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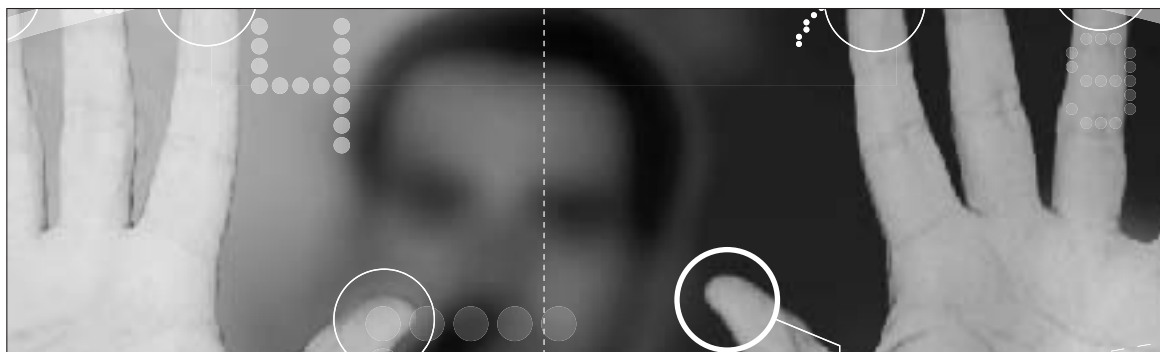
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Micah Laaker  
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# **Adobe® Photoshop® cs** **in 10 Simple Steps or Less**



**Micah Laaker and Christopher Schmitt**

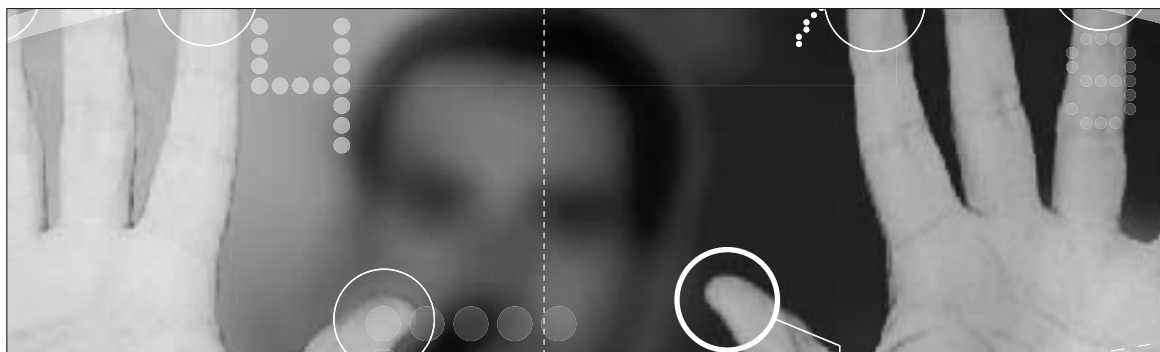


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**Micah Laaker and Christopher Schmitt**



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## Adobe® Photoshop® CS in 10 Simple Steps or Less

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**From Christopher Schmitt:**

I recall the first time I used Photoshop. While being filled with awe at such an amazing tool, I also had a head full of questions about the many Photoshop commands and features available.

That's why I want to thank Micah for helping to co-write this educational tool. Through his invaluable contributions, we have created a truly wonderful educational tool to eliminate those types of questions for new users as well as old.

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# About the Authors

**Micah Laaker** is the creative director of Fearless Concepts, an interactive design and development firm in New York. As head of the creative department, Micah leads the conceptual and visual direction of music and entertainment projects. Having worked in the interactive field for more than seven years, he has provided his entertainment, corporate, and not-for-profit clients with a range of graphic design, illustration, and multimedia services.

Micah was instrumental in the founding and operations of the research and development department at Iguana Studios, a leading New York-based design firm. Thanks to the resources of Iguana and with the support of Adobe Systems, Inc., he was able to coordinate the development of the first commercial SVG (Scalable Vector Graphics) project: the redesign of BattleBots.com.

