** *Channels* are where Photoshop stores the color information your images are made from. Channels are extremely powerful, and you can use them to edit the individual colors in an image, which is helpful in sharpening images, creating selections (telling Photoshop which part of an image you want to work with), and so on. [Chapter 5](#) has the scoop on channels.
- **Paths.** *Paths* are the outlines you make with the Pen and shape tools. But these aren't your average, run-of-the-mill lines: they're made up of points and paths instead of pixels, so they'll always look perfectly crisp when printed. You can also resize them without losing any quality. You'll conquer paths in [Chapter 13](#).
- **History.** This panel is like your very own time machine: It tracks nearly everything you do to your image (the last 50 things, to be exact, though you can change this number using preferences [see [Changing How Far Back You Can Go](#)]). It appears docked as a button to the left of the Color panel group. The next section explains how to use it to undo what you've recently done (if only that worked in real life!).
- **Properties.** This panel, which is also docked to the left of the Color panel group, is where you access the settings for individual adjustment layers, shape layers, linked smart objects, and layer masks. You'll dive headfirst into masks in [Chapter 3](#); for now, think of them as digital masking tape that lets you hide the contents of a layer.

The Power of Undo

Thankfully, Photoshop is extremely forgiving: It'll let you back out of almost anything you do, which is *muy importante*, especially when you're getting the hang of things.

You've got several ways to retrace your steps, including the lifesaving Undo command. Just choose Edit → Undo or press ⌘-Z (Ctrl+Z). This command lets you undo the very last edit you made.

If you need to go back *more* than one step, use the Step Backward command instead: Choose Edit → Step Backward or press Option-⌘-Z (Alt+Ctrl+Z). Straight from the factory, this command lets you undo the last 50 things you did, one at a time. If you want to go back even further, you can change that number by digging into Photoshop's preferences, as the next section explains. You can step *forward* through your editing history, too, by choosing Edit → Step Forward or Shift-⌘-Z (Shift+Ctrl+Z).

NOTE

Photoshop only lets you undo changes back to the point when you first opened the document you're working on, meaning you can't close a document and then undo changes you made *before* you closed it.

Changing How Far Back You Can Go

If you think you might someday need to go back further than your last 50 steps, you can make Photoshop remember up to 1,000 steps by changing the program's preferences. Here's how:

1. **Choose Photoshop → Preferences → Performance (Edit → Preferences → Performance on a PC).**
2. **In the Preferences dialog box's History States field, pick the number of steps you want Photoshop to remember.**

You can enter any number between 1 and 1,000 in this field. While increasing the number of history states might help you sleep better, doing so means Photoshop has to keep track of that many more versions of your document, which requires more hard drive space and processing power. So if you increase this setting and then notice that the program is running like molasses — or you're suddenly out of hard drive space — try lowering it.

3. **Click OK when you're finished.**

Turning Back Time with the History Panel

Whereas the Undo and Step Backward commands let you move back through changes one at a time, the History panel ([Figure 1-10](#)) kicks it up a notch and lets you jump back *several* steps at once. (You can step back through as many history states as you set in Photoshop's preferences — see the previous section.) Using the History panel is much quicker than undoing a long list of changes one by one, and it gives you a nice list of *exactly* what tools and menu items you used to alter the image — in chronological order from top to bottom — letting you pinpoint the exact state you want to jump back to. And, as explained in a moment, you can also take snapshots of an image at various points in the editing process to make it easier to hop back to the state you want.

After you make a few changes to an image, pop open the History panel by clicking its