

Step-by-Step Tasks in Full Color

Includes

- Workshops ▶
- ACE Exam Objectives ▶
- More than 600 of the
Most Essential Photoshop
CS4 Tasks ▶



Adobe®

Photoshop® CS4

1 2 3 4 5 6 7 on Demand

What you need, when you need it!

que®

Steve Johnson, Perspection, Inc.

Adobe® Photoshop® CS4 On Demand

Copyright © 2009 by Perspection, Inc.

All rights reserved. No part of this book shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher. No patent liability is assumed with respect to the use of the information contained herein. Although every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions. Nor is any liability assumed for damages resulting from the use of the information contained herein.

Library of Congress Cataloging-in-Publication Data is on file

ISBN-13: 978-0-7897-3835-6

ISBN-10: 0-7897-3835-X

Printed and bound in the United States of America

First Printing: November 2008

11 10 09 08 4 3 2 1

Que Publishing offers excellent discounts on this book when ordered in quantity for bulk purchases or special sales.

For information, please contact: U.S. Corporate and Government Sales

1-800-382-3419 or corpsales@pearsontechgroup.com

For sales outside the U.S., please contact: International Sales

1-317-428-3341 or International@pearsontechgroup.com

Trademarks

All terms mentioned in this book that are known to be trademarks or service marks have been appropriately capitalized. Que cannot attest to the accuracy of this information. Use of a term in this book should not be regarded as affecting the validity of any trademark or service mark.

Adobe, the Adobe logo, Acrobat, Bridge, Device Central, Dreamweaver, Extension Manager, Flash, InDesign, Illustrator, PageMaker, Photoshop, Photoshop Elements, and Version Cue are registered trademarks of Adobe System Incorporated. Apple, Mac OS, and Macintosh are trademarks of Apple Computer, Inc. Microsoft and the Microsoft Office logo are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Warning and Disclaimer

Every effort has been made to make this book as complete and as accurate as possible, but no warranty or fitness is implied. The authors and the publishers shall have neither liability nor responsibility to any person or entity with respect to any loss or damage arising from the information contained in this book.

Publisher

Paul Boger

Associate Publisher

Greg Wiegand

Acquisitions Editor

Laura Norman

Managing Editor

Steve Johnson

Author

Steve Johnson

Contributor

Toni Bennett

Technical Editor

Toni Bennett

Page Layout

Beth Teyler

James Teyler

Interior Designers

Steve Johnson

Marian Hartsough

Photographs

Toni Bennett

Tracy Teyler

Indexer

Katherine Stimson

Proofreader

Toni Bennett

Beth Teyler

Team Coordinator

Cindy Teeters

Introduction

Welcome to *Adobe Photoshop CS4 On Demand*, a visual quick reference book that shows you how to work efficiently with Photoshop CS4. This book provides complete coverage of basic to advanced Photoshop skills.


How This Book Works

You don't have to read this book in any particular order. We've designed the book so that you can jump in, get the information you need, and jump out. However, the book does follow a logical progression from simple tasks to more complex ones. Each task is presented on no more than two facing pages, which lets you focus on a single task without having to turn the page. To find the information that you need, just look up the task in the table of contents or index, and turn to the page listed. Read the task introduction, follow the step-by-step instructions in the left column along with screen illustrations in the right column, and you're done.

What's New

If you're searching for what's new in Photoshop CS4, just look for the icon: **New!**. The new icon appears in the table of contents and throughout this book so you can quickly and easily identify a new or improved feature in Photoshop CS4. A complete description of each new feature appears in the New Features guide in the back of this book.

Keyboard Shortcuts

Most menu commands have a keyboard equivalent, such as Ctrl+P (Win) or +P (Mac), as a quicker alternative to using the mouse. A complete list of keyboard shortcuts is available on the Web at www.perspection.com.



How You'll Learn

How This Book Works

What's New

Keyboard Shortcuts

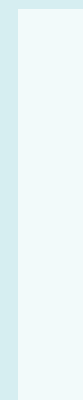
Step-by-Step Instructions

Real World Examples

Workshops

Adobe Certified Expert

Get More on the Web

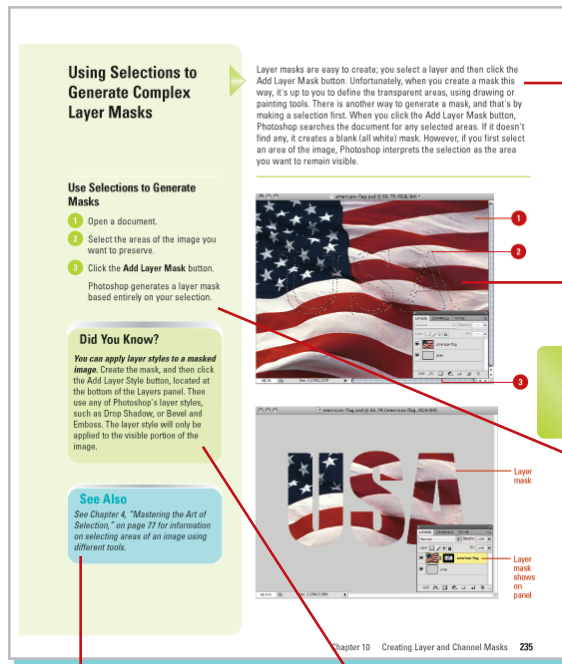


Step-by-Step Instructions

This book provides concise step-by-step instructions that show you “how” to accomplish a task. Each set of instructions includes illustrations that directly correspond to the easy-to-read steps. Also included in the text are time-savers, tables, and sidebars to help you work more efficiently or to teach you more in-depth information. A “Did You Know?” provides tips and techniques to help you work smarter, while a “See Also” leads you to other parts of the book containing related information about the task.

Real World Examples

This book uses real world examples files to give you a context in which to use the task. By using the example files, you won’t waste time looking for or creating sample files. You get a start file and a result file, so you can compare your work. Not every topic needs an example file, such as changing options, so we provide a complete list of the example files used through out the book. The example files that you need for project tasks along with a complete file list are available on the Web at www.perspection.com.



Easy-to-follow introductions focus on a single concept.

Illustrations match the numbered steps.

Numbered steps guide you through each task.

See Also points you to related information in the book.

Did You Know? alerts you to tips, techniques and related information.



Real world examples help you apply what you’ve learned to other tasks.

Workshops

This book shows you how to put together the individual step-by-step tasks into in-depth projects with the Workshop. You start each project with a sample file, work through the steps, and then compare your results with project results file at the end. The Workshop projects and associated files are available on the Web at www.perspection.com.

Adobe Certified Expert

This book prepares you fully for the Adobe Certified Expert (ACE) exam for Adobe Photoshop CS4. Each Adobe Certified Expert certification level has a set of objectives, which are organized into broader skill sets. To prepare for the certification exam, you should review and perform each task identified with a Adobe Certified Expert objective to confirm that you can meet the requirements for the exam. Throughout this book, content that pertains to an objective is identified with the Adobe Certified Expert logo and objective number next to it.

Workshops

Introduction

The Workshop is all about being creative and thinking outside of the box. These workshops will help your right-brain soar, while making your left-brain happy by explaining why things work the way they do. Exploring Photoshop's possibilities is great fun; however, always stay grounded with the knowledge of how things work. Knowledge is power.

Getting and Using the Project Files

Each project in the Workshop includes a start file to help you get started with the project, and a final file to provide you with the results so you can see how well you accomplished the task.

Before you can use the project files, you need to download them from the Web. You can access the files at www.perspection.com. After you download the files, uncompress them into a folder on your hard drive.

Project 1: Scaling an Image Using Content-Aware

Skills and Tools: Content-Aware Scale, Refine Edge, and Blending Mode

One of the exciting new features in Photoshop CS4 is Content-Aware Scaling. This command looks for the focal point in your image and then identifies pixel areas that are less important and adds or subtracts pixels in those areas as necessary as you scale the image, leaving the focal point unchanged (unless you go too far).

The Project

In this project, you'll use the Content-Aware Scaling feature along with other refining tools to modify and enhance a photograph.

The Process

- 1 Open the file *Red_Rock_Canyon_start.psd* in Photoshop and then save it as *my_Red_Rock_Canyon.psd*.
- 2 Be sure you're not working on a locked layer (like the Background). If necessary, double click on the word "Background" and rename it. Duplicate the layer by dragging it on to the New Layer icon or using Ctrl-J (Win) Command-J (Mac). Duplicating the layer will enable you to

The **Workshop** walks you through in-depth projects to help you put Photoshop to work.

Adobe Certified Expert

About the Adobe Certified Expert (ACE) Program

The Adobe Certified Expert (ACE) program is for graphic designers, Web designers, systems integrators, value-added resellers, developers, and business professionals seeking official recognition of their expertise on Adobe products.

What Is an ACE?

An Adobe Certified Expert is an individual who has passed an Adobe Product Proficiency Exam for a specific Adobe software product. Adobe Certified Experts are eligible to promote themselves to clients or employers as highly skilled, expert-level users of Adobe software. ACE certification is a recognized worldwide standard for excellence in Adobe software knowledge. There are three levels of ACE certification: Single product certification, Specialist certification, and Master certification. To become an ACE, you must pass one or more product-specific proficiency exam and sign the ACE program agreement. When you become an ACE, you enjoy these special benefits:

- ♦ Professional recognition
- ♦ An ACE program certificate
- ♦ Use of the Adobe Certified Expert program logo

What Does This Logo Mean?

It means this book will prepare you fully for the Adobe Certified Expert exam for Adobe Photoshop CS4. The certification exam has a set of objectives, which are organized into broader skill sets. Throughout this book, content that pertains to an ACE objective is identified with the following Adobe Certified Expert logo and objective number below the title of the topic:



Logo indicates a task fulfills one or more Adobe Certified Expert objectives.

Get More on the Web

In addition to the information in this book, you can also get more information on the Web to help you get up to speed faster with Photoshop CS4. Some of the information includes:

Transition Helpers

- ◆ **Only New Features.** Download and print the new feature tasks as a quick and easy guide.

Productivity Tools

- ◆ **Keyboard Shortcuts.** Download a list of keyboard shortcuts to learn faster ways to get the job done.

More Content

- ◆ **Photographs.** Download photographs and other graphics to use in your Photoshop documents.
- ◆ **More Content.** Download new content developed after publication.

You can access these additional resources on the Web at www.perspection.com.

Keyboard Shortcuts

Adobe Photoshop CS4 is a powerful program with many commands, which sometimes can be time consuming to access. Most menu commands have a keyboard equivalent, known as a **keyboard shortcut**, as a quicker alternative to using the mouse. For example, if you want to open a new document in Photoshop, you click the File menu, and then click New, or you can abandon the mouse and press Ctrl+N (Win) or ⌘+N (Mac) to use shortcut keys. Using shortcut keys reduces the use of the mouse and speeds up operations. If a command on a menu includes a keyboard shortcut to the right of the command name, you can perform the action by pressing and holding the first key, and then pressing the second key to perform the command quickly. In some cases, a keyboard shortcut uses one key or three keys. For three keys, simply press and hold the first two keys, and then press the third key. Keyboard shortcuts provide an alternative to using the mouse and make it easy to perform repetitive commands.

Finding a Keyboard Shortcut

Photoshop contains keyboard shortcuts for almost every command and task in the program. To help you find the keyboard shortcut you're looking for, the shortcuts are organized in categories and listed with page numbers.

Actions, 21	History, 20
Adobe Bridge, 23	Image, 13
Animations, 21	Layers, 13
Blending Modes, 16	Paths, 19
Brushes, 18	Photoshop, 2
Channel Palettes, 18	Quick Masks, 19
Color, 17	Selecting, 10
Dialog Boxes, 21	Tools, 3
Display, 8	Transform, 21
Edit, 3	Type, 10
File (Documents), 2	View, 8
Filters, 18	

If you're searching for new keyboard shortcuts in Adobe Photoshop CS4, just look for the letter: **N**. The **N** appears in the Keyboard Shortcuts table so you can quickly and easily identify new shortcuts.

Additional content is available on the Web.

Customizing the Way You Work

Introduction

No description of Adobe Photoshop would be complete without that well-known, but little utilized area called Preferences. Photoshop preferences serve several purposes. They help customize the program to your particular designing style, and they help you utilize available computer resources to increase the overall performance of the program.

By modifying File Handling preferences, such as appending a file extension on the file, or being asked when saving a layered TIFF file, you can streamline the file saving process. In addition, you can change the way your cursors look. For example, do you want your paintbrush to look like a paintbrush when you paint, do you prefer a precision crosshair or the actual brush size shape, or the shape with a crosshair?

As you use Photoshop, you'll come to realize the importance of working with units and rulers. Precision is the name of the game when you are working with images. What about the color of your guides, grids, and slices? No big deal, you say. Well, if you've ever tried viewing a blue guide against a blue-sky image, you know exactly why guide color is important. By working through preferences such as Image Cache, Scratch Disks, and RAM (Random Access Memory), speed increases of up to 20% can be achieved.

In addition, customizing the program helps make you more comfortable, and studies show that the more comfortable you are as a designer, the better your designs. Plus, being comfortable allows you to work faster, and that means you'll accomplish more in the same amount of time. What does setting up preferences do for you? They make Photoshop run faster (up to 20%), you work more efficiently, and your designs are better. That's a pretty good combination. Photoshop doesn't give you Preferences to confuse you, but to give you choices, and those choices give you control.

3

What You'll Do

Optimize Photoshop

Set General Preferences

Modify File Handling Preferences

Work with Interface Preferences

Work with Cursors Preferences

Control Transparency & Gamut Preferences

Work with Units & Rulers

Work with Guides, Grid & Slices

Select Plug-Ins

Select Scratch Disks

Allocate Memory & Image Cache

Work with Type

Manage Libraries with the Preset Manager

Customize the Workspace

Define Shortcut Keys

Create a Customized User Interface

Use Drawing Tablets

Optimizing Photoshop

Photoshop is a powerful program, and as such, requires a tremendous amount of computing power. When working on large documents, a poorly optimized Photoshop program will mean longer processing times for your files. That's the bad news if you have a deadline to meet. The good news is that Photoshop can be configured to run more efficiently. To optimize Photoshop, click the Edit (Win) or Photoshop (Mac) menu, point to Preferences, and then click Performance. The Performance preferences dialog box contains options that will help maximize the performance of Photoshop.

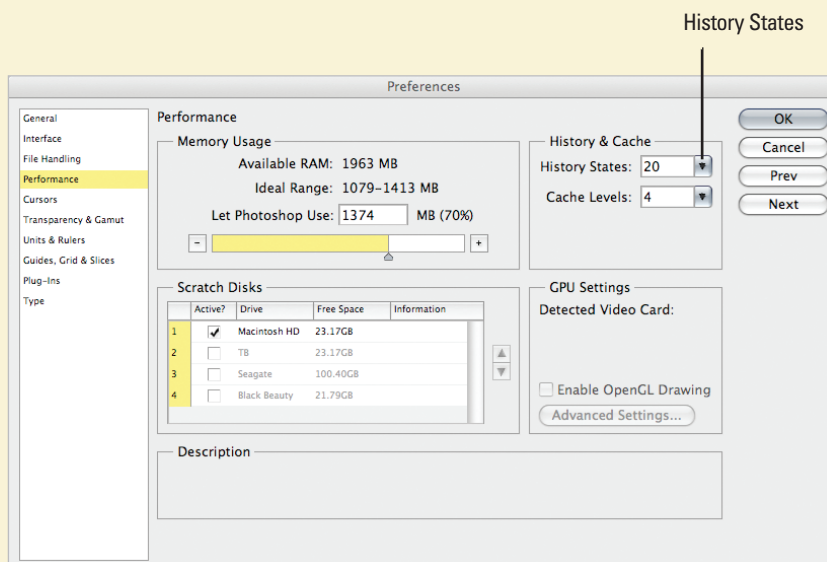
History States

History States control the number of undos available. In fact, you can have up to 1,000 undos (ever wonder who would make so many mistakes that they would need 1,000 undos?). Unfortunately, increasing the number

of History States will ultimately increase the amount of RAM Photoshop uses to manage the History panel. Assigning more RAM to manage History means less memory for Photoshop to perform other operations, and will reduce the performance of the program. If you are experiencing problems with slow performance, lowering the number of History States frees up more RAM, and permits Photoshop to operate more efficiently.

Scratch Disk

When your computer doesn't have enough RAM to perform an operation, Photoshop uses free space on any available drive, known as a **Scratch Disk**. Photoshop requires 5 times the working size of the file in contiguous hard drive space. For example, if the working size of your file is 100 MB, you will need 500 MB of contiguous

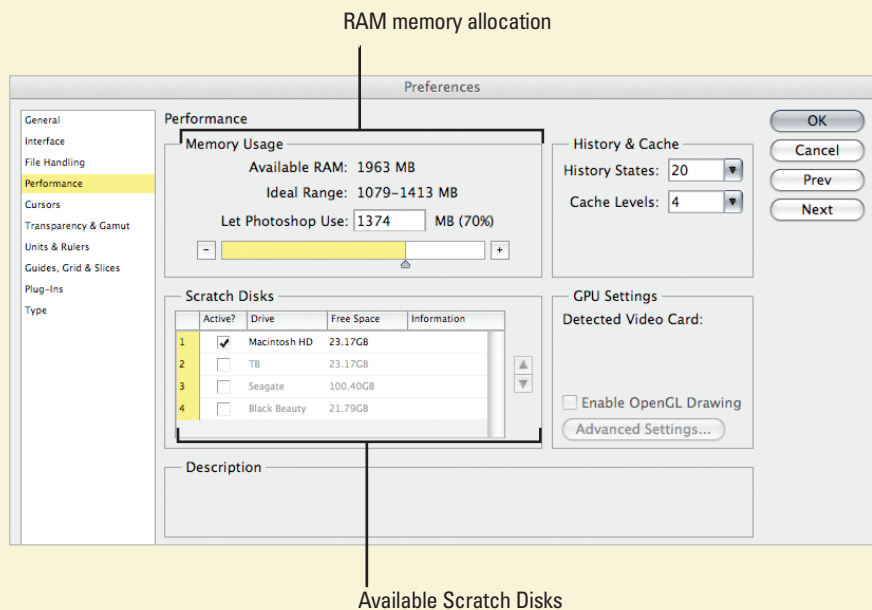


hard drive space, or you will receive an error message: Out of Scratch Disk Space (I hate it when that happens). Using additional hard drives gives Photoshop the ability to divide the processing load and increase performance. Photoshop detects and displays all available internal disks in the Preferences dialog box. Scratch disks must be physically attached to your computer (avoid networks and removable media, such as zip drives, or rewriteable CDs or DVDs). For maximum speed, avoid USB, and use 4- or 6-pin FireWire drives. Benchmark tests show FireWire drives provide up to a 20% speed improvement when used as Scratch Disks. Think of saving one hour out of every five, or one full day out of every five. That's not too bad. For best results, select a scratch disk on a different drive than the one used for virtual memory or any large files you're editing.