Supplementing this development, Micah has written extensively detailing practical applications of SVG, including “SAMS Teach Yourself SVG in 24 Hours,” and continues to lecture and teach university classes about online vector graphics and interactive production technologies.

His clients have included the ACLU, Island Def Jam Music Group, Disney Channel, Sprint PCS, Lockheed Martin, and Adobe Systems.

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He has written for *Web Techniques*, *A List Apart*, *Digital Web*, and *Web Reference* and contributed four chapters to *XML*, *HTML XHTML Magic*. He wrote *Designing CSS Web Pages* ([www.cssbook.com](http://www.cssbook.com)), a book about contemporary Web page layouts through Cascading Style Sheets, Dynamic HTML, PNG, and SVG.

Christopher also created the Web Design Pad ([www.designpad.com](http://www.designpad.com)), a mouse pad sporting the first-ever look of the Web-safe colors in a true color wheel arrangement that was widely sold throughout the United States and abroad, just so he could use one for work. Co-moderator of Babble ([www.babblelist.com](http://www.babblelist.com)), a mailing list devoted to advanced Web design and development, Christopher continues to write about Web design and culture.

You can read more about Christopher's professional work and experience at

[www.christopherschmitt.com](http://www.christopherschmitt.com).

# Contents

<b>Acknowledgments</b>	<b>v</b>
<b>About the Authors</b>	<b>vii</b>
<b>Introduction</b>	<b>xix</b>
<b>Part 1: Photoshop Basics</b>	<b>1</b>
Task 1: Setting File Handling Preferences	2
Task 2: Recording Steps in the History Log	4
Task 3: Setting Display and Cursor Preferences	6
Task 4: Setting Transparency and Gamut Preferences	8
Task 5: Setting Units and Rulers Preferences	10
Task 6: Setting Guides, Grid, and Slices Preferences	12
Task 7: Setting Plug-ins and Scratch Disk Preferences	14
Task 8: Setting Memory and Image Cache Preferences	16
Task 9: Navigating the HTML-Based Help System	18
Task 10: Determining Necessary Options to Create a New Image File	20
Task 11: Viewing Images with the File Browser	22
Task 12: Organizing Thumbnails in the File Browser	24
Task 13: Managing Folders and File Names from within the File Browser	26
Task 14: Importing Digital Camera Images	28
Task 15: Importing a PDF Image	30
Task 16: Adding Notes to Image Files	32
Task 17: Adding Audio Annotations to Image Files	34
Task 18: Using the Save, Save As, and Save for Web Options	36
Task 19: Utilizing the PSD Format to Keep Layers and Effects Intact	38
<b>Part 2: The Work Area</b>	<b>41</b>
Task 20: Using the Toolbox, Options Bar, View Modes, and Jump Commands	42
Task 21: Using and Editing Shortcut Keys	44
Task 22: Using the Navigator, Info, and Histogram Palettes	46
Task 23: Using the Floating Palettes, Palette Options, and the Palette Well	48



Task 24: Zooming in on Your Work with the Zoom and Hand Tools	50
Task 25: Measuring Distance and Angles in Images with the Measure Tool	52
Task 26: Using Rulers and Setting Ruler Options	54
Task 27: Viewing and Using Grids for Precision Work	56
Task 28: Placing, Moving, and Locking Guides for More Precise Control	58
Task 29: Using the Snap To Command with Grids and Guides	60
Task 30: Undoing, Redoing, Stepping Forward and Backward	62
Task 31: Using the History Palette to Revert to Previous States	64
Task 32: Creating a Duplicate Window or New Document from Current State	66
Task 33: Creating Tool Presets to Streamline your Workflow	68
Task 34: Using the Preset Manager to Access and Organize All Preset Types	70
Task 35: Customizing and Saving Your Workspace	72
<b>Part 3: Color Essentials</b>	<b>75</b>
Task 36: Establishing and Customizing Initial Color Settings	76
Task 37: Calibrating a Macintosh Monitor	78
Task 38: Calibrating a Windows Monitor	80
Task 39: Setting Foreground and Background Colors Using the Color Picker	82
Task 40: Using the Color Palette to Choose Colors	84
Task 41: Adding, Renaming, and Deleting Colors from the Swatch Palette	86
Task 42: Creating, Saving, and Loading Swatch Libraries	88
Task 43: Using the Eyedropper Tool to Sample Single Colors or Areas of Color	90
Task 44: Using the Color Sampler Tool to Place Color Sample Readout Markers	92
Task 45: Converting an Image into a Different Color Mode	94
Task 46: Proofing Colors for Specific Outputs	96
Task 47: Changing or Converting a Color Profile	98
<b>Part 4: Color Adjustments</b>	<b>101</b>
Task 48: Determining Detail and Tonal Range of an Image with the Histogram	102
Task 49: Using the Auto Adjustments for Quick and Simple Corrections	104
Task 50: Specifying Auto Correction Options	106
Task 51: Adjusting the Tonal Range of an Image Using Levels	108
Task 52: Setting White and Black Points Using Levels	110
Task 53: Adjusting Color in an Image More Precisely with Curves	112
Task 54: Using the Color Balance Command to Modify the Mixture of Colors	114
Task 55: Using the Brightness/Contrast Command to Regulate Those Values within an Image	116
Task 56: Using the Hue/Saturation Command to Alter the HSL Values in an Image	118

Task 57: Editing the Range of the Hue/Saturation Sliders	120
Task 58: Matching Colors between Images with the Match Color Command	122
Task 59: Using the Replace Color Command to Change a Selected Color or Colors	124
Task 60: Using Selective Color to Increase or Decrease Specific Color Components	126
Task 61: Applying Gradient Mapping to Add a Stunning Color Effect to an Image	128
Task 62: Using the Photo Filter Command	130
Task 63: Using the Shadow/Highlight Command	132
Task 64: Using the Invert Color Command to Inverse Color Values in an Image	134
Task 65: Equalizing Levels of Brightness and Dark with the Equalize Command	136
Task 66: Adjusting the Threshold to Get a High-Contrast, Black-and-White Image	138
Task 67: Posterizing an Image to a Specified Number of Tonal Levels	140
Task 68: Using the Variations Command to Adjust Values with the Help of Thumbnail Views	142

## **Part 5: Selections** **145**

Task 69: Forming Basic Selections Using the Rectangular Marquee Tool	146
Task 70: Using the Lasso and Polygonal Lasso Tools to Make a Freeform Selection	148
Task 71: Outlining a High-Contrast Object with the Magnetic Lasso Tool	150
Task 72: Select by Color with the Magic Wand Tool	152
Task 73: Making a Selection by Color Range	154
Task 74: Moving the Selection Marquee or Selection Contents	156
Task 75: Adding to or Subtracting from Selection Areas	158
Task 76: Intersecting Selections to Create Unique Selection Shapes	160
Task 77: Stroking a Selection to Make an Instant Frame for an Image	162
Task 78: Using Inverse to Select a Complex Object with a Plain Background	164
Task 79: Creating a Soft-edged Vignette Effect with Feathering	166
Task 80: Creating a Border Selection	168
Task 81: Modifying a Selection by Smoothing, Expanding, or Contracting	170
Task 82: Resizing or Reshaping a Selection with the Transform Selection Command	172
Task 83: Cropping an Image to a Selected Area	174
Task 84: Deselecting, Reselecting, and Deleting Selections	176
Task 85: Copying and Pasting a Selected Area into Another Image	178
Task 86: Saving and Loading Selections for Later Use	180

## **Part 6: Path Essentials** **183**

Task 87: Creating a Simple Work Path Using the Pen Tool	184
Task 88: Drawing Curves with the Pen Tool	186
Task 89: Creating a Freeform Path	188

Task 90: Using the Magnetic Pen Tool to Trace a Path around an Object	190
Task 91: Selecting Path Components with the Path and Direct Selection Tools	192
Task 92: Adding and Deleting Anchor Points to Reshape a Path	194
Task 93: Using the Convert Point Tool to Change to Smooth or Corner Points	196
Task 94: Aligning and Distributing Path Components	198
Task 95: Filling and Stroking Paths	200
Task 96: Converting a Path to a Selection and Vice Versa	202
Task 97: Duplicating, Saving, and Deleting Paths	204
Task 98: Exporting a Path to Adobe Illustrator	206
<b>Part 7: Transformations</b>	<b>209</b>
Task 99: Resizing and Resampling an Image Using the Image Size Command	210
Task 100: Increasing or Decreasing an Image's Canvas Area	212
Task 101: Flipping an Image Vertically or Horizontally	214
Task 102: Rotating an Image	216
Task 103: Eliminating an Unnecessary Image Area by Cropping	218
Task 104: Using the Trim Command to Crop Away Specified Outer Image Areas	220
Task 105: Scaling an Image or Image Area	222
Task 106: Skewing and Distorting an Image or Image Area One Corner at a Time	224
Task 107: Applying One-Point Perspective to an Image	226
Task 108: Working with Video Format Pixel Aspect Ratios	228
<b>Part 8: Painting Essentials</b>	<b>231</b>
Task 109: Using the Brush Preset Picker to Choose and Load Brush Tips	232
Task 110: Painting and Drawing with the Brush and Pencil Tools	234
Task 111: Using the Color Replacement Tool	236
Task 112: Using a Brush Blend Mode to Repair Red-Eye	238
Task 113: Erasing a Portion of an Image or Layer with the Eraser Tool	240
Task 114: Controlling Boundaries While Erasing with the Background Eraser Tool	242
Task 115: Using the Magic Eraser Tool to Erase an Area Based on a Range of Colors	244
Task 116: Filling Areas with Solid Colors or Patterns Using the Paint Bucket Tool	246
Task 117: Adding Softness to a Chosen Image Area with the Blur Tool	248
Task 118: Increasing the Clarity of an Area with the Sharpen Tool	250
Task 119: Simulating a Fingerpainted Look Using the Smudge Tool	252
Task 120: Highlighting an Image Area with the Dodge Tool	254
Task 121: Applying the Burn Tool to Create Shading Effects in an Image	256
Task 122: Changing Color Saturation with the Sponge Tool Options	258

Task 123: Performing Digital Plastic Surgery with the Healing Brush	260
Task 124: Using the Healing Brush Pattern Option	262
Task 125: Repairing a Selected Area with the Patch Tool	264
Task 126: Transferring Part of an Image to Another Image with the Clone Stamp Tool	266
Task 127: Painting with a Pattern by Means of the Pattern Stamp Tool	268
<b>Part 9: Advanced Painting Techniques</b>	<b>271</b>
Task 128: Using the History Brush to Paint with a History State	272
Task 129: Painting from or Recovering Your Previous Work Using Snapshots	274
Task 130: Adding Artistic Style to an Image with the Art History Brush	276
Task 131: Erasing to a History State	278
Task 132: Filling a Selection or Layer with a History State	280
Task 133: Using the Gradient Tool to Apply a Color Gradient	282
Task 134: Creating a Custom Gradient	284
Task 135: Saving and Loading Gradient Libraries	286
Task 136: Creating and Defining a Pattern	288
Task 137: Setting Brush Dynamics	290
Task 138: Creating Custom Brushes	292
Task 139: Editing a Preset Brush	294
Task 140: Creating and Saving a Brush Set	296
<b>Part 10: Channels and Masks</b>	<b>299</b>
Task 141: Working with Color Channels	300
Task 142: Splitting Channels into Separate Images	302
Task 143: Creating and Editing an Alpha Channel	304
Task 144: Converting a Selection to a Channel	306
Task 145: Using the Quick Mask Mode to Isolate an Image Area	308
Task 146: Changing the Quick Mask Options	310
Task 147: Storing Masks in Channels for Later Use	312
Task 148: Using the Channel Options in the Save Selection Dialog Box	314
Task 149: Using the Channel Mixer to Create Interesting Color Effects	316
<b>Part 11: Layer Essentials</b>	<b>319</b>
Task 150: Creating a Basic Layered Image	320
Task 151: Organizing Your Layers by Naming and Color Coding	322
Task 152: Selecting, Moving, and Duplicating Layers	324
Task 153: Adjusting Master and Fill Opacities in a Layer	326

Task 154: Locking Layers or Layer Attributes	328
Task 155: Linking Layers or Layer Sets	330
Task 156: Using Layer Sets to Organize Layers	332
Task 157: Aligning and Distributing Linked Layers	334
Task 158: Changing the Stacking Order of Layers and Layer Sets	336
Task 159: Blending Layers Using Layer Blend Modes	338
Task 160: Restricting Blending to Specific Channels	340
Task 161: Adding and Editing a Hide All or Reveal All Layer Mask	342
Task 162: Creating a Gradient Layer Mask	344
Task 163: Using a Solid Color or Gradient Fill Layer	346
Task 164: Using a Pattern Fill Layer to Enhance Another Patterned Layer	348
Task 165: Using an Adjustment Layer to Fine-Tune Color Adjustments	350
Task 166: Making Use of an Adjustment Layer's Mask	352
Task 167: Moving Layers to Other Images	354
Task 168: Cleaning Up Edges with Defringe and Remove Matte Commands	356
Task 169: Using Layers to Create a Collage	358
Task 170: Creating a Knockout Effect with Knockout Options	360
Task 171: Merging Layers in Different Ways	362
Task 172: Rasterizing and Flattening Layers	364
Task 173: Utilizing the Layer Comps Feature	366
Task 174: Exporting Layers as Files	368
<b>Part 12: Layer Styles and Shape Layers</b>	<b>371</b>
Task 175: Using the Preset Styles in the Styles Palette	372
Task 176: Creating a New Drop Shadow Style	374
Task 177: Creating a New Inner Shadow Style	376
Task 178: Creating a New Outer Glow Style	378
Task 179: Creating a New Inner Glow Style	380
Task 180: Creating a New Bevel and Emboss Style	382
Task 181: Creating a New Satin Effect Style	384
Task 182: Creating a New Color Overlay Style	386
Task 183: Creating a New Gradient Overlay Style	388
Task 184: Creating a New Pattern Overlay Style	390
Task 185: Creating a New Stroke Style	392
Task 186: Converting Layer Styles to Image Layers	394
Task 187: Using a Shape Tool to Create a Shape Layer	396
Task 188: Use the Shape Tool Options to Modify the Shape	398

Task 189: Creating a Raster Shape or Path with the Shape Tools	400
Task 190: Fashioning a Unique Image Using only Preset Shapes	402
Task 191: Creating, Saving, and Loading Custom Shapes	404
Task 192: Using the Line Shape Tool and Creating Arrowhead Lines	406
Task 193: Creating a Vector Layer Mask with a Shape Tool	408
Task 194: Creating a Layer Clipping Group	410

## **Part 13: Type 413**

Task 195: Inserting Point Type into an Image	414
Task 196: Specifying and Adjusting Type Parameters	416
Task 197: Moving, Aligning, and Justifying Type	418
Task 198: Resizing and Transforming Type	420
Task 199: Checking and Correcting Spelling; Finding and Replacing Text	422
Task 200: Managing and Transforming Paragraph Type	424
Task 201: Dressing up an Image with Warped Type	426
Task 202: Placing Text on a Path	428
Task 203: Customizing a Text Logo with Shape Type	430
Task 204: Combining Text with Imagery Using a Selection Mask Type	432
Task 205: Using Work Path Type as a Clipping Path	434
Task 206: Creating an Eye-Catching Text Effect by Manipulating Layer Styles	436
Task 207: Using Layers to Form Text Reflections	438

## **Part 14: Filters 441**

Task 208: Extracting an Object from the Surrounding Background	442
Task 209: Using the Liquify Command to Contort an Image	444
Task 210: Using the Freeze and Thaw Functions in Liquify	446
Task 211: Creating and Saving a Liquify Mesh	448
Task 212: Creating Patterns Using the Pattern Maker	450
Task 213: Using the Filter Gallery to Combine Filter Effects	452
Task 214: Replicate a Painterly Effect with an Artistic Filter	454
Task 215: Use a Blur Filter with a Blend Mode to Get a Sketch Effect	456
Task 216: Creating a Unique Blur Effect Using Zoom in the Radial Blur Filter	458
Task 217: Adding Stylish Texture to an Image with a Brush Strokes Filter	460
Task 218: Creating a Unique Photo Effect with the Glass Filter	462
Task 219: Using a Distortion Filter to Create an Edge Mask	464
Task 220: Creating a Displacement Map to Distort an Image	466
Task 221: Using a Noise Filter to Create a Pattern	468

Task 222: Generating and Manipulating Digital Clouds	470
Task 223: Illuminating Image Areas with Lighting Effects	472
Task 224: Applying a Specialized Lighting Effect Using a Texture Channel	474
Task 225: Adding an Unusual Color Effect Using the Plaster Filter	476
Task 226: Using the Fade Command on Filter Effects	478
Task 227: Setting Up an Additional Plug-ins Directory	480
<b>Part 15: Automations</b>	<b>483</b>
Task 228: Loading and Playing Preset Actions	484
Task 229: Creating an Action from Scratch for a Common Task	486
Task 230: Editing and Customizing Existing Actions	488
Task 231: Creating Droplets from Actions	490
Task 232: Using the Batch Command to Batch Process Files	492
Task 233: Creating and Organizing a Picture Package	494
Task 234: Creating a Contact Sheet for Cataloging Images	496
Task 235: Creating a Basic Web Photo Gallery	498
Task 236: Customizing Web Photo Gallery Styles	500
Task 237: Cropping and Straightening Photos Automatically	502
Task 238: Creating Seamless Panoramas with Photomerge	504
Task 239: Using Scripts	506
<b>Part 16: Print Essentials</b>	<b>509</b>
Task 240: Setting Printer and Page Setup Options	510
Task 241: Using the Print with Preview Command	512
Task 242: Printing Using Color Management	514
Task 243: Using the Proof Setups	516
Task 244: Identifying and Correcting Out-of-Gamut Colors	518
Task 245: Creating a Duotone Image	520
Task 246: Converting an Image to Halftone	522
Task 247: Adding a Spot Color Using a Spot Channel	524
<b>Part 17: For the Web: ImageReady</b>	<b>527</b>
Task 248: Optimizing GIFs for Web Use	528
Task 249: Optimizing JPEGs for Web Use	530
Task 250: Optimize PNGs for Web Use	532
Task 251: Exporting to SWF	534
Task 252: Using and Customizing the Preview in Browser Command	536
Task 253: Creating a Seamless Tiling Background	538

Task 254: Using Layer Styles to Design Matching Web Elements	540
Task 255: Working with the Object-Based User Interface	542
Task 256: Using the Web Page Template Action to Create a Basic Site Look	544
Task 257: Using ImageReady Tables	546
Task 258: Slicing an Image into Separate Parts with the Slice Tool	548
Task 259: Identifying Slice Characteristics, Moving, Resizing, and Locking Slices	550
Task 260: Selecting, Saving, Loading, and Deleting Slices	552
Task 261: Dividing, Combining, and Duplicating Slices	554
Task 262: Specifying Slice Background Color	556
Task 263: Assigning URLs to Slices	558
Task 264: Linking and Unlinking Slices	560
Task 265: Applying Different Optimizations to User Slices	562
Task 266: Creating a Layer-based Image Map	564
Task 267: Creating a Tool-Based Image Map	566
Task 268: Modifying Image Map Settings	568
Task 269: Creating a Rollover Effect	570
Task 270: Creating a Secondary Rollover Effect	572
Task 271: Constructing a Simple Animation	574
Task 272: Optimizing and Saving Animation Files	576
Task 273: Editing an Animation Action to Customize It	578
Task 274: Using an Animation in a Rollover	580
Task 275: Creating an Animation Using the Tweening Function	582
Index	585





# Introduction

**J**ust as the camera is no longer relegated to the elite or industry professionals, Photoshop is no longer considered the tool of graphic designers alone. Whether it is used to scan photographs, paint a landscape, apply effects to text, create Web pages, or alter images, the application enables all users to accomplish one common feat: to produce professional-quality images in virtually any