Memory & Image Cache

Photoshop functions in RAM (actually all applications work within RAM). To run efficiently, Photoshop requires 5 times the working size of the open document in available memory (some tests indicate 6 to 8 times). Strictly speaking, the more RAM you can assign to Photoshop, the more efficiently the program operates, especially when opening large documents.

RAM usage is determined by the working size of the document, not its open size. As you work on a document, you will eventually add additional layers to separate and control elements of the image. As you add these new layers, the working size of the file increases.



Setting General Preferences

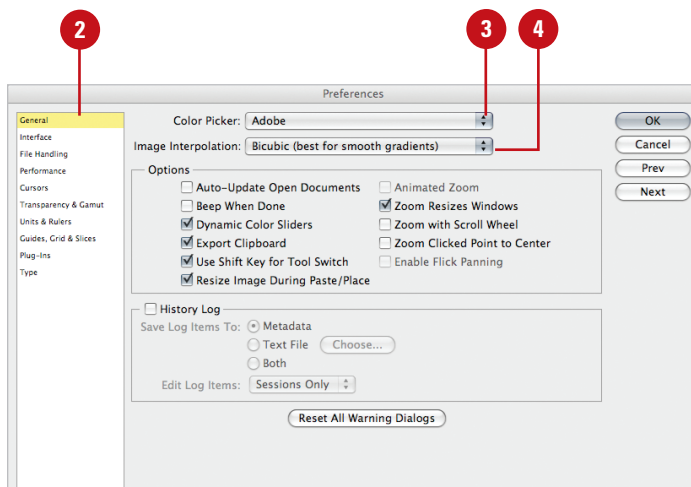


PS 1.3

Work with General Options

- 1 Click the **Edit** (Win) or **Photoshop** (Mac) menu, and then point to **Preferences**.
- 2 Click **General**.
- 3 Click the **Color Picker** list arrow, and then select Adobe or another operating system (Windows or Macintosh).
- 4 Click the **Image Interpolation** list arrow, and then select Nearest Neighbor (Faster), Bilinear, or one of the Bicubic options.
- 5 Select the various options you want to use:
 - ◆ **Auto-Update Open Documents.** Creates a link between the open image and the image file on disk.
 - ◆ **Beep When Done.** Makes a sound when an operation is complete.

Photoshop's General preferences help you configure some of the more common features of the program. Image interpolation settings, as well as the History log, are set up in General preferences. Other options, such as beeping when an operation is finished, auto-updating open documents, and using the Shift key for tool switching, can all be turned on or off in the Options area. The History Log lets you save all the History States performed on a particular document. For example, when you open an image, all the adjustments and actions performed are saved in a text file. This gives you access to valuable information, and lets you reproduce the steps performed on one image to correct another.



- ◆ **Dynamic Color Sliders.** Previews color effects within the slider bars.

- ◆ **Export Clipboard.** Transfers a copied image to the operating systems clipboard.

- ◆ **Use Shift Key For Tool Switch.** Allows you to use the keyboard shortcut when two tools share the same slot in the toolbox.

- ◆ **Resize Image During Paste/Place.** Allows you to resize an image during a Paste or Place.

- ◆ **Animated Zoom. (New!)** Enables continuous-motion, smooth zooming in and out of your document. Must have OpenGL on your computer.

- ◆ **Zoom Resizes Windows.** Forces the image window to resize when zoom is selected.

- ◆ **Zoom With Scroll Wheel.** Determines whether zooming or scrolling is the default operation of the scroll wheel.

- ◆ **Zoom Clicked Point to Center. (New!)** Centers the zoom view on the clicked location.

- ◆ **Enable Flick Panning. (New!)** Enables quick mouse movement over the image instead of holding down the mouse.

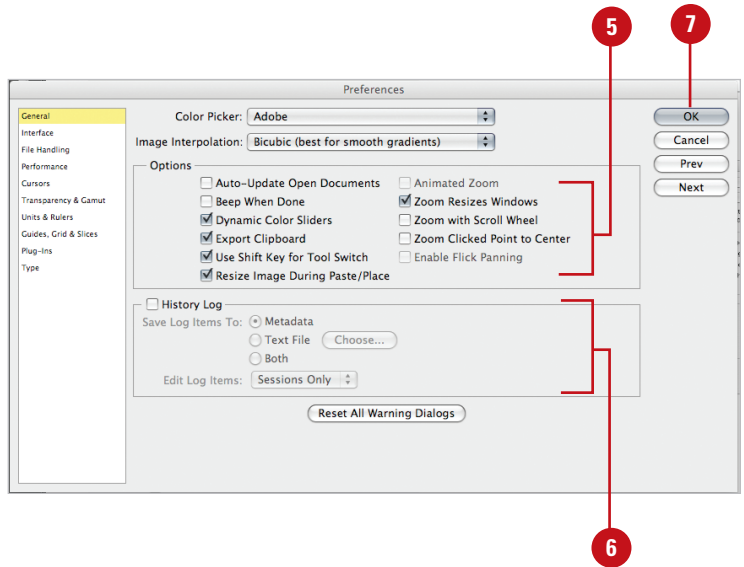
6 Select the History Log options you want to use.

7 Click **OK**.

Did You Know?

You can turn a text box into a slider.

You can use any text box which displays a numerical value, such as font size, like a slider. Point to the name of the box (which changes the cursor to a hand with arrows), and then move the mouse left to decrease or right to increase the displayed number.

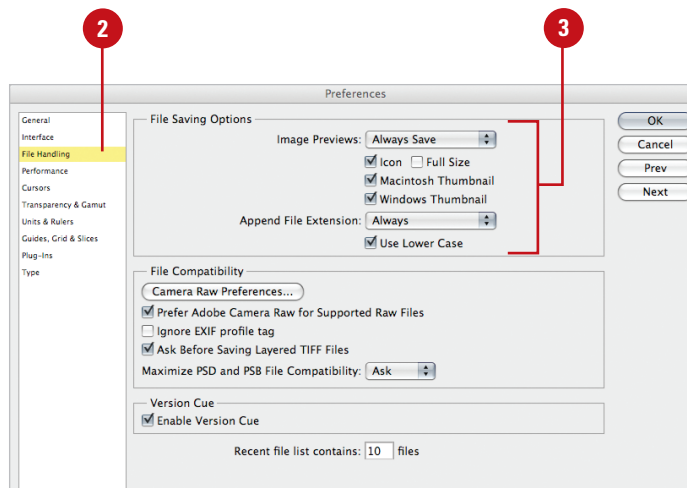


Modifying File Handling Preferences

Work with File Handling Options

- 1 Click the **Edit** (Win) or **Photoshop** (Mac) menu, and then point to **Preferences**.
- 2 Click **File Handling**.
- 3 Select the File Saving Options you want to use:
 - ◆ **Image Previews.** Select from: Always Save, Never Save, or Ask When Saving.
 - ◆ **Icon.** Saves previews of the images (Mac).
 - ◆ **Full Size.** Saves full-size previews for use as FPO (For Placement Only) objects in Desktop layout programs (Mac).
 - ◆ **Mac Thumbnail.** Saves previews viewable when using the Mac File Open command (Mac).
 - ◆ **Win Thumbnail.** Saves previews viewable when using the Win File Open command (Mac).
 - ◆ **Append File Extension.** Lets you choose whether or not to append the file extension (Mac).
 - ◆ **Use Lower Case.** Choose to have upper or lower case extensions.

Sooner or later, you'll have to save the file (document) you've created in Photoshop. The final output of any document is contained within a specific file format such as TIFF, EPS, JPEG, or BMP. In fact, Photoshop lets you save files using over 15 different formats. The File Handling preferences provide several options that modify what information is saved with a file. Image previews are typically very small, adding very little to the file size of the saved document. Once saved you may want to open, print, and possibly even modify the document using other image-editing applications. The File compatibility options help you save a file that will be transportable to other applications.



- 4 Select the File Compatibility options you want to use:

◆ **Camera Raw Preferences** Click to choose from options such as default image settings, cache size, DNG file handling, and whether or not to open JPEG and TIFF files with Camera Raw.

◆ **Prefer Adobe Camera Raw for Supported Raw Files.** Open supported raw files in Camera Raw.

◆ **Ignore EXIF Profile Tag.** Ignores color space metadata attached to digital camera images.

◆ **Ask Before Saving Layered TIFF Files.** Lets you create multi-layered documents, and then save them using the TIFF format.

This is a distinct advantage when you need to use multi-layered files and you don't want to save them using Photoshop's proprietary format (PSD).

◆ **Maximize PSD and PSB File Compatibility.** Lets you save PSD files that can be opened in earlier versions of the program and PSB (Large Document Format) files.

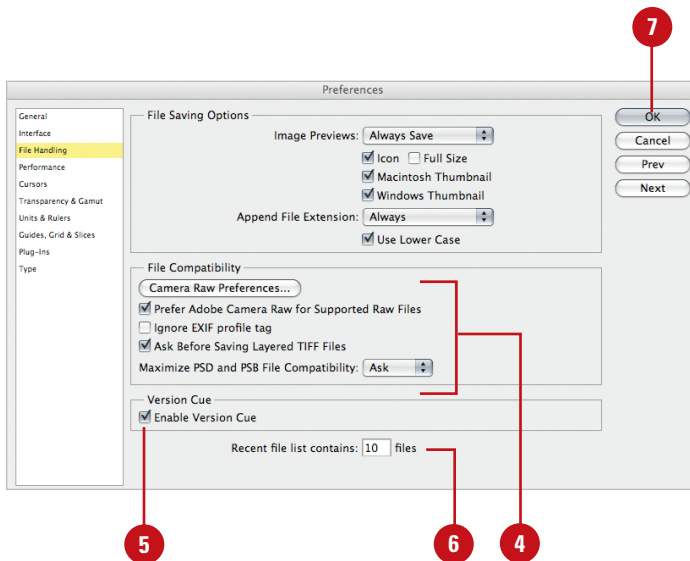
- 5 Select the **Enable Version Cue** check box to enable Adobe Version Cue in your work process.

- 6 Enter the number of files (up to 30) to keep in the Recent File List box.

- 7 Click **OK**.

See Also

See “Understanding File Formats” on page 381 for information on some of the various file formats available in Photoshop.



Working with Interface Preferences



PS 1.1, 1.2

Work with Interface Options

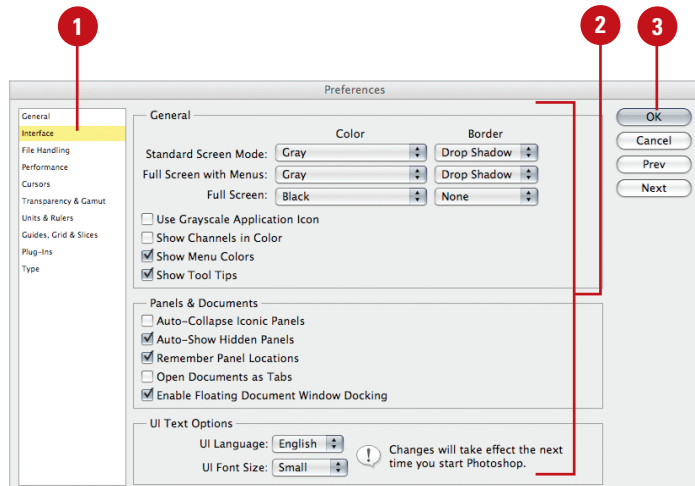
1 Click the **Edit (Win)** or **Photoshop (Mac)** menu, point to **Preferences**, and then click **Interface**.

2 Select the Interface options:

- ◆ **Screen Modes.** Choose background and border colors for the three screen modes.
- ◆ **Use Grayscale Application Icon.** Shows the application icon in grayscale or color.
- ◆ **Show Channels In Color.** Allows you to view channels in the Channels panel in color.
- ◆ **Show Menu Colors.** Displays menu items in user-defined colors.
- ◆ **Show Tool Tips.** Shows labels when your cursor is placed over an option.
- ◆ **Auto-Collapse Iconic Panels.** Automatically collapses icon panels when you click away.
- ◆ **Remember Panel Locations.** Saves the panel locations.
- ◆ **Auto-Show Hidden Panels.** (**New!**) Hidden panels will temporarily appear when you move your cursor to the edge of the application window.
- ◆ **UI Text Options.** Click the UI Language list arrow to choose a default language, and then click the Font Size list arrow to select a size for interface fonts.

3 Click **OK**.

Working with the Interface preferences gives you control over whether Photoshop displays or hides user interface features. You can display some user interface elements in color. For example, you can show the Application icon in color or grayscale, show channels in color, or show selected menu items in user-defined colors. Interface preferences also allow you to show descriptive labels when your cursor is placed over an option, automatically collapse icon panels when you click away, and remember panel locations for the next use. You can also change the size of the text font on the Options bar, panels, and tool tips.

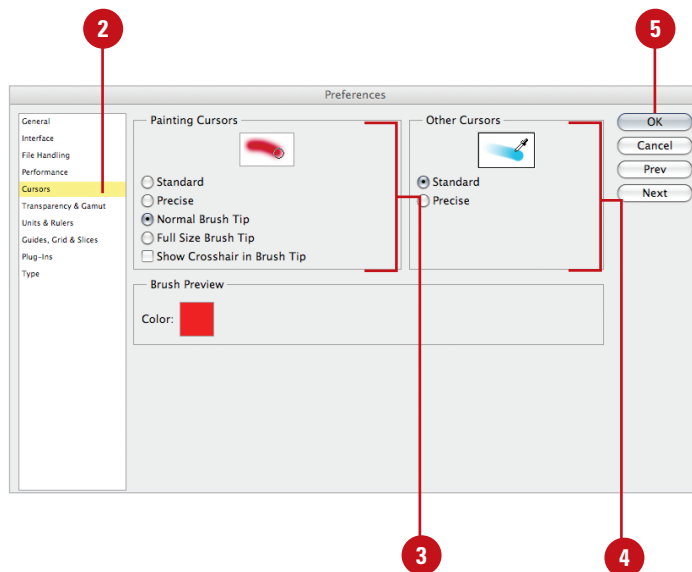


Working with Cursors Preferences

Work with Cursors Options

- 1 Click the **Edit (Win)** or **Photoshop (Mac)** menu, and then point to **Preferences**.
- 2 Click **Cursors**.
- 3 Select the Painting Cursors options you want to use:
 - ◆ **Standard.** Painting cursors look like their toolbox icons.
 - ◆ **Precise.** Painting cursors appear as crosshairs.
 - ◆ **Normal Brush Tip.** Painting cursors appear with the shape of the active brush tip.
 - ◆ **Full Size Brush Tip.** Shows the full size of the brush tip, including feathered edges.
 - ◆ **Show Crosshair In Brush Tip.** Displays a crosshair in the center of the brush tip.
- 4 Select the Other Cursors options you want to use:
 - ◆ **Standard.** Painting cursors look like their toolbox icons.
 - ◆ **Precise.** Painting cursors appear as crosshairs.
 - ◆ **Brush Preview.** Choose a color for brush editing preview.
- 5 Click **OK**.

We communicate with Photoshop using various devices, such as a drawing tablet, mouse, touch screen, track pad, or keyboard. Photoshop communicates with us using visual cues, the most prominent one being the shape of the cursor. For example, when a cursor looks like an I-beam, this typically means it's time to enter text, or when the cursor looks like a magnifying glass, clicking on the image expands the view size. Working with the Cursors preferences gives you control over how Photoshop communicates with you.



For Your Information

Toggling Between Precise and Standard Tools

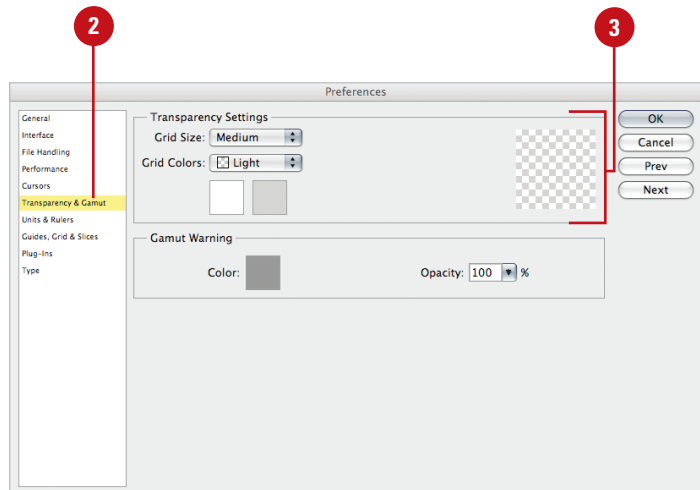
Pressing the Caps Lock key while using a painting cursor toggles the tool between the precise and brush size options, and pressing the Caps Lock key when using any other cursor toggles between standard and precise options.

Controlling Transparency & Gamut Preferences

Control Transparency & Gamut Options

- 1 Click the **Edit** (Win) or **Photoshop** (Mac) menu, and then point to **Preferences**.
- 2 Click **Transparency & Gamut**.
- 3 Select the Transparency Settings options you want to use:
 - ◆ **Grid Size.** Allows you to select a transparency grid size.
 - ◆ **Grid Colors.** Allows you to choose the color scheme for the transparency grid.

The Transparency & Gamut preferences control how Photoshop displays transparent areas of a document (commonly called the checkerboard), as well as the color and opacity of areas of an image that fall outside of the CMYK (Cyan, Magenta, Yellow, and Black) color mode. It's important to understand that transparency in Photoshop does not always translate into transparency after you save the file. For example, the JPEG format is used primarily for images saved for the Internet, and does not support transparency. When you save the file, Photoshop will fill the transparent areas of the image with a matte color (the default is white). In addition, the Gamut Warning may be activated because a monitor displays color information using RGB, and has more available saturation values than a CMYK document. Using a different ink or spot colors can sometimes fix an out-of-gamut color. For transparency it's important to remember that unless you're printing the document directly in Photoshop, it's the format you choose that determines if the transparent areas will be saved, and the Gamut Warning is there to warn you of any areas that may not print the way you expect.



4 Select the Gamut Warning options you want to use:

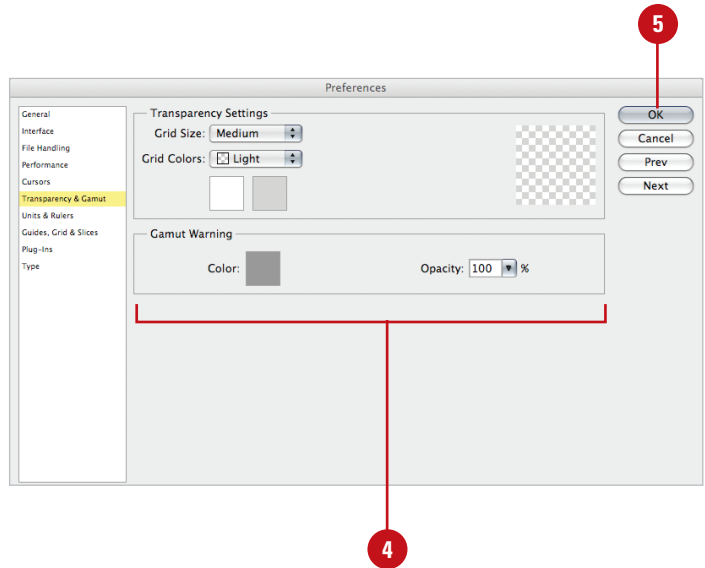
- ◆ **Color.** Choose a color to mask areas of an image that move out of the CMYK color space.
- ◆ **Opacity.** Enter a value from 0% to 100%.

Opacity determines how much of the Color Overlay masks the original image pixels.

For example, if you choose the color gray, and an opacity of 100%, areas of an image that fall outside of the CMYK color space will be masked with gray.

5 Click **OK**.

IMPORTANT To activate the gamut warning option, open a document in Photoshop, click the View menu, and then click Gamut Warning. Out of Gamut areas of the image will display with the color and opacity chosen in the Transparency & Gamut preferences.



Working with Units & Rulers

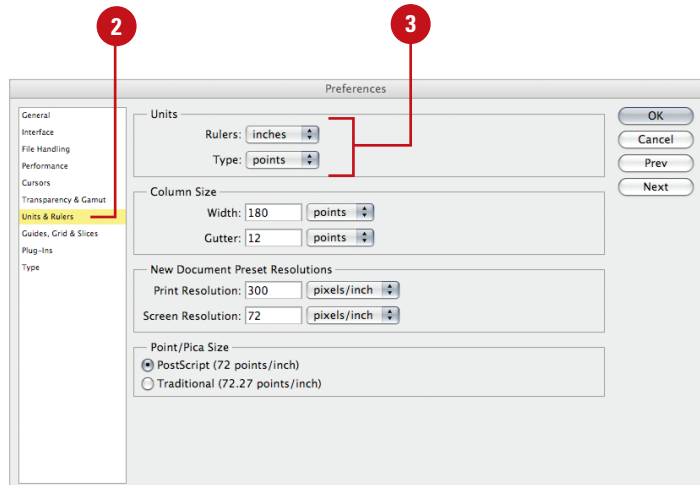
Work with Units & Rulers Options

- 1 Click the **Edit (Win)** or **Photoshop (Mac)** menu, and then point to **Preferences**.
 - 2 Click **Units & Rulers**.
 - 3 Select the Units options you want to use:
 - ◆ **Rulers.** Sets a default measuring system for the Ruler bar.
- For example, pixels would be most common for images displayed on a monitor, and picas or inches most common for output to press or printer.
- ◆ **Type.** Use to measure type with pixels, points, or millimeters.

Did You Know?

You can switch between ruler measurements without going to Preferences. To change the default measurement system of the Ruler bar, simply move into the Ruler bar, and then right-click your mouse. A list of available measurement options will be instantly available.

While changing the measurable units and rulers do not affect output quality, they do help to measure information in a document consistent with the specific output device. Ruler Units give you precise information on the width and height of the active document. The Column Size measurements provide information that Photoshop needs to create documents with columns, such as newspapers, magazines, brochures, etc. The New Document Preset Resolutions area lets you select specific resolution values when creating new documents. Insert the values you'll use most often in the creation of a new Photoshop document.



- 4 Select the Column Size settings you want to use:

- ◆ **Width.** Choose a measurement system and numerical value for column width.
- ◆ **Gutter.** Choose a measurement system and numerical value for gutter (the space between the columns).

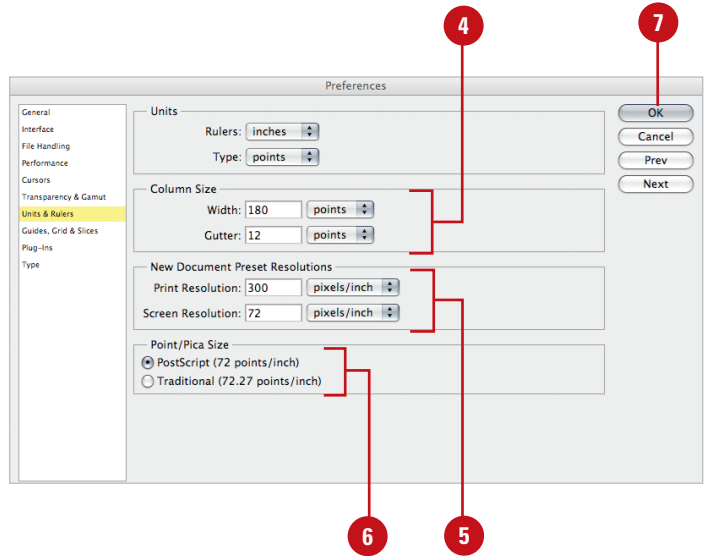
When you choose a measurement system (points, inches, or centimeters), Photoshop changes the value to correspond to the type of measurement system.

- 5 Select the New Document Preset Resolutions settings you want to use:

- ◆ **Print Resolution.** Select a print resolution and measurement value for default printing.
- ◆ **Screen Resolution.** Select a print resolution and measurement value for default screen display.

- 6 Click the **PostScript** or **Traditional** option measuring systems for Photoshop's type tool (PostScript is the most widely used).

- 7 Click **OK**.



Working with Guides, Grid & Slices

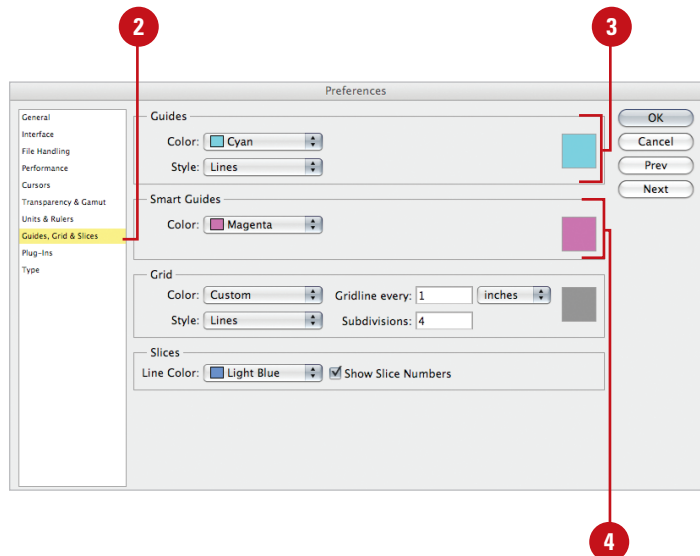
Work with Guides, Grid & Slices Options

- 1 Click the **Edit (Win)** or **Photoshop (Mac)** menu, and then point to **Preferences**.
- 2 Click **Guides, Grid & Slices**.
- 3 Select the Guides options you want to use:
 - ◆ **Color.** Select a default color for displaying guides.
 - ◆ **Style.** Select a default (Lines or Dashed Lines) for displaying guidelines.
- 4 Select the Smart Guides options you want to use:
 - ◆ **Color.** Select a color for use with Smart Guides.

Did You Know?

You can change a horizontal guide into a vertical guide, and vice versa. Move into the Ruler bar and drag a guide into the document window. Before releasing the mouse, hold down the Alt (Win) or Option (Mac) key. The guide automatically switches directions.

The Guides, Grid & Slices preferences help keep a multi-layered document in proper order. For example, using Guides can help you line up buttons on a web interface, or make sure specific design elements are precisely placed within the document window. The Guides option lets you select the color and style of the guides placed within a Photoshop document. Guides are placed within the image by dragging them from the horizontal or vertical Ruler bars in the active document. The Grid options let you decide on a color, style, and layout for Photoshop's grid system. The Slices option defines the visible color of a slice, and whether Photoshop displays a number value for each slice.



5 Select the Grid options you want to use:

- ◆ **Color.** Select a default color for displaying grids.
- ◆ **Style.** Select a default style (Lines, Dashed Lines, or Dots) for displaying the grid.
- ◆ **Gridline Every.** Enter a value for how often the grid lines appear within the active document.
- ◆ **Subdivisions.** Enter a value for how many subdivisions (lines) appear between each main gridline.

6 Select the Slices options you want to use:

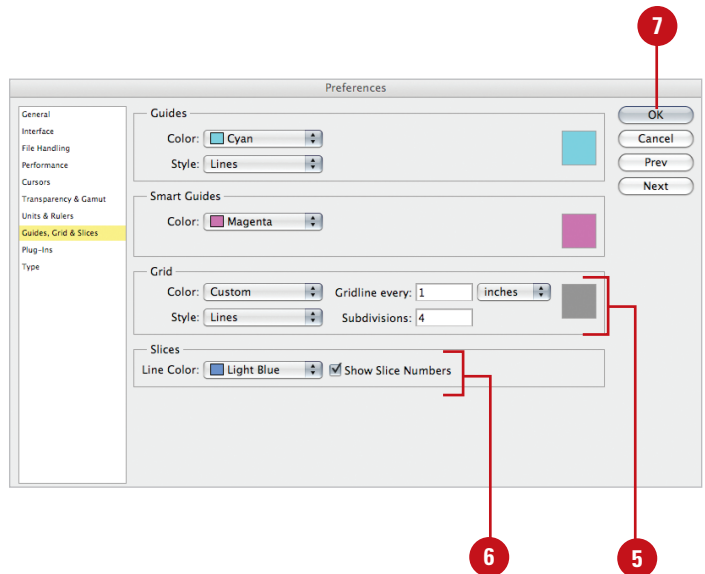
- ◆ **Line Color.** Select a default line color for displaying document slices.
- ◆ **Show Slice Numbers.** Select the check box to display a number for each slice in the upper left corner of the slice.

IMPORTANT When you select a line color, choose a color that is different than the grid and guide line colors. That way you can easily identify grids and guides for user-created lines.

7 Click **OK**.

Did You Know?

You can change color choices for Guides, Grid & Slices. Not satisfied with the color choices offered by the color and style menus? Click on the Color boxes located on the right side of the Preferences dialog box, and select any color from the Color Picker.

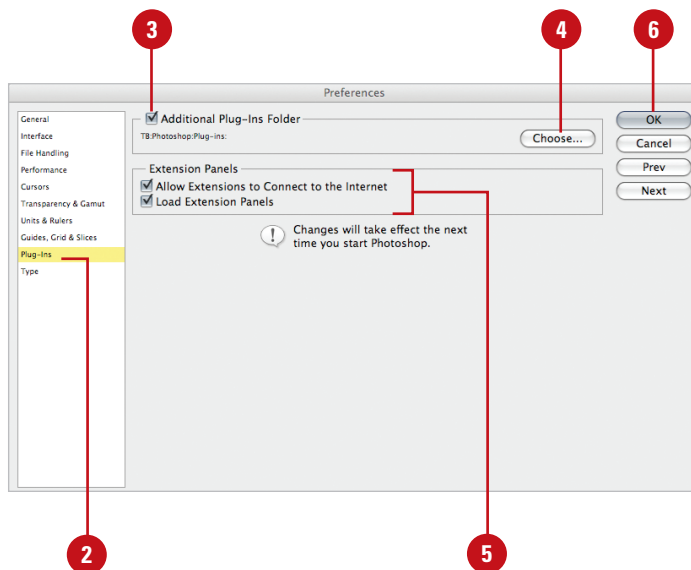


Selecting Plug-Ins

Work with Plug-Ins Options

- 1 Click the **Edit (Win)** or **Photoshop (Mac)** menu, and then point to **Preferences**.
- 2 Click **Plug-Ins**.
- 3 Select the **Additional Plug-Ins Folder** check box if you have additional plug-ins stored outside the default Photoshop plug-ins folder.
IMPORTANT *The first time you select this option, Photoshop asks you where the plug-ins are stored.*
- 4 If you change the location of your additional plug-ins folder, you can always click **Choose** and navigate to it.
- 5 Choose options for Extension Panels. (**New!**)
Check **Allow Extensions to Connect to the Internet** and/or **Load Extension Panels** if you want to use new features such as Kuler or Connections. (**New!**)
- 6 Click **OK**.

The Plug-ins preferences give you the ability to organize your plug-ins by saving them in one or more folders. These additional folders are typically used to hold third-party plug-ins. When selected, plug-ins contained within the folder will be available from Photoshop's Filter menu. Organizing your plug-ins into folders helps keep your projects focused and reduces the clutter of plug-ins when you select them from the Filter menu.



Selecting Scratch Disks

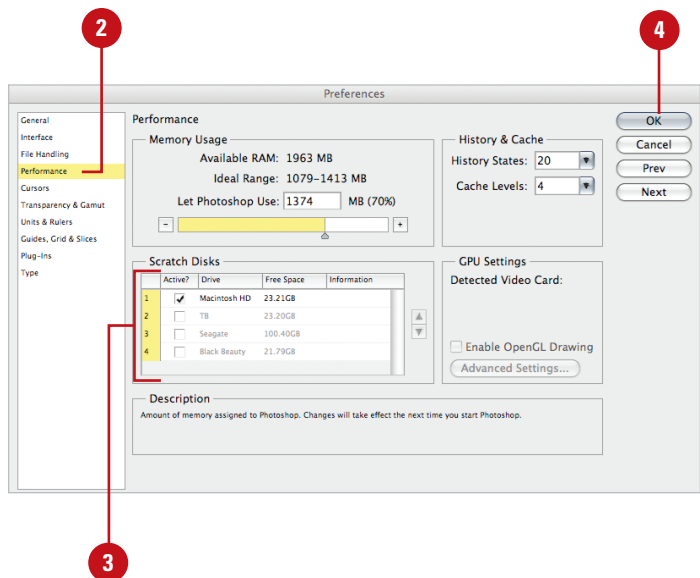
Work with Scratch Disks Options

- 1 Click the **Edit (Win)** or **Photoshop (Mac)** menu, and then point to **Preferences**.
- 2 Click **Performance**.
- 3 Select the check box next to the scratch disk you want to use or clear the check box to remove it.

IMPORTANT Photoshop holds scratch disk space as long as the application is open. To delete scratch disk space you must close Photoshop.

- 4 Click **OK**.

The Performance preferences are available to help you get the best performance out of your computer by letting you choose one or more hard drives for scratch operations. When your computer doesn't have enough RAM to perform an operation, Photoshop uses free space on any available drive, known as a Scratch Disk. Photoshop runs faster when you divide the Scratch Disk workload. Scratch operations are performed on your hard drive and take place when Photoshop is using one of its many filters and adjustments. Photoshop detects and displays all available disks in the Performance preferences dialog box, where you can select the disks you want to use. By assigning additional hard drives to the task, you speed up Photoshop's overall performance. Scratch Disk changes take effect the next time you start Photoshop.



Allocating Memory & Image Cache



PS 1.3

Allocate Memory & Image Cache Options

- 1 Click the **Edit (Win)** or **Photoshop (Mac)** menu, and then point to **Preferences**.
- 2 Click **Performance**.
- 3 Select the **History & Cache** options you want to use:

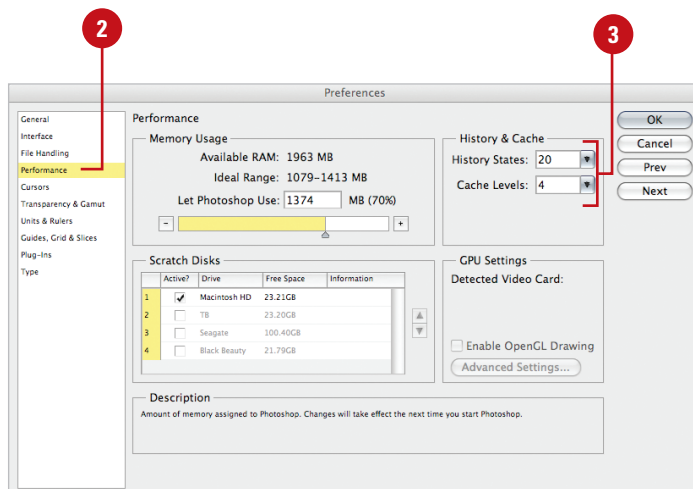
- ◆ **Cache Levels.** Select a number from 1 to 8.
- ◆ **History States.** Enter the amount of History States steps you want to keep as undos; you can enter up to 1,000.

IMPORTANT *History States impact Photoshop's performance by holding the History States using a combination of RAM and Scratch Disk space. The more History States used, the more RAM is required. Using an extensive number of History States can impact Photoshop's performance.*

See Also

See "Installing Photoshop," on page 2 for information on RAM and other system needs.

The Memory Usage and History & Cache preferences give you control over how much RAM is assigned to Photoshop, and how much memory is allocated to screen redraws (Image Cache). Photoshop, being a high-performance application, requires a fairly large amount of RAM. Adjusting these options can help increase Photoshop's overall speed performance. Photoshop uses many operations that affect RAM: History States, Undo, Clipboard, and Cache. When you modify the Memory Usage settings, you are increasing or decreasing the amount of RAM Photoshop uses for various tasks. Experimentation is the key here. Try different settings and record Photoshop's performance. By fine-tuning Photoshop's engine, you increase its overall speed, and you'll get more design miles to the gallon.



For Your Information

Setting the Cache Levels

Cache Levels are screen redraws, or how many versions of the current active document Photoshop saves. When you're working on large documents, more Cache Levels help speed up the redraw function, and make image manipulation proceed faster. However, they are held primarily in RAM, so the more Cache Levels you choose, the less RAM is available for other Photoshop functions.

- 4 Enter the percentage of RAM used in the Let Photoshop Use box.

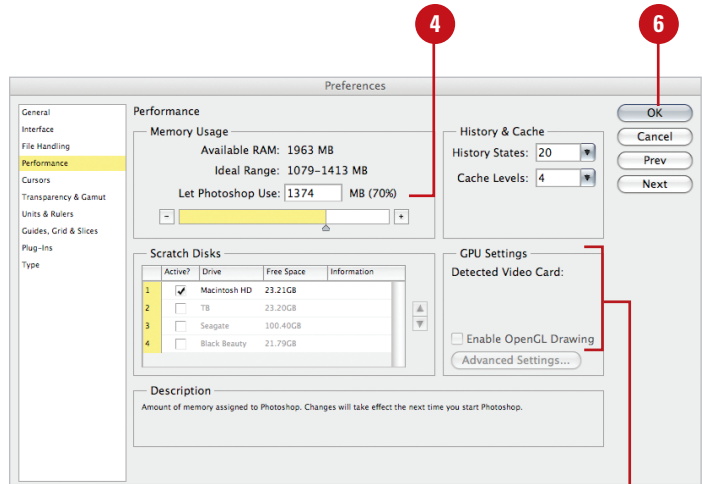
Photoshop needs about 5 times the size of the open document of unused RAM to operate efficiently.

IMPORTANT Any changes made for allocating memory and image caching will take place the next time you start Photoshop. Please see the message at the bottom of the screen.

- 5 GPU Settings (**New!**). If you have a video card installed with a GPU (Graphics Processing Unit), the name of your video card will appear under Detected Video Card. Check **Enable OpenGL Drawing** (GL stands for Graphics Library) to make the enhanced speed and smoothness of CS4 graphic rendering and navigation available to you.

- 6 Click **OK**.

IMPORTANT Never select 100% Memory Usage. Selecting 100% gives Photoshop your entire available RAM, leaving nothing for the operating system or any other open programs. If you are experiencing more than your usual share of Photoshop crashes, experiment with reducing memory usage.



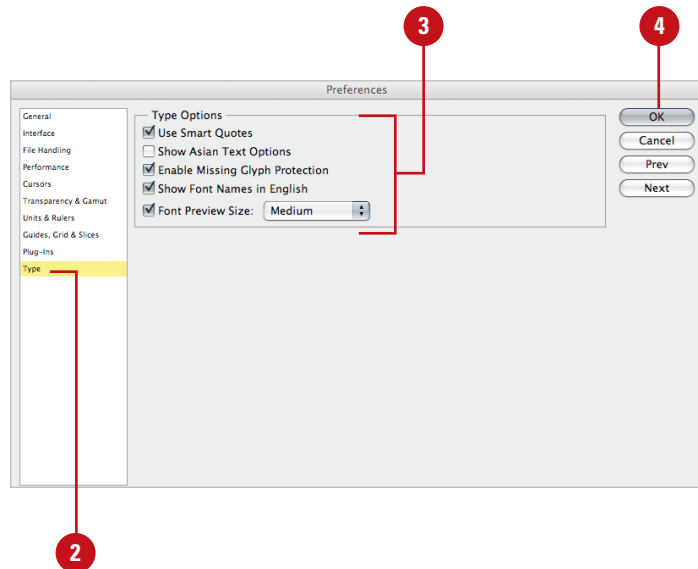
Working with Type

Work with Type Options

- 1 Click the **Edit** (Win) or **Photoshop** (Mac) menu, and then point to **Preferences**.
- 2 Click **Type**.
- 3 Select the Type options you want to use:
 - ◆ **Use Smart Quotes.** Select to use left and right quotation marks.
 - ◆ **Show Asian Text Options.** Select to display Japanese, Chinese, and Korean type options in the Character and Paragraph panels.
 - ◆ **Enable Missing Glyph Protection.** Select to automatically select incorrect, unreadable characters between roman and non-roman (Japanese or Cyrillic) fonts.
 - ◆ **Show Font Names In English.** Select to display non-roman fonts using their roman names.
 - ◆ **Font Preview Size.** Select to display fonts on the menu in small, medium, or large size.
- 4 Click **OK**.

IMPORTANT *Photoshop uses PostScript measuring systems to size fonts. Therefore a 72-point font will print 1 inch tall. This lets you know how big the fonts will appear when output to print.*

Although Photoshop is not by definition a typesetting application, such as Adobe InDesign, it does have some very powerful type features. For example, Adobe Photoshop allows you to output PostScript text to a printer with a PostScript option. This way you will not need to place Photoshop images into type-intensive applications, such as InDesign or Illustrator, just to create a few lines of text. In addition, Photoshop's type menu lets you see fonts exactly as they will print or display. For designers who use a lot of fonts, this WYSIWYG (What You See Is What You Get) font menu is a timesaver. You can use Type preferences to help you select the type and font options you want to use.



Managing Libraries with the Preset Manager

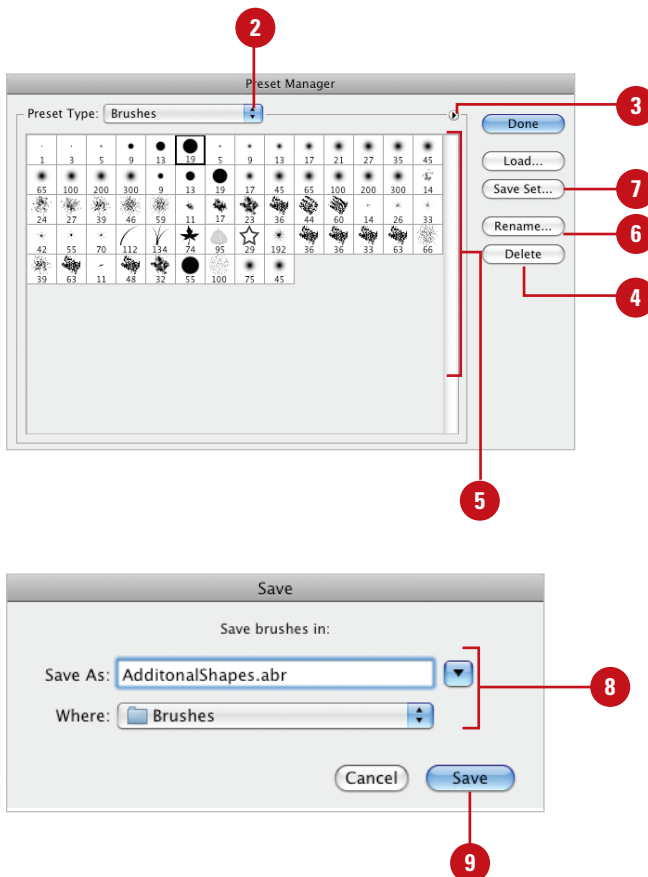
Create a New Preset

- 1 Click the **Edit** menu, and then click **Preset Manager**.
- 2 Click the **Preset Type** list arrow, and then select the options.
- 3 Click the **Options** list arrow, and then select from the available presets to add them to the current item list.
- 4 To remove any items in a new preset, click a thumbnail, and then click **Delete**.
- 5 To reorganize their order, click and drag the thumbnails to new positions within the view window.
- 6 To change a preset name, click a thumbnail, click **Rename**, change the name, and then click **OK**.
- 7 Click a thumbnail, and then click **Save Set**.
- 8 Enter a new set name, and then select a location to store the set.
- 9 Click **Save**, and then click **Done**.

Did You Know?

You can save specific items in the view window as a preset. Press **Ctrl+click** (Win) or **⌘+click** (Mac) on only those items you want in the new set, and then click **Save Set**.

The Preset Manager gives you one place to manage brushes, swatches, gradients, styles, patterns, contours, custom shapes, and preset tools. The Preset Manager can be used to change the current set of preset items and create new libraries of customized sets. Once a library is loaded in the Preset Manager, you can access the library's items in all locations where the preset is available. Changes made in the Preset Manager are global and are applied every time you open Photoshop. When you save a new preset, the name appears in the dialog box for the specific option you selected.



Customizing the Workspace

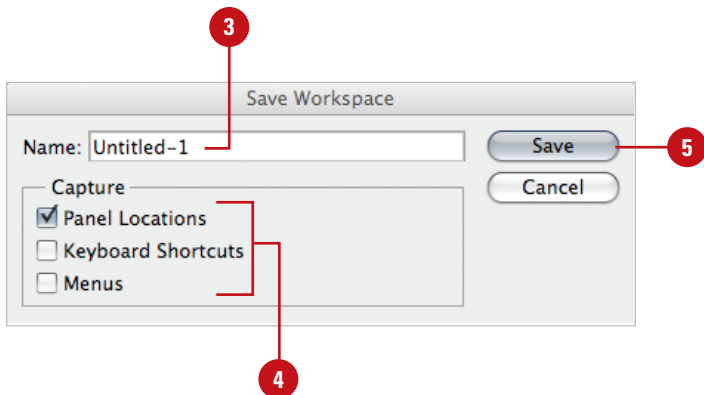


PS 1.1

Create a Customized Workspace

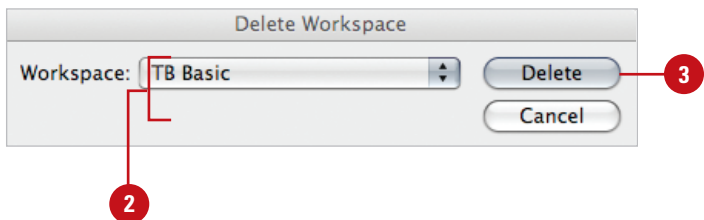
- 1 Arrange the panels into a specific working order.
- 2 Click the **Window** menu, point to **Workspace**, and then click **Save Workspace**.
- 3 Type a name for the workspace.
- 4 Select check boxes to save Panel Locations, Keyboard Shortcuts, or Menus.
- 5 Click **Save**.

The Photoshop workspace consists of a document surrounded by an Application frame (Mac only), Application bar, Options bar, toolbox, and over 20 floating panels, including new 3D, Adjustments, Masks, and Notes panels (**New!**). Depending on how you work, your workspace may reflect any combination of the above. For example, when you work with text, you would need the Character and Paragraph panels, but you might not need the Styles or Histogram panel. To work efficiently, each job requires a specific organization of the workspace. Rather than making you redesign your workspace every time you begin a new project, Photoshop gives you ways to create and save your own customized workspaces.



Delete a Customized Workspace

- 1 Click the **Window** menu, point to **Workspace**, and then click **Delete Workspace**.
- 2 Click the **Workspace** list arrow, and then click the workspace you want to delete, or click **All**.
- 3 Click **Delete**, and then click **Yes** to confirm the deletion.



Did You Know?

You cannot delete the Workspace in which you are currently working. You must switch to another workspace first.

For Your Information

Resetting Panels

You can reset all Photoshop panels back to their original configurations. Click the Window menu, point to Workspace, and then click Essentials (Default) Workspace to reset all panel locations and menus.

Defining Shortcut Keys



PS 1.1

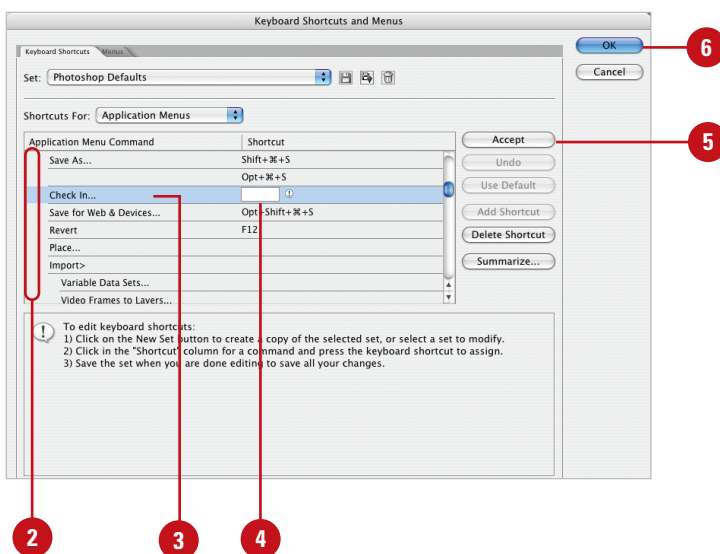
Create a Keyboard Shortcut

- 1 Click the **Edit** menu, and then click **Keyboard Shortcuts**.
- 2 Click an arrow (left column) to expand the menu that contains the command for which you want to create a shortcut.
- 3 Select an item from the Commands list.
- 4 Use the keyboard to create the new shortcut. For example, press Ctrl+N (Win) or ⌘+N (Mac).
- 5 Click **Accept**.
- 6 Click **OK**.

Did You Know?

You can save time using shortcut keys. According to several time and motion studies, using shortcut keys can actually save a computer user 1 hour out of every 8 in a work day.

A wise man once wrote "time is money," and Photoshop is a program that can consume a lot of time. That's why the Photoshop application uses keyboard shortcuts. **Keyboard Shortcuts**, as their name implies, let you perform tasks in a shorter period of time. For example, if you want to open a new document in Photoshop, you can click the File menu, and then click New, or you can abandon the mouse and press Ctrl+N (Win) or ⌘+N (Mac) to use shortcut keys. Using shortcut keys reduces the use of the mouse and speeds up operations. In fact, a recent study in the American Medical Journal suggested that the use of shortcut keys significantly cuts down on repetitive stress, and reduces instances of carpal tunnel syndrome. Photoshop raises the bar by not only giving you hundreds of possible shortcut keys, but also actually allowing you to define your own shortcuts.



For Your Information

Working with Shortcuts

In addition to adding shortcuts, you can delete any of them you don't want and even print out a summary of shortcuts defined in Photoshop. Shortcuts can be used for the Application and Panel menus, as well as for your tools in the toolbox. Click the Edit menu, click Keyboard Shortcuts, and then use the appropriate buttons, such as Add Shortcut, Delete Shortcut, or Summarize, to perform the tasks you want.

Creating a Customized User Interface



PS 1.1

Use a Predefined User Interface

- 1 Click the **Window** menu, and then point to **Workspace**.

TIMESAVER Click the *Workspace* menu (**New!**) (which displays the name of the current workspace) on the menu bar.

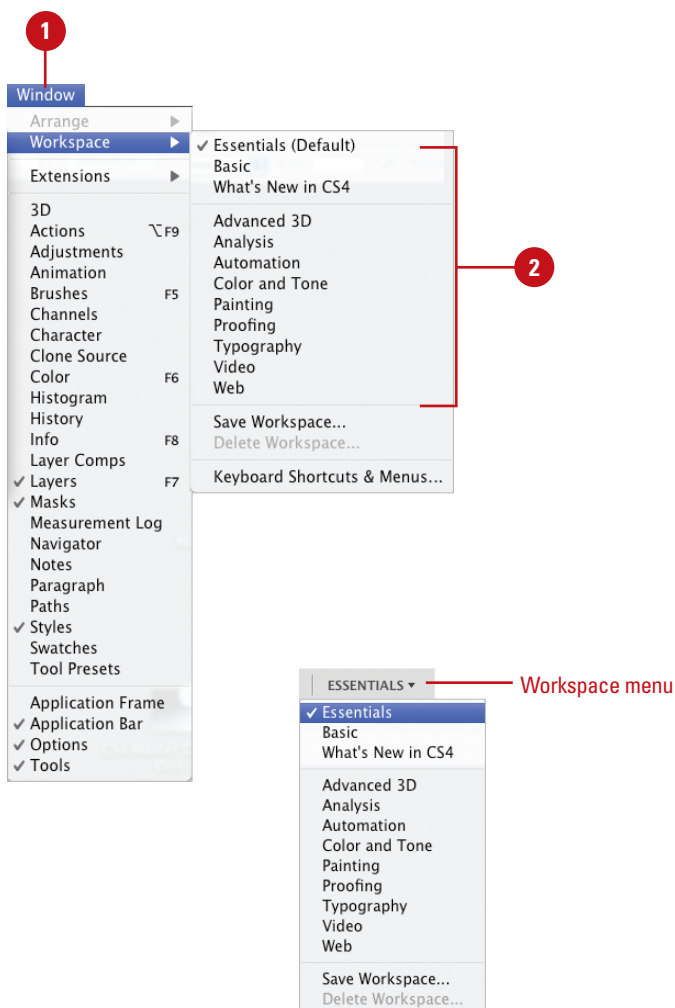
- 2 Click one of the predefined sets, such as: Automation, Web, Painting, or What's New in CS4.
- 3 If prompted, click **Yes** to apply the changes.

The Photoshop menus will now display with highlighted options based on your selection.

Did You Know?

You can restore menus to the original settings. To restore all of the Photoshop menu settings to the original values, click the Window menu, choose Workspace, then scroll to the bottom and choose Keyboard Shortcuts & Menus. From there, you can choose Photoshop Defaults in the Set drop-down menu to revert to default menus.

Photoshop's pull-down menus actually contain hundreds of options (yes, I did say hundreds). If you find navigating through menus a hassle, then Adobe has the answer to your problem with a customizable user interface. In Photoshop, you have the ability to choose what menu items appear on the pull-down menus and you can even colorize certain menu items for easier visibility. For example, if you're curious about all the new features in Photoshop CS4, you can choose a drop-down menu system with all the new features highlighted. Photoshop includes nine predefined user interface sets, known as workspaces, just to get you started in the right direction. You can access these workspaces—such as Essentials, Basic, and What's New in CS4—by using the Workspace menu (**New!**) on the Application bar or Workspace sub-menu on the Window menu.



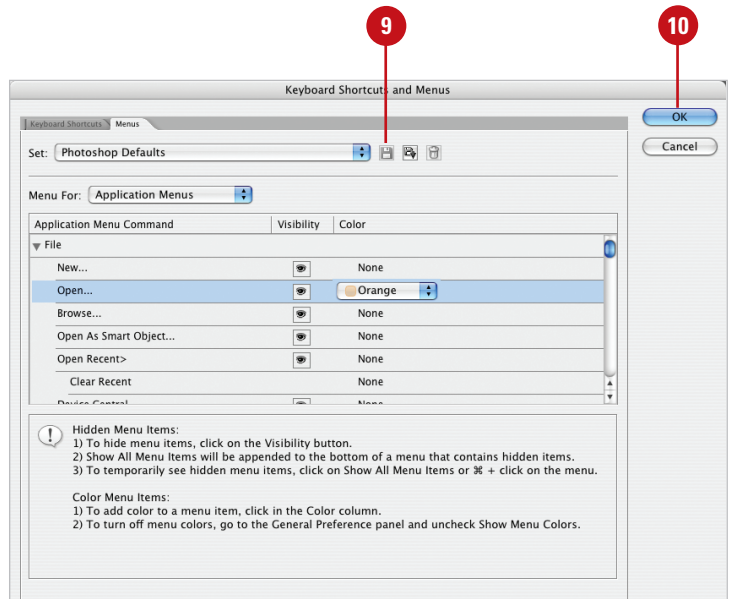
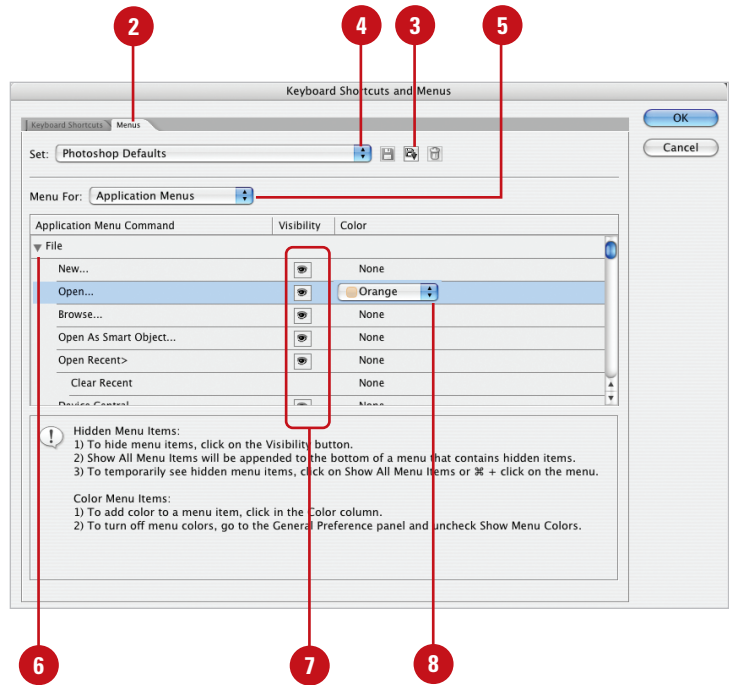
Create a Customized User Interface

- 1 Click the **Window** menu, point to **Workspace**, and then click **Keyboard Shortcuts & Menus**.
- 2 Click the **Menus** tab.
- 3 To create a new set based on the current active set, click the **Create New Set** button, enter a name, and then click **Save**.
- 4 Click the **Set** list arrow, and then select a listing of modified User Interfaces.
- 5 Click the **Menu For** list arrow, and then click **Application Menus** or **Panel Menus** with the items you want to modify.
- 6 Click an arrow (left column) to expand the menu that contains the command you want to modify.
- 7 Click the **Visibility** icon associated with a command to show or hide the command.
- 8 Click the **Color** list arrow, and select a color for the selected command.
- 9 Click the **Save All Changes** button to save the new customized User Interface.
- 10 Click **OK**.

Did You Know?

You can delete a user interface set.

Click the **Windows** menu, point to **Workspace**, click **Keyboard Shortcuts & Menus**, click the **Menus** tab, click the **Set** list arrow, click the set you want, and then click the **Delete** button.



Using Drawing Tablets

When you design on a computer, you're leaving the natural world of oil, watercolor, and canvas, for the electronic world of computer monitors and pixels (don't worry, it's a relatively painless transition). Without a doubt, there are many differences between traditional and digital design; however, it's not necessary to abandon all aspects of the natural media world. For example, the computer mouse has always been a problem with designers who miss the feel and control of a brush in their hands. Fortunately, technology came to the rescue several years ago, with the invention of the drawing tablet. Drawing tablets combine a drawing surface and a brush-like drawing tool in the form of a pen. A designer picks up the pen and moves it across the drawing tablet surface. In turn, the drawing tablet interprets those movements as brush strokes. Not only does Photoshop

fully support drawing tablet technology, it also interprets the particular drawing style of the designer. For example, pushing harder with the brush against the drawing tablet instructs Photoshop to create a wider stroke, or to apply more color. Drawing tablets have helped to translate the control of working with real art brushes on canvas, into the world of the digital designer. Of all the manufacturers, Wacom stands out as the leader in drawing tablet technology. Wacom returns the feel of designing with a brush to the digital designer's world, and the software required to power the tablet works seamlessly with Photoshop and the Windows or Macintosh operating systems. To check out which tablet might be right for your needs, point your browser to www.wacom.com and check out the available options.



Index

A

absolute colorimetric rendering intent, 419
accented edges filter effect, 345
Acrobat 4 color system, 422
Acrobat ConnectNow, 499
actions, 347-368. *See also* [droplets](#)
 adding command to action, 354
 buttons, converting to, 349
 Conditional Mode Change command, 400
 copying, 358
 sets, copying between, 362
 deleting command from action, 355
 enhanced scripting of, 364-365
 files, saving actions as, 361
 modal controls, working with, 356
 moving actions between sets, 362
 multiple sources, calling actions from, 359
 names for action sets, 362
 new action, building, 350
 non-recordable commands, inserting, 363
 order of commands, changing, 357
 pauses in, 356
 play options, 366
 playback of command, controlling, 353
 recording actions, 351
 running actions inside actions, 359
 saving, 347
 files, saving actions as, 361
 sets, saving actions into, 360
 sets
 creating, 360
 files, saving actions as, 361
 moving and copying between, 362
 names for, 362
 speed of executing, 357

 stop to action, adding, 352
Actions dialog box, 361
Actions panel, 347-349. *See also* [actions; droplets](#)
Add Layer Mask button, 233, 235
 with type masks, 317
Add Layer Styles button, 235, 275, 290
Add New Layer button, 101
Add Noise filter, 146
Additional Plug-Ins Folder, 66
Additive RGB, 172
adjustment layers, 99
 advantages of, 135
 blending modes with, 142
 composite layers, creating, 139
 creating, 136
 deleting, 141
 file formats for, 136
 filters on masks, 145
 grouping, 140
 Levels adjustment for, 164-165
 linking layers in, 111, 139
 masks with, 144-145
 merging
 with images, 138
 temporary composite images, creating, 139
 modifying, 137
 opacity, working with, 142
 pain on adjustment masks, 144
 regular layer, converting to, 141
 temporary composite images, creating, 139
Adobe (ACE) color management, 426
Adobe Acrobat Connect, 488, 497
Adobe Acrobat Reader, 4
Adobe Bridge. *See* [Bridge](#)
Adobe Creative Suite, 1, 488
 Bridge with, 13



- Adobe Device Central, 488, 500-501
- Adobe Drive, 488
- Adobe Extension Manager, 488, 502
- Adobe Flash. [See SWF files](#)
- Adobe Gamma utility, 414
- Adobe Help Center, 4, 26-27
- Adobe Illustrator. [See Illustrator](#)
- Adobe Updater Preferences dialog box, 4, 24-25
- Adobe Version Cue, 1, 488
- Airbrush, 159, 213, 214
- align layers, Auto, 474-475
- alpha channels
 - different file formats, saving documents as, 383
 - saving, 28
- altitude values for Bevel and Emboss style, 279
- anchor points. [See also paths](#)
 - with Magnetic Lasso tool, 83
- angle values
 - for Bevel and Emboss style, 279
 - for Drop Shadow style, 276
 - with Smart Sharpen filter, 156
- animations, work with, 452-453
- animated GIFs
 - creating, 450-451
- annotations. [See notes](#)
- anti-aliasing, 213
 - for Bevel and Emboss style, 280
 - Character panel selections, 301
 - Column Marquee tools and, 80
 - with Custom Shapes tool, 220
 - for Drop Shadow style, 277
 - for Inner Glow style, 289
 - with Line tool, 217
 - and Magic Eraser tool, 226
 - multi-page PDFs to PSDs, converting, 403
 - for Outer Glow style, 287
 - with Paint Bucket tool, 223
 - for paths with fill, 268
 - setting options for, 303
 - with Type tool, 297, 299
- Apple Computers. [See also Macintosh](#)
- Arc and Arch styles of warped text, 304
- arrange
 - multiple documents, 42

- arrowheads with Line tool, 217
- Art History brush, 121, 132
- artistic filters, 320
 - for layer mask borders, 239
- Asian text options, 70
- Auto-Align, 474-475
- Auto-Blend, 474-475
- Auto Color command, 191
- Auto Contrast and Color command, 167
- Auto Contrast command, 191
- Auto Erase, 216
- Auto levels command, 190
- Automate commands, 397-412

B

- Background Eraser tool, 224-225
- backgrounds, 99, 206-207
 - converting into layers, 106-107
 - default and switching of colors, 207
 - Foreground and Background colors, 206-207
 - Merge Visible option, 107
 - multi-layered documents into backgrounds, converting, 107
 - Screen Mode determining, 37
- Barrel distortion, 150-151
- baseline shift, 295
 - Character panel selections, 301
- batch commands with Bridge, 410-411
- Batch File Processing, 398-399
- BBEEdit, 364
- Bevel and Emboss style
 - contours, working with, 279-280
 - with layer masks, 235
 - Texture option for, 280-281
 - with type masks, 314-315
 - working with, 278-279
- Bicubic Sharper method, 54
- Bird's Eye view, 38-39
- bit depth, 168
- bitmap color modes, 171, 175
- bitmapped fonts, 299
- black and white. [See also Grayscale color mode](#)
 - Threshold adjustment for, 203
 - Black & White adjustment, 204
- Black Point Compensation

- for converting color space, 427
- for soft-proof colors, 416
- blade curvature with Lens Blur filter
 - option, 333
- blend modes, 09
 - with adjustment layers, 142
 - Color Overlay style with, 282
 - for Drop Shadow style, 276
 - Fill blending mode, 187
 - for Inner Shadow style, 288
 - with layer masks, 237
 - with layers, 112
 - for Outer Glow style, 286
 - with Pattern Overlays, 284
 - for Stroke layer style, 283
- blend layers, Auto, 474-475
- bloating with Liquify, 324
- Blur filters. [See also Lens Blur filter](#)
 - Box Blur filter, 152
 - channel masks, softening effects of, 247
 - in Quick Mask Mode, 251
 - Shape Blur filter, 152-153
 - Surface Blur filter, 152-153
 - vignettes, creating, 238
- BMP files, 381
 - layers exported as, 117
- borders
 - Auto Color command with, 191
 - channel mask borders, moving, 248
 - layer mask borders, creating, 239
 - paths, creating shapes as, 270
- boundaries, proportional transform, 94
- bounding boxes, 238
 - clipping paths and, 266
 - in Print dialog box with preview, 373
 - Show Bounding Box check box, 372
- Box Blur filter, 152
- Bridge, 1, 4
 - automating, tasks, 498
 - camera raw, 492-493
 - closing documents and opening, 31
 - exploring, 489
 - images, working with, 494-495
 - opening files with, 16
 - photos, getting, 491
 - preferences, 496-497
 - starting, 490
 - with Adobe Creative Suite 2, 13, 423

- brightness. [See also HSB \(hue, saturation, brightness\)](#)
 - with Lens Blur filter, 333
- Brightness/Contrast adjustment, 167, 192
- Brush font, 286
- brush strokes filters, 320
 - in Quick Mask Mode, 251
- brush tips, 210
 - cursor options, 59
 - customized brush tips, creating, 211
 - saving, 212
- brushes, 205. [See also specific tools](#)
 - with Color Replacement tool, 230
 - Liquify tool option, 326
 - in Quick Mask Mode, 250
 - with Vanishing Point tool, 148
- Brushes Options menu, 212
- Brushes panel, 208
 - modifying, 209
 - pre-defined sets in, 210
- built-in scripts, 365
- Bulge style of warped text, 304
- Burn tool, 159

C

- cache preferences, 53
 - setting levels, 68
- calibrating colors. [See color management](#)
- calligraphy lettering, Pencil tool for, 215
- Camera Data 1 and 2, 384
- Camera Raw
 - dialog box, 18-19, 492-493
 - preferences in Bridge, 492
 - preferences in Photoshop, 57
- center justification, 299
- chain button with layer masks, 233
- channel masks, 231. [See also Quick Mask Mode](#)
 - combining, 249
 - deleting, 246-247
 - filter effects, controlling, 340-341
 - Gaussian Blur filter with, 247, 249
 - loading, 246-247
 - modifying options, 242
 - moving masks between documents, 248
 - from native color channels, 244-245
 - pre-existing channels, options, 242

channel masks (continued)

- saving, 246-247
- from scratch, 241
- from selections, 243
- showing/hiding, 241
- softening effects of, 247
- working with, 240

Channel Mixer adjustment, 197

channels, 167. *See also* channel masks

- Channel Mixer adjustment, 197
- 8-bit channels, 168-169
- Spot color channels, 188

Channels panel. *See also* channel masks

- selections, creating, 92
- working with, 170

Character panel, 72, 295

- showing/hiding, 299

Character panel

- working with, 300-301

Chisel Hard Technique for bevel, 278

chiseled text

- creating, 288
- with type mask, 314-315

choke value for Inner Glow style, 289

chromatic aberration, 150

circles with Standard Shape tool, 218

clipart for Web, preparing, 388-389

clipboard

- with Pattern Maker filter, 336
- preferences for, 55

clipping. *See also* paths

- masks, creating, 101
- with Variations adjustment, 189

Clone Stamp tool, 158, 481

Clone Source panel, 160, 162, 481-482

closing documents, 31

CMYK (cyan, magenta, yellow, black) color, 13, 47, 171. *See also* color management; out-of-gamut

- Color Slider, 182
- converting images to, 173
- Multi-Channel color mode, converting images to, 180
- patterns, generation of, 337
- press, preparing images for, 392-393
- RGB (red, green, blue) color and, 171, 418
- soft-proof colors, setting up, 416-417

- Spectrums or Ramps, 183

Color Balance command, 167, 192-193

Color Dynamics, 208, 213

Color Intensity with Match Color adjustment, 195

color lookup table (CLUT), 176-177

color management, 413-433. *See also* ICC Profile; out-of-gamut; rendering intent

- converting color space to profile, 426-427
- different profiles to document, assigning, 425
- defaults, 422-423
- hardware, calibrating with, 415
- monitors, calibrating, 414
- RGB to CMYK, changing from, 418
- soft-proof colors, setting up, 416-417
- software, calibrating with, 415
- target images, printing, 428
- working with, 422-423

Color Management button, 374

color markers, creating, 46

color modes, 13, 171

- bitmap color modes, 175
- changing, 171
- Replace Color command, 181
- selecting, 13

Color Overlay, 273

- applying, 282

Color panel, 182-183

- for PNG-8 documents, 446

Color Picker

- selecting colors from, 65
- text color, changing, 297

Color Replacement tool, 230

color sliders, 182

- preferences for, 55

Color Swatch button, 299

colors, 167. *See also* channels; CMYK (cyan, magenta, yellow, black) color; color management; Info panel; RGB (red, green, blue) color; spot colors; tonal values; unified color table

- Auto Color command, 191
- Auto Contrast command, 191
- Auto levels command, 190
- Background colors, 206-207
- Background Eraser tool, 224-225
 - of brush tips, 211

- Black & White adjustment, 204
- Channel Mixer adjustment, 197
- clipart for Web, preparing, 388
- Color Balance adjustment, 192-193
- Color Replacement tool, 230
- Curves adjustment, 192
- deleting on Swatches panel, 184
- Desaturate command, 194
- for Drop Shadow style, 276
- Equalize command, 202
- Eraser tools with, 224-225
- fill colors, changing, 310
- Fill command, 186-187
- Foreground colors, 206-207
- for GIF documents, 444
- Gradient Map adjustment, 198
- Grid options, 64-65
- Guides option, 64-65
- for Inner Glow style, 288
- Invert command for, 202
- levels adjustment, 190
- Macintosh, printing in, 377
- Match Color adjustment, 195
- Navigator panel view box color, 36
- of notes, 45
- for Outer Glow style, 286
- Photo Filter option, 199, 334
- for PNG-8 documents, 446
- Posterize adjustment for, 203
- in Quick Mask Mode, 251
- Replace Color command, 181
- selection by color range, 87
- Selective Color adjustment, 196
- Slice option, 64-65
- Stroke command, 186
- Swatches panel, 184-185
- text color, changing, 297
- for transparency grid, 60
- Variations adjustment, 189
- ColorSync, 414, 426
 - workflow, setting, 422
- color settings, 422
 - with Creative Suite, 423
- columns and rows
 - ruler options, 63
 - Single Row/Column Marquee tools, 80
- combine layers, Auto, 474-475

- combining channel masks, 249
- commands. [See also specific commands](#)
 - enhanced scripting of, 364-365
- compression. [See file compression](#)
- comps, layer, 116
- concavity with Line tool, 217
- Conditional Mode Change command, 400
- Content-Aware scaling, 96, 503-505
- contours
 - for Bevel and Emboss style, 279
 - for Outer Glow style, 287
 - working with, 280
- Convert Point tool, 265
- Convert To Mask button, 240
- Convert To Profile command, 426
- copies
 - different file formats, save as, 383
 - file copies, saving, 28
 - printing, 376, 378
- copying. [See also actions; layers](#)
 - do not copy watermarks, 343
 - History states, 122, 127
 - with Vanishing Point tool, 148-149
- copyrights, watermarks protecting, 319, 342-343
- contours
 - for Drop Shadow style, 277
 - for Inner Glow style, 289
- Count tool
 - counting, 470-471
 - preferences, 64-65
- crawling marquee, 254
- Create New Action button, Actions panel, 349, 350
- Create New Channel button, 240
- Create New Layer button, 237
 - duplicating layers with, 113
- Create New Set button, Actions panel, 349
- Create Plane tool, 148
- Crop and Straighten Photos command, 397, 401
- Crop command, 397
- cropping selections, 91
- cursors
 - painting cursor options, 59
 - preferences, 59
- Curves adjustment, 167, 192
 - with channel masks, 245

custom preset document, creating, 12
Custom Shapes tool, 220-222
 creating custom shapes, 221
 saving shape sets, 222
customizing, 51. [See also layer styles](#)
 brush tips, 211
 color settings, 422-423
 Swatches panels, 185
 user interface, 74-75
 workspace, 72
cutout filter effect, 344

D

data driven graphics, 464
DCS files, 381
 press, preparing images for, 392-393
defaults for panels, 7-9
Delete button, Actions panel, 349
deleting. [See also layers](#)
 actions, commands from, 355
 adjustment layers, 141
 anchor points in paths, 260-261
 with Bridge, 494-495
 channel masks, 246-247
 customized workspace, 72
 linked layers, 114
 notes, 45
 panels, 7-9
 pixels, 44
 presets, items in, 71
 ruler guides, 49
 Swatches panel, colors on, 184
 text, 297
density option, 377, 344
depth values
 for Bevel and Emboss style, 278
 Lens Blur filter option, 333
 for texture, 281
Desaturate command, 194
Despeckle filter, 154
destination for droplets, 367
Device Central, 500-501
DICOM files, 381
Difference Blending Mode, 142
diffuse glow filter effect, 345
digital cameras
 calibrating, 415
 importing raw data from, 18-19
 noise from, 147
digital watermarks, embedding, 319, 342-343
Direct Selection tool, 263
 curve of segment line, changing, 265
 type path, reshaping, 318
direction for Bevel and Emboss style, 278
Display preferences. [See also interface](#)
distance values
 for Drop Shadow style, 277
 Lens Blur filter option, 333
distortion, 320
 with Free Transform command, 94
 for layer mask borders, 239
 Lens Correction filter and, 150-151
 in Quick Mask Mode, 251
 Transform command selection, 95
distribution option with Add Noise filter, 146
dithering
 clipart for Web, preparing, 388
 for GIF documents, 445
 for gradients, 227
 for Indexed color mode, 176
 for PNG-8 documents, 447
 for WBMP documents, 419
DNG files
 information on, 493
 raw images saved as, 18-19, 492-493
do not copy watermarks, 343
Dock, painting engine in, 208
docking, 6
 document windows, 42
document dimensions, 30
document window, 6
 moving images in, 41
 Vanishing point tool, working with, 148-149
documents. [See also layers; new documents](#)
 all documents, closing, 31
 backgrounds, converting multi-layered documents into, 107
 closing, 31
 custom preset document, creating, 12
 dragging layer thumbnails into documents, 44

- inserting
 - file information into, 384-385
 - images in, 17
- New Document Preset Resolutions, 62-63
- multiple, arrange, 42
- organizing documents, 383
- profiles, 30
- saving, 28-29
- sizes, 30
- Dodge tool, 159
- downloading
 - DNG converters, 19
 - layer styles, 292
 - patches, 24-25
 - updates, 24-25
- dragging layer thumbnails into documents, 44
- drawing tablets, 76
- Drawing tool, 205
- Drop Shadow, 274
 - creating, 276-277
 - with layer masks, 235
 - modifying, 276-277
- droplets, 347
 - creating, 366-367
 - naming options, 367
 - using, 368
- dry brush filter effect, 344
- DSC 2.0 color plates, 188
- Dual Brush, 208, 213
- Duotone color mode, 171
 - converting images to, 179
- duplicating. [See copying](#)
- Dust and Scratches filter, 146
- dynamic range, 168-169. [See also High Dynamic Range \(HDR\) images](#)

E

- Edit Plane tool, 258
- editing
 - animated GIFs, 455
 - inserted documents, 17
 - nondestructively, 21
 - selections, 89
- 8-bit channels, 168-169
 - Exposure adjustment with, 201

- ellipses
 - for layer mask borders, 239
 - with Standard Shape tool, 218
- Elliptical Marquee tool, 79
 - vignettes, creating, 238
- Embed Color Profile, Macintosh, 383
- embedding
 - ICC color profiles, 424
 - proof profile information, 29
- Emboss style. [See Bevel and Emboss style](#)
- emulating color systems, 422
- encoding images for press, 393
- EPS files, 381
 - inserting images in, 17
 - metadata information, adding, 385
 - text saved as, 297
- Equalize command, 202
- Eraser tools, 205, 224-225
 - Background Eraser tool, 224-225
 - basic Eraser tool, 224
 - with Foreground and Background colors, 206
 - to History brush, 133
 - Magic Eraser tool, 226
- exact colors for Indexed color mode, 176
- Exclusion Blending Mode, 142
- EXIF profile tag, ignoring, 57
- exiting Photoshop, 32
- Export Layers To Files command, 117
- exporting. [See importing and exporting](#)
- exposure
 - controlling, 30
 - Exposure adjustment, 201
- Extension Manager, 502
- Extract, 319
- eyedroppers, 87
 - for Background colors, 206-207
 - for Foreground colors, 206-207
 - with Save For Web command, 438
 - with Vanishing Point tool, 149

F

- F-Stop information, 384
- fades, 319
 - with Match Color adjustment, 195
 - with Smart Sharpen filter, 157
 - working with, 338

- Feather option
 - with layer masks, 236
 - for out-of-gamut colors, 431
- File Compatibility options, 57
- file compression
 - lossy/lossless compression, 386-387
 - understanding, 386-387
- file extensions
 - for droplets, 367
 - lowercase, saving as, 29
- file formats. [See also specific types](#)
 - different file formats, saving documents with, 382-383
 - list of, 381
 - understanding types of, 381
- File Handling preferences, 51, 56-57
- files. [See also droplets; importing and exporting](#)
 - 3D, 483-485
 - actions as files, saving, 361
 - File Handling preferences, 56-57
- Fill command, 186-187
 - for paths, 253
 - with paths, 268
- fills
 - colors, changing, 310
 - Layers panel option, 98
 - with Paint Bucket tool, 223
 - for Stroke layer style, 283
- Filter Controls, Image Gallery dialog box, 320
- Filter Gallery, 320-321
 - multiple filters, applying, 323
- Filter Selection, Image Gallery dialog box, 320
- filters, 319-346. [See also specific types](#)
 - on adjustment layer masks, 145
 - categories of, 320
 - channel masks controlling effects, 340-341
 - Fade command with, 338
 - gradient masks with, 340-341
 - for layer mask borders, 239
 - Lens Correction filter, 150-151
 - multiple filters, applying, 323
 - order for applying, 323
 - Photo Filters, 199, 334
 - in Quick Mask Mode, 251

- selections, controlling filters with, 339
 - shortcut for reapplying, 321
 - various filter effects, 344-346
 - watermarks, embedding, 319, 342-343
- Find and Replace, 295, 307
 - with Bridge, 494-495
- Find Edges filter, 338
- Fine/Coarse slider with Variations adjustment, 189
- FireWire
 - Scratch Disks with, 53
 - video preview option, 14
- Fish style of warped text, 304
- Fisheye style of warped text, 304
- Fit Image command, 412
- Fixed Aspect Ratio
 - with Elliptical Marquee tool, 79
 - with Rectangular Marquee tool, 78
- Flag style of warped text, 304
- Flash. [See SWF files](#)
- flow
 - for Airbrush tool, 214
 - for Paintbrush tool, 214
- fonts
 - Character panel selections, 300-301
 - neon effects for, 286
 - of notes, 45
 - preferences, 54
 - types of, 299
 - Type preferences for, 70
 - Type tool, working with, 298
- foregrounds, 206-207
 - default and switching of, 207
 - with Paint Bucket tool, 223
- freeform bounding box, 17
- Free Transform command, 94
- Freeform Pen tool, 258-259
- FreeHand, moving shapes to, 221
- freezing with Liquify, 325
- fresco filter effect, 344
- Full Screen Mode, 37
- Fuzziness slider, 87

G

- gamut. [See also out-of-gamut](#)
 - preferences, 60-61
- Gamut Warning, 173, 372, 429

- mask, 60-61
- Gaussian Blur filter, 154
 - on adjustment masks, 145
 - with channel masks, 247, 249
 - with layer masks, 236, 239
 - Smart Sharpen filter with, 156
 - for vignettes, 238
- General preferences, setting, 54-55
- geometry
 - with Custom Shapes tool, 220
 - with Line tool, 217
 - paths, complexity of, 258
 - with Standard Shape tool, 218
- GIF files, 369, 440. [See also animated GIFs](#)
 - creating, 450-451
 - clipart for Web, preparing, 388-389
 - compression of, 386-387
 - metadata information, adding, 385
 - opening images, 16
 - optimizing GIF documents, 444-445
 - Save For Web command with, 436
 - saving documents as, 28
 - for Web images, 435
- glass filter effect, 345
- Global Light option
 - for Bevel and Emboss style, 279
 - with Drop Shadow style, 276
- Gloss Contours for Bevel and Emboss style, 279
- glowing edges filter effect, 345
- Gradient Map adjustment, 198
- Gradient Overlay, 273
- Gradient tool, 11
 - layer masks, blending images with, 237
- gradients, 205
 - creating, 227
 - customized gradients, 228-229
 - with filters, 340-341
 - for Inner Glow style, 289
 - for Outer Glow style, 287
 - pre-defined gradients, adding, 227
 - with Stroke layer style, 283
- grain filter effect, 346
- graphic pen filter effect, 346
- gray. [See also Grayscale color mode](#)
 - with layer masks, 232, 234
- Grayscale color mode, 13, 171

- Channel Mixer adjustment with, 197
- Color Slider, 182
- converting images to, 174
- Duotone color mode and, 179
- patterns, generation of, 337
- Spectrums or Ramps, 183
- working with, 174
- grid size, 64-65
 - transparency grid size, 60
- groups
 - adjustment layers, grouping, 140
 - nested layer group, creating, 103
- Guides, Grids & Slices options, 64-65
- guides for 45 degree angles, 80

H

- halftone screens for press images, 393
- Hand tool
 - with Lens Correction filter, 150
 - with Liquify, 325
 - monitor, fitting image to, 40
 - moving images, document window, 41
 - with Save For Web command, 438
 - with Vanishing Point tool, 149
- Hard Mix Blending Mode, 142
- hard proofs, printing, 420-421
- hardware color calibration, 415
- HDV Anamorphic Pixel Aspect Ratio, 15
- Healing Brush tool, 160
 - with Reduce Noise filter, 147, 160
- height values
 - Fit Image command, 412
 - with Pattern Maker filter, 337
 - print size option, 373
- Help menu
 - updates, checking for, 25
 - using, 26-27
- hiding. [See showing/hiding](#)
- High Dynamic Range (HDR) images, 168-169
 - Exposure adjustment with, 201
 - Merge images to, 408-409
- highlights
 - for Bevel and Emboss style, 279
 - with Dodge and Burn tools, 159
 - Shadow/Highlight adjustment, 200
 - tonal range, controlling, 164-165

- Histogram panel, 166
 - for levels, 165
 - History brush, 121
 - combining with History states, 130
 - correcting mistakes with, 130
 - Eraser tool to, 133
 - layers with, 133
 - snapshots, working with, 131
 - History panel, 121-133. [See also snapshots](#)
 - linear history, 121, 124
 - resetting to, 134
 - multiple undo commands, 122
 - non-linear state of, 121, 124-125
 - purging RAM, 134
 - saving RAM, 127
 - setting options in, 122-123
 - History states, 52, 68
 - controlling, 134
 - duplicating, 122, 127
 - History brush combined with, 130
 - number, setting, 122
 - purging, 125, 134
 - reviewing text file, 129
 - saving, 128
 - Horizontal Type Mask tool, 311
 - HSB (hue, saturation, brightness)
 - Brightness/Contrast adjustment, 167, 192
 - Color Slider, 182
 - Hue/Saturation adjustment, 194
 - opacity of, 142
 - Replace Color command and, 181
 - with Variations adjustment, 189
 - HTML (Hypertext Markup Language) files
 - generating, 441
 - hue. [See HSB \(hue, saturation, brightness\)](#)
 - Hue/Saturation adjustment, 194
 - for out-of-gamut colors, 430-431
 - hyphenation
 - Character panel selections, 301
 - Paragraph panel selections, 302
- I**
- ICC Profile
 - embedding ICC color profiles, 424
 - information, embedding, 29
 - for JPEG images, 443
 - Windows, 383
 - Illustrator, 208
 - inserting images in, 17
 - paths, exporting, 253, 271-272
 - Pen tools in, 257
 - scripts, using, 364-365
 - shapes to Illustrator, moving, 221
 - image cache, 51
 - preferences, 53
 - image compression, 369
 - Image Gallery dialog box, 320
 - Image menu, Adjustments option, 135
 - Image Preview, Image Gallery dialog box, 320
 - Image Processor, 410-411
 - image pyramid, saving, 395
 - images, with bit depth (8, 30, and 32), 168-169
 - importing and exporting. [See also paths; SWF files](#)
 - digital camera, raw data from, 18-19
 - layers to files, exporting, 117
 - shapes to vector programs, exporting, 221
 - video, 466-467
 - Zoomify, 468
 - inches as measurement system, 33
 - Include All Subfolders command, 366
 - indents
 - Paragraph panel selections, 302
 - with Standard Shape tool, 219
 - InDesign, 70
 - adjustment layers, opening, 136
 - clipping paths in, 253
 - EPS documents, type information in, 297
 - indexed color mode, 171
 - converting image to, 176-177
 - Inflate style of warped text, 304
 - Info panel, 46
 - changing measurement of colors in, 47
 - color markers, creating, 46
 - displaying information in, 47
 - specific size object, creating, 46
 - ink density. [See density](#)
 - inkjet printers
 - getting the best results for, 394-395
 - resolution, understanding, 396
 - Inner Glow style, 288-289
 - Inner Shadow style, 286-287

- Insert Menu command with actions, 363
- inserting images in documents, 17
- installing Photoshop, 2-3
- intellectual property, protecting, 319, 342-343
- interface
 - preferences, 58
- interlacing
 - for GIF images, 445
 - for PNG-8 documents, 447
 - for PNG-24 documents, 448
- Internet. [See also Web design; Web images; Web sites](#)
 - help on, 26-27
 - saving files for, 28
 - updates, checking for, 24
- interpolation, 22-23, 54, 254
 - press, images for, 393
- inverting
 - command, 202
 - Lens Blur filter option, 333
 - textures, 281
- IPTC Contract, 384

J

- Japan
 - color defaults, 423
 - text options for Japanese, 70
- jitter
 - for Inner Glow style, 289
 - Liquify tool option, 326
 - for Outer Glow style, 287
- JPEG files, 369, 381, 440
 - compression of, 386-387
 - JPEG 2000 format, 391
 - layers exported as, 117
 - metadata information, adding, 385
 - opening images, 16
 - optimizing JPEG documents, 442-443
 - photographs for Web, preparing, 390-391
 - printers, preparing images for, 395
 - raw images saved as, 18
 - Save For Web command with, 436
 - saving documents as, 28
 - transparency, support for, 60
 - for Web images, 435

- justification
 - Paragraph panel selections, 302
 - of text, 297, 299

K

- kerning, 300
- keyboard. [See also shortcut keys](#)
 - paths, moving, 262
- Kuler panel, 66
- Korean text options, 70

L

- Lab color mode, 13, 171
 - Color Slider, 182
 - converting image to, 178
 - patterns, generation of, 337
- landscape orientation, 371
- large files, saving, 22, 57
- laser printers, preparing images for, 394-395
- Lasso Marquee tool, 81
- Lasso tools. [See also specific tools](#)
 - Lasso Marquee tool, 81
 - for layer mask borders, 239
 - Magnetic Lasso tool, 82-83
 - Polygonal Lasso tool, 81-84
- launching Photoshop, 4-5
- Layer Comps panel, 116
- layer masks, 98, 231
 - blending images with, 237
 - borders, creating, 239
 - creating, 233
 - Paint tools with, 234
 - role of, 232
 - selections generating, 235
 - soft transparency, generating, 236
 - type masks, combining with, 316-317
 - vignettes, creating, 238
 - as white, 234
- Layer Properties dialog box, 115
- Layer Style dialog box, 275
 - customized styles with, 290-291
- layer styles, 273-294. [See also specific styles](#)
 - adding, 275
 - combining layer style elements, 290

layer styles (continued)

- customized styles
 - with Layer Style dialog box, 290-291
 - with Styles panel, 292-293
- to masked images, 235
- modifying existing layer style, 275
- moving existing layer styles, 294
- names for, 291, 293
- saving customized styles, 292
- sharing, 293
- showing/hiding, 275
- single layer styles, moving, 294
- understanding, 274

layers, 97-118. *See also* [adjustment layers](#); [backgrounds](#); [layer masks](#); [layer styles](#); [linked layers](#); [opacity](#); [Type tool](#)

- active document, adding layers to, 100
- blending modes, 112
- comps, creating, 116
- copying, 113
 - elements in layers, 105
- deleting, 98, 114
 - linked layers, 114
- designation of, 99
- different file formats, saving documents as, 383
- dragging layer thumbnails into documents, 44
- Eraser tools with layered documents, 224
- exporting as files, 117
- History brush, multiple layers with, 133
- locking, 108
- Magic Eraser tool with, 226
- Merge options with, 110
- moving, 100
 - documents, layers between, 109
 - two open documents, moving layers between, 44
- names for, 108, 115
- nested layer group, creating, 103
- new layers, creating, 100-101
- properties, changing, 115
- saving, 28
- selecting layer options, 101
- selecting methods, 102
- selections from layers, creating, 104-105
- showing/hiding, 108

- Smart Objects, converting, 21
- stacking order, changing, 108
- two open documents, moving layers between, 44
- updating layer comps, 116

Layers panel, 98. *See also* [layers](#)

- controlling image information with, 108
- setting options, 118
- thumbnail size, changing, 118
- tonal range, controlling, 164-165

leading Character panel selection, 301

left justification, 299

length with Line tool, 217

Lens Blur filter

- brightness with, 149, 333
- Smart Sharpen filter with, 156
- working with, 332-333

Lens Correction filter, 150-151

Levels adjustment, 164-165

- for actions, 352
- with channel masks, 245
- with type masks, 313
- working with, 190

libraries, Preset Manager for, 71

Line tool, 217

- 45 and 90 degree angles, 217

linear history. *See* [History panel](#)

lines. *See* [straight lines](#)

Link Layers option, Layers panel option, 98

linked layers, 108

- with composite adjustment layers, 139
- creating, 108, 111
- deleting, 114
- with Pattern Overlays, 285
- textures, linking, 281
- unlinking, 111

Liquify, 319

- mask options, 328
- meshes
 - applying, 331
 - creating, 330
 - modifying loaded meshes, 331
 - Show Mesh option, 329, 330
- modifying images with, 324
- options, working with, 326-327
- saving meshes, 331
- Show Mesh option, 329, 330
- view options, 329

- Load Mesh button, 330
- loading
 - channel masks, 246-247
 - meshes, 330
- localized color cluster, 87, 181
- locking layers, 108
 - Layers panel option, 98
- locking ruler guides, 49
- lossless compression, 386-387
 - printers, preparing images for, 394-395
- lossy compression, 386-387
 - for GIF images, 445
- luminosity
 - with Match Color adjustment, 195
 - Photo Filter option, 334
- LZW files
 - compression of, 387
 - printers, preparing images for, 395

M

- Macintosh
 - color calibrator in, 414
 - Embed Color Profile option, 383
 - Page Setup in, 370
 - printers, preparing images for, 395
 - printing documents in, 376-377
- Magic Eraser tool, 226
- Magic Wand tool, 86
 - channel masks, creating, 243
- Magnetic Lasso tool, 82-83
 - with paths, 259
- Make Work Path button, 255
- marching ant marquee, 252
- margins
 - in Macintosh Page Setup, 370
 - Paragraph panel selections, 302
 - in Windows, 371
- Marquee tools, 77. [See also Elliptical Marquee tool; Rectangular Marquee tool](#)
 - Lasso Marquee tool, 81
 - Single Row/Column Marquee tools, 80
 - type masks, creating, 311
 - with Vanishing Point tool, 148
- masks, 98. [See also channel masks; layer masks; Quick Mask Mode; selections; Type tool](#)
 - with adjustment layers, 144-145

- clipping masks, creating, 101
- Liquify mask options, 328
- Standard Mask Mode, 250
- Match color adjustments, 167, 195
- Mask Edge button, 236
- match prints, printing, 420-421
- matte option
 - clipart for Web, preparing, 388
 - for GIF documents, 445
 - for indexed color mode, 176
 - for JPEG images, 443
 - photographs for Web, preparing, 390
 - for PNG-8 documents, 447
 - for PNG-24 documents, 448
 - for Web design, 437
- measurements
 - Rulers, 48-49
 - system for, 33
- Measurement Log panel
 - counting, 470-471
 - taking measurements, 472-473
- memory. [See also RAM \(random access memory\)](#)
 - 100 percent Memory Usage option, 69
 - preferences, setting, 68-69
- Memory & Image Cache preferences, 68-69
- menus
 - color preferences for, 55
 - customizing, 74-75
 - original settings, restoring, 74
- Merge Down option, 110
- Merge Image to HDR, 408-409
- Merge Visible option, 107, 110
- merging. [See also adjustment layers](#)
 - Merge Down option, 110
 - Merge Visible option, 107, 110
 - Photomerge, 406-407
- meshes. [See Liquify](#)
- metadata, 13
 - adding to files, 385
 - with Bridge, 495
- matte option
 - for GIF images, 445
 - for JPEG images, 443
 - for PNG-8 documents, 447
 - for PNG-24 documents, 448
- metadata, 495
- Microsoft ICM color management, 426

- midtones
 - with Dodge and Burn tools, 159
 - Shadow/Highlight adjustment for, 200
 - tonal range, controlling, 164-165
 - with Variations adjustment, 189
- mirroring with Liquify, 325
- mode
 - for Airbrush tool, 214
 - color, 13, 171
 - Conditional Mode Change command, 400
 - with Custom Shapes tool, 220
 - for gradients, 227
 - with Line tool, 217
 - for Paint Bucket tool, 223
 - for Paintbrush tool, 214
 - for Pencil tool, 215
- monitors. [See also color management](#)
 - automatically fitting image to, 40
 - calibrating, 415
 - resolution, understanding, 396
 - selecting areas for, 78
 - soft-proof colors, setting up, 416-417
- monochromatic option
 - with Add Noise filter, 146
 - with Lens Blur filter, 333
- mosaic tiles filter effect, 346
- Motion Blur filter
 - Add Noise filter with, 146
 - Smart Sharpen filter with, 156
- mouse movements in actions, 363
- Move Grid tool, 150
- Move tool, 11
 - with Vanishing Point tool, 148
- moving. [See also layers; paths](#)
 - adjustment layers, 137
 - anchor points in paths, 260
 - with Bridge, 494-495
 - channel masks between documents, 248
 - Document window, moving images in, 41
 - layer styles, 294
 - with Vanishing Point tool, 148-149
- Multi-Channel color mode, 171, 180
- multi-layered documents into backgrounds, converting, 107
- Multiply blending mode

- with layers, 112, 142
- with Pattern Overlays, 284

N

- names. [See also renaming](#)
 - for action sets, 362
 - for animated GIFs, 450
 - for custom preset document, 12
 - of data driven graphics, 466
 - droplets, naming options for, 367
 - for gradients, 228
 - for layer styles, 291, 293
 - for layers, 108, 115
- native color channels, channel masks from, 244-245
- native formats, 444
- Navigator panel. [See also zooming](#)
 - area of view, changing, 35
 - color of view box, changing, 36
 - shortcuts, 34
 - size of view, changing, 34
 - thumbnails
 - increasing size of, 36
 - zooming with, 35
- Nearest Neighbor method, 54
- neon effects, 286
- nested layer group, creating, 103
- New Document Preset Resolutions, 62-63
- new documents
 - creating, 12
 - preset resolutions, 62-63
 - with presets, 14
- New Layer dialog box, 101
- New Layer Effect button, 323
- noise
 - Add Noise filter, 146
 - with brush tips, 213
 - for Drop Shadow style, 277
 - for Inner Glow style, 288
 - for Outer Glow style, 286
 - Reduce Noise filter, 147
- nondestructive editing, 21
- non-linear state of History panel, 121, 124-125
- non-squared pixels, 15
- note paper filter effect, 345

notes, 45
different file formats, save as, 383
saving, 28, 45

O

offset with Pattern Maker filter, 337
on-image controls, 204, 517-520
opacity, 60-61
with adjustment layers, 142-143
for Airbrush tool, 214
with Art History brush, 132
for Bevel and Emboss style, 279
for Color Overlay style, 282
with Custom Shapes tool, 220
for Drop Shadow style, 276
of gradients, 229
for Inner Glow style, 288
Layers panel option, 98
Liquify view option, 329
for Outer Glow style, 286
for Paintbrush tool, 214
with Pattern Overlays, 284
for Pencil tool, 215
setting, 101
for Stroke layer style, 283
Open As command, 16
opening images, 16
Optimize To File Size option, 439
optimizing
image to file size, 439
Photoshop, 52-53
Options bar, 6, 11
organizing documents, 383
outline font, 299
output options, printing, 374-375
out-of-gamut, 60, 173
command, test, 429
Hue/Saturation Adjustment for, 430-431
Sponge tool, working with, 432-433
Out of Scratch Disk Space error, 53
Outer Glow style, 274
working with, 286-287
output options, setting
setting, 460-461
saving, 460-461
Overlay blending mode with Pattern
Overlays, 284

Override Action "Open" commands, 366

P

Page Setup, 370-371
Paint Brush tool, 77
Paint Bucket tool, 11, 223
Paint tools, 10, 205
with layer masks, 234
Paintbrush, 214
with layer masks, 234
as Stroke tool, 269
painting. [See also gradients](#)
adjustment layers, opening, 136
on adjustment masks, 144
cursor options, 59
painting engine. [See Brushes panel](#)
panel knife filter effect, 344
panels, 6. [See also specific types](#)
adding panels, 7-9
customizing, 72
preferences for, 55
showing/hiding, 7-9, 37
subtracting panels, 7-9
working with, 7-9
panoramic photographs, creating, 406-407
Pantone Color Matching System, 413
paper options, 370-371, 377
Paragraph panel, 72
showing/hiding, 299
working with, 301, 302
Paste, preferences for resizing, 55
Patch tool, 160-161
with Reduce Noise filter, 147
patches, checking for, 24-25
Path Selection tool, 262
type path, reshaping, 318
paths, 272. [See also Type tool](#)
anchor points
adding, 260
curved to straight points, converting, 265
deleting, 260-261
direction lines, modifying, 264
with Magnetic option of Freeform Pen tool, 259
modifying, 262
moving, 260

paths *(continued)*

- straight to curved points, converting, 265
- clipping paths, 253
 - working with, 266-267
- complexity of path, controlling, 258
- curved to straight points, converting, 265
- deleting anchor points, 260-261
- direction lines, modifying, 264
- Fill command with, 253, 268
- Freeform Pen tool, 258-259
 - Magnetic option, using, 259
- Illustrator, exporting paths to, 271-272
- keyboard, moving path with, 262
- Magnetic option of Freeform Pen tool, using, 259
- moving
 - anchor points, 260
 - keyboard, moving path with, 262
- Paths To Illustrator command, exporting paths with, 272
- Pen tools with, 253, 256-257
- Save As, exporting paths with, 271
- selections into paths, converting, 255
- shapes as paths, creating, 270
- straight to curved points, converting, 265
- Stroke command with, 253, 269
- Paths panel, 253
- Paths To Illustrator command, 272
- Pattern Maker, 319, 336-337
- Pattern Overlays, 273
 - repositioning, 285
 - working with, 284-285
- patterns
 - with Paint Bucket tool, 223
 - for Stroke layer style, 283
 - for texture, 281
- pauses in actions, 356
- PBM files, 381
- PCX files, 381
- PDAs (personal digital assistants), 172
 - RGB (red, green, blue) color with, 418
- PDF files, 381, 397
 - creating, saving, 404-405
 - format, 405
 - inserting images in, 17
 - layers exported as, 117
 - metadata information, adding, 385
 - multi-page PDFs to PSDs, converting, 402-403
 - PSD file, converting to, 402-403
 - types of, 404
- PDF presentations, 381, 397
 - creating, 404-405
- PDF presets
 - creating, working, 405
- Pen tools
 - in Illustrator, 257
 - with paths, 253, 256-257
- Pencil tool, 215
 - Auto Erase and, 216
 - for calligraphy lettering, 215
- perceptual rendering intent, 419
- Perspection Web site, 11
- perspective of Transform command
 - selection, 95
- Photo Filters, 199, 334
- photographic manipulation, 158
- photographic restoration, 146
- photographs for Web, preparing, 390-391
- Photomerge, 406-407
 - command, 397
- Photoshop Extended
 - 3D files, 483
 - Align layers, Auto, 474-475
 - Angle, Vanishing Point, 148
 - Blend layers, Auto, 474-475
 - Clone sources, panel, 482
 - Count tool, 470-471
 - Count tool, preferences, 64-65
 - Enable 3D Acceleration, 69
 - Measurement feature, 148, 470-473
 - MPEG-4 video, 466
 - Timeline view (mode), 452
 - video layer
 - cloning, 481
 - creating, 477
 - modifying, 478-479
 - splitting, 480
- picas as measurement system, 33
- PICT files, 381
- Pincushion distortion, 150-151
- Pixar files, 381
- Pixel Aspect Ratio Correction, 15
- pixelization, 13

pixels, 13. [See also adjustment layers; raster data](#)

- Add Noise filter, working with, 146
- of data driven graphics, 466
- of data sets, 465
- Equalize command, 202
- with Eraser tool, 206
- excess pixels, deleting, 44
- Histogram panel, information in, 166
- image interpolation, 54
- large files, saving, 22
- Magic Eraser tool with, 226
- as measurement system, 33
- non-squared pixels, 15
- resolution, understanding, 396
- with RGB (red, green, blue) color, 418
- Smart Sharpen filter, 156-157
- Unsharp Mask filter, 155

Place command

- inserting images in documents with, 17
- preferences for resizing, 55

plastic wrap filter effect, 346

Play button, Actions panel, 349

play options, 366

playback of command, controlling, 353

plug-ins, 66-67

- organizing, 66

Plug-Ins and Scratch Disks preferences, 66-67

PNG-8 files

- information on, 387
- optimizing PNG-8 documents, 446-447
- saving for the Web, 436-437

PNG-24 files

- information on, 387
- optimizing PNG-24 documents, 448
- saving for the Web, 436-437

PNG files, 381

- clipart for Web, preparing, 388-389
- compression of, 386-387
- layers exported as, 117
- metadata information, adding, 385
- opening images, 16
- Save For Web command with, 436-437
- saving documents as, 28
- for Web images, 435

Polygonal Lasso tool, 81-84

polygons

- Polygonal Lasso tool, 81-84
- with Standard Shape tool, 218

portrait orientation, 371

position for Stroke layer style, 283

Posterize adjustment, 203

PostScript type size, 48, 70

precise cursor options, 59

preferences, 51

- cursors preferences, 59
- File Compatibility options, 57
- File Handling preferences, 56-57
- gamut preferences, 60-61
- General preferences, 54-55
- Guides, Grid & Slices preferences, 64-65
- interface preferences, 58
- Memory & Image Cache preferences, 68-69
- plug-ins preferences, 66
- scratch disks preferences, 67
- transparency preferences, 60-61
- Type preferences, 70
- Units & Rulers preferences, 62-63

Preset Manager for libraries, 71

presets

- new documents with, 14
- Preset Manager, 71
- saving items and, 71
- tools, 50

press, preparing images for, 392-393

previewing

- fonts, 70, 298-299
- Lens Blur filter option, 333
- non-squared pixels, 15
- press, images for, 393
- with Save For Web command, 438
- transparency settings, 60
- with Unsharp Mask filter, 155
- video preview option, 14
- vignettes, 238

Print One Copy command, 380

Print dialog box with preview, 372-373

- part of document, printing, 379

printers. [See also Windows](#)

- calibrating, 415
- converting color space to another profile, 426
- preparing images for, 394-395

printing

- Gamut Warning, 372
 - hard proofs, 420-421
 - larger images, 380
 - Macintosh, documents in, 376-377
 - one copy of document, 380
 - output options, 374-375
 - part of document, 379
 - Print dialog box with preview, 372-373
 - Show Paper White, 372
 - target images, 428
 - Windows, documents in, 376
- problems, reporting, 25
- progressive option
- for JPEG images, 443
 - photographs for Web, preparing, 391
- proof profile information, embedding, 29
- Proof Setup, Windows, 383
- Protect Texture option, 213
- Protect Tones, 159, 432
- PSB files, 381
- opening images, 16
- PSD files, 381
- adjustment layers as, 136
 - creating, 404-405
 - as a presentation, 405
 - large files, saving, 22
 - layers exported as, 117
 - metadata information, adding, 385
 - multi-page PDFs to PSDs, converting, 402-403
 - opening images, 16
 - PDF files, converting, 402-403
 - preferences for saving, 57
 - raw images saved as, 18
- puckering with Liquify, 324
- purging RAM, 125, 134
- pushing left with Liquify, 324

Q

- QuarkXpress, 266
- EPS documents, type information in, 297
- Quick Mask Mode, 252, 250
- filters in, 251
 - options, working with, 251
 - saving selections, 251
- Quick Selection tool, 85

R

- radius option, 152-153, 155-157, 219, 333
- RAM (random access memory), 51. [See also History panel; History states](#)
- adjusting options, 68-69
 - optimizing, 53
 - purging RAM, 125, 134
- ramps, 183
- range values
- for Bevel and Emboss style, 280
 - for Inner Glow style, 289
 - for Outer Glow style, 287
- raster data, 396. [See also Layers panel](#)
- change and, 369
 - documents, 13
 - interpolation and, 254
 - Smart Objects with, 21
 - understanding raster images, 254
- Rasterize Type command, 308
- raw digital camera data, importing, 18-19
- RAW files, 18-19, 381
- large files, saving, 22
- reconstructing with Liquify, 324, 327
- Record button, Actions panel, 349
- recording actions, 351
- Rectangle tool for layer mask borders, 239
- rectangles
- with Rectangle tool, 239
 - with Standard Shape tool, 218
- Rectangular Marquee tool, 78
- with Pattern Maker filter, 336
 - for printing part of document, 379
- RedEye tool, 163
- Reduce Noise filter, 147
- with Healing Brush tool, 147, 160
- reduction
- for GIF documents, 444
 - for PNG-8 documents, 446
- Refine Edge
- selection, 88
 - with Layer Masks, 236
- relative colorimetric rendering intent, 419
- remove option with Smart Sharpen filter, 156
- renaming
- with Bridge, 498
 - presets, 71

- rendering intent
 - for hard proofs, 421
 - for soft-proof colors, 416
 - working with, 419
- reopening notes, 45
- repeating Transform command selection, 95
- Replace Color command, 181
- Resample Image option, 22
- resizing. [See size](#)
- resolution
 - changing, 22-23
 - selecting, 13
 - understanding, 396
- retouching images, 158
- RGB (red, green, blue) color, 13, 47, 171. [See also color management; out-of-gamut](#)
 - CMYK (cyan, magenta, yellow, black) color and, 171, 418
 - Color Slider, 182
 - converting image to, 172
 - with 8-bit channels, 168-169
 - Gamut Warning mask, 60-61
 - Lab color mode for archiving images, 178
 - Multi-Channel color mode, converting images to, 180
 - patterns, generation of, 337
 - press, preparing images for, 392-393
 - Spectrums or Ramps, 183
- right justification, 299
- Rise style of warped text, 304
- RLE (Run Length Encoding) scheme, 388
- Rotate View tool, 41
- rotating
 - with Bridge, 494-495
 - with Lens Blur filter, 333
 - Smart Objects, 21
 - Transform command selection, 95
- roughness of gradients, 229
- rows. [See columns and rows](#)
- rulers, 48-49, 51
 - guides, working with, 48-49
 - options for, 62-63
 - switching between measurements, 62

S

- Saturate and Desaturate command, 167

- saturation. [See also HSB \(hue, saturation, brightness\)](#)
 - rendering intent, 419
 - Saturate and Desaturate command, 167
- Save As command, 29
 - paths exported with, 271
 - with text, 299
- Save commands.
 - understanding, 29
- Save For Web command, 436-437
- Save for Web dialog box, 439
- Save Mesh button, 330
- Save Optimized As command, 441
- saving. [See also actions; layer styles](#)
 - alpha channels, 28
 - brush tips, 212
 - channel masks, 246-247
 - custom shape sets, 222
 - documents, 28-29
 - file formats, files with different, 382-383
 - File Saving options, selecting, 56
 - gradients, 228-229
 - History states, 128
 - image pyramid, 395
 - inserting file information into documents, 384-385
 - large files, 22, 57
 - layer styles, 292
 - layers, 28
 - Liquify meshes, 331
 - notes, 28, 45
 - presets, items as, 71
 - Quick Mask selections, 251
 - spot colors, 28
 - Swatches panels, 185
 - thumbnail data, 29
 - understanding Save commands, 29
 - for Web, 436-438
- scaling
 - Content-Aware scaling, 96, 503-505
 - Character panel selections, 301
 - in Macintosh Page Setup, 370
 - with Pattern Overlays, 285
 - in Print dialog box with preview, 373
 - Smart Objects, 21
 - for texture, 281
 - Transform command selection, 95

- ul style="list-style-type: none;">
- scanners
 - calibrating, 415
 - noise from, 147
 - photographs for Web, preparing, 391
 - Photoshop, scanning images into, 17
- Scattering, 208, 213
- Scratch Disks, 51, 53, 66-67
- scratch sizes, 30
 - Info panel displaying, 47
- Screen blending mode, 142
 - with Pattern Overlays, 284
- Screen Mode for display, 37
- scripts
 - built-in scripts, 365
 - enhanced scripting, 364-365
- scroll wheel preferences, 55
- SCT files, 381
- searching. [See Find and Replace](#)
- Select menu options, 89
- selection marquees
 - hiding, 433
- selection masks, 92-93
- selections, 10, 77-96. [See also specific tools](#)
 - adding to, 90
 - Brightness/Contrast adjustment with, 193
 - channel masks from, 243
 - channels, creating with, 92
 - by color range, 87
 - cropping selections, 91
 - filters, controlling, 339
 - with Free Transform command, 94
 - layers, 102
 - layer masks, generation of, 235
 - layer options, selecting, 101
 - masks, 92-93, 145
 - layer masks, generation of, 235
 - modifying existing selection, 89
 - paths, converting to, 255
 - Quick Mask option, 252
 - Quick Selection tool, 85
 - Refine Edge, 88
 - subtracting from, 90
 - with Transform command, 94-95
 - vignettes, creating, 238
- Selective Color adjustments, 167, 196
- sepia color, Fill blending with, 187
- sets. [See actions](#)
- Shadow Angles option with Drop Shadow style, 276
- Shadow/Highlight adjustment, 200
- shadows
 - for Bevel and Emboss style, 279
 - with Dodge and Burn tools, 159
 - Shadow/Highlight adjustment, 200
 - tonal range, controlling, 164-165
 - with Variations adjustment, 189
- Shape Blur filter, 152-153
- Shape Dynamics, 208, 213
- shape layers, 99
 - drawing option, 270
- Shape Marquee tools, 11
- Shape tool, 205
- shapes
 - Custom Shapes tool, 220-222
 - Lens Blur filter option, 333
 - paths, creating shapes as, 270
 - with Standard Shape tool, 218-219
 - Type tool, creating shape layers with, 310
- Share My Screen, 488, 499
- sharing
 - actions, 361
 - layer styles, 293
- Shell Lower/Upper style of warped text, 304
- Shift key for tools, 11
- shortcut keys, 3, 4
 - defining, 73
 - filters, reapplying, 321
 - with Navigator panel, 34
 - for tools, 11
 - working with, 73
 - zooming with, 39
- Show Bounding Box check box, 372
- Show Paper White, 372
- Show This Dialog At Startup check box, 5
- showing/hiding
 - channel masks, 241
 - Character panel, 299
 - layer styles, 275
 - layers, 108
 - Navigator panel, 35
 - panels, 7-9, 37
 - Paragraph panel, 299
 - selection marquees, 433
 - toolbox, 37

- shutter speed information, 384
- Single Row/Column Marquee tools, 80
- size
 - adjustment layers and, 135
 - for Bevel and Emboss style, 278
 - of CMYK document, 171
 - of documents, 30
 - for Drop Shadow style, 277
 - image size, changing, 22-23
 - Info panel, information in, 46, 47
 - for Inner Glow style, 289
 - for Outer Glow style, 287
 - photographs for Web, preparing, 391
 - preferences for resizing, 55
 - for Stroke layer style, 283
 - view size, changing, 34
- sketch filters, 320
- skewing Transform command selection, 95
- Slice Selection tool
 - with Save For Web command, 438
- slicing images, 454-455
 - arranging, 458-459
 - distributing, 458-459
 - HTML text, add, 462-463
 - saving for the Web, 460-461
 - setting output options, 460-461
 - stacking, 458-459
 - URL, add Web address, 462-463
 - working with, 64-65, 456-457
- slide shows, 404-405
- sliders, changing text boxes to, 74
- Smart Filters
 - Creating, 322
 - Smart Objects, from, 20-21
 - Working with, 322
- Smart Guides, 119
- Smart Objects, 20-21
 - converting 3D layer to, 21
- Smart Sharpen filter, 156-157
- smoothness
 - of gradients, 229
 - with painting engine, Brushes panel, 213
- snapshots, 122
 - creating, 126
 - with History brush, 131
- softness
 - for Bevel and Emboss style, 278
 - channel masks, 247
 - layer masks generating soft transparency, 236
 - soft-proof colors, setting up, 416-417
- software color calibration, 415
- sounds, preferences for, 55
- source option for Inner Glow style, 289
- spacing Paragraph panel selections, 302
- Spatter filter, 346
 - for layer mask borders, 239
- specific size object, creating, 43
- spectrums, 183
- speed of Photoshop, adjusting, 68-69
- Spell Check, 295
 - Character panel selections, 301
 - working with, 306
- Sponge tool, 159
 - desaturating areas of image with, 194
 - for out-of-gamut colors, 432-433
- spot colors, 188
 - different file formats, saving documents as, 383
 - saving, 28
- Spot Healing Brush tool, 162
- spread values
 - for Drop Shadow style, 277
 - for Outer Glow style, 287
- squares with Standard Shape tool, 218
- Squeeze style of warped text, 304
- stacking images, 474
- stacking order of layers, 108
- stained glass filter effect, 346
- stamp filter effect, 345
- Stamp tool
 - Clone Stamp tool, 158
 - with Vanishing Point tool, 148
- Standard Mask Mode, 250
- Standard Pen tool with paths, 256
- Standard Screen Mode, 37
- Standard Shape tool, 218-219
 - Options bar, 11
- stars with Standard Shape tool, 219
- Status bar, 30
- Stop button, Actions panel, 349
- straight lines
 - drawing, 210
 - Line tool for, 217
 - Pencil tool for, 216

- Straighten tool, 150
- Stroke command, 186
 - for paths, 253
 - with paths, 269
- Stroke layer style, 283
- Stroke Path option, 269
- styles. [See also layer styles](#)
 - for Art History brush, 132
 - for Bevel and Emboss style, 278
- Styles button for warping text, 304
- Styles panel, 273
 - layer styles, creating, 292-293
- stylize filters, 320
- subfolders
 - in Batch File Processing, 395
 - Include All Subfolders command, 366
- subtracting from selection, 90
- Suppress Color Profile Warnings, 366
- Suppress File Open Options Dialogs, 366
- Surface Blur filter, 152-153
- Swatches panel, 184-185
 - customizing, 185
 - saving, 185
- system requirements, 3

T

- tablecloth, 60
- Targa files, 381
 - layers exported as, 117
- target images, printing, 428
- technique
 - for Bevel and Emboss style, 278
 - for Inner Glow style, 289
 - for Outer Glow style, 287
- text, 33. [See also anti-aliasing; notes; Spell Check; Type tool; warping](#)
 - Asian text options, 70
 - chiseled text, creating, 288
 - of data sets, 465
 - History state text files, reviewing, 129
 - Rasterize Type command, 308
 - workspace for, 72
- text boxes to sliders, changing, 74
- textures, 208, 213
 - with Bevel and Emboss style, 280-281
 - filters, 320
 - Protect Texture option, 213

- thawing with Liquify, 325
- 32-bit images, [See also High Dynamic Range \(HDR\) images](#)
- 3D effects, Bevel and Emboss style for, 278
- 3D model files
 - adding to a 2D model, 483
 - converting 3D layer to Smart Object, 21
 - creating from a 2D image, 484
 - editing a model, 485
- threshold, 203
 - with Lens Blur filter, 333
 - with Surface Blur filter, 152-153
 - with Unsharp Mask filter, 155
- thumbnails. [See also Navigator panel](#)
 - with Bridge, 13
 - in Brushes panel, 209
 - dragging layer thumbnails, 44
 - file saving options, 56
 - Layers panel thumbnail size, changing, 118
 - with Save For Web command, 438
 - saving thumbnail data, 29
- TIFF files, 381
 - adjustment layers as, 136
 - large files, saving, 22
 - layers exported as, 117
 - metadata information, adding, 13, 385
 - opening images, 16
 - photographs for Web, preparing, 390-391
 - preferences for saving, 57
 - printers, preparing images for, 394-395
 - raw images saved as, 18
- tile boundaries with Pattern Maker filter, 337
- tolerance
 - for Art History brush, 132
 - with Paint Bucket tool, 223
 - for paths, 255
- tonal values
 - controlling, 164-165
 - Histogram panel and, 166
 - Invert command for, 202
 - with Smart Sharpen filter, 157
 - with Surface Blur filter, 152-153
- tool tip preferences, 55
- toolbox, 6
 - showing/hiding, 37
- tools. [See also specific tools](#)

- multiple tools, accessing, 10
- working with, 10-11
- tracking Character panel selections, 301
- Traditional type size, 48
- transfer functions for press images, 393
- Transform command, 94-95
 - with Vanishing Point tool, 148
- transparency. *See also layer masks*
 - clipart for Web, preparing, 388
 - clipping paths and, 266-267
 - for GIF documents, 445
 - for gradients, 227
 - gray creating, 232, 234
 - with History brush, 133
 - for JPEG images, 443
 - layer styles requiring, 274
 - for PNG-8 documents, 447
 - for PNG-24 documents, 448
 - preferences, 60-61
 - printer, preparing images for, 395
 - soft transparency, generating, 236
 - for Web design, 437
- turbulence with Liquify, 325
- turning on/off Smart Guides, 119
- Twain plug-in, scanning images with, 17
- twirling with Liquify, 324
- Twist style of warped text, 304
- Type preferences, 70
- Type tool, 10, 295-318
 - chiseled type, creating, 314-315
 - editing type on path, 297
 - fonts, working with, 298-299
 - horizontal and vertical type, toggling between, 298
 - layers
 - creating, 99
 - shape layers, creating, 310
 - masks
 - chiseled type, creating, 314-315
 - creating type masks, 311
 - layer masks, combining with, 316-317
 - pixels, isolating, 312-313
 - special effects, generating, 316-317
 - moving type mask, 312
 - options, working with, 298
 - paths, 296-297, 309
 - text on path, creating, 318
 - work paths, creating, 309

- preferences for, 70
- Rasterize Type command, 308
- Type tool
 - shape layers, creating, 310
 - special effects, generating, 316-317
 - standard typing tools, 296-297

U

- undos, 52. *See also History panel*
 - multiple undo commands, performing, 122
- unified color table
 - for GIF images, 445
 - for PNG-8 documents, 447
- units, 51. *See also rulers*
 - options for, 62-63
- Unsharp Mask filter, 155
- Updater, 24-25
- updates
 - checking for, 24-25
 - from Internet, 24
 - layer comps, updating, 116
 - options, setting, 4
 - for versions of Photoshop, 2
- user interface, customized, 74-75

V

- Vanishing Point tool, 148-149
- Variations adjustment, 189
- vector data
 - interpolation and, 254
 - Paths panel and, 253
 - press, images for, 393
 - Smart Objects with, 20-21
 - understanding vector images, 254
- Version Cue, 30
 - preferences, 57
- Vertical Type Mask tool, 311
- vibrance, 169
- video
 - exporting, 466-467
 - layers, cloning, 481
 - layers, creating and modifying, 477-478
 - layers, splitting, 480
 - new documents with video presets, 14
 - opening, formats, 476
 - preview option, 14

views and viewing. [See also Navigator panel](#)

- Bird's Eye view, 38-39
- with Bridge, 490, 494-495
- for Brushes panel, 209
- Liquify view options, 329
- Photoshop window, 6
- RGB color mode, 13, 171
- size of view, changing, 34
- two views, working on one image in, 43
- Zoom tool, changing view with, 38-39

vignettes

- with layer masks, 238
- Lens Correction filter, vignetting and, 150

visibility

- of data driven graphics, 466
- of data sets, 465

W

Wacom drawing tablets, 76

Warped Text button, 299

warping

- with Liquify, 324
- Smart Objects, 20-21
- text, 299, 304-305
- Transform command selection, 95

watermarks

- embedding, 319, 342-343
- restricted, 343

Wave style of warped text, 304

WBMP files

- optimizing WBMP documents, 449
- Save For Web command with, 436-437
- for Web images, 435

Web Content panel, 461

Web design, 435-470.

- file formats, working with, 446-441
- optimizing image to file size, 439
- saving documents for, 436-438

Web images

- clipart, preparing, 388-389
- Color Slider, 182
- lossy/lossless compression, 386-387
- photographs for Web, preparing, 390-391
- preparing, 369

Web snap

- for GIF documents, 444

- for PNG-8 documents, 446

Wet Edges, 213

width values

- Fit Image command, 412
- with Line tool, 217
- with Pattern Maker filter, 337
- print size option, 373

Windows

- color calibrator in, 414
- ICC Profile, 383
- Microsoft ICM color management, 426
- Page Setup in, 371
- printers
 - preparing images for, 394-395
 - setting up, 371
- printing documents in, 378
- Proof Setup, 383

workspace, customizing, 72

WYSIWYG type, 70

X

XMP files, 13

- inserting file information into documents, 384-385

XMP Software Development Kit, 385

Z

ZIP files

- compression of, 387
- printers, preparing images for, 395

Zoom tool, 33

- with Lens Correction filter, 150
- with Save For Web command, 438
- two views, working on one image in, 43
- with Vanishing Point tool, 149
- view of image, changing, 38-39

Zoomify, export, 468

zooming, 6. [See also Zoom tool](#)

- area of view, changing, 35
- with Liquify, 325
- monitor, automatically fitting image to, 40
- on multiple documents, 40
- with Navigator panel, 34-35
- 100%, automatically zooming to, 40
- preferences for, 55
- with shortcut keys, 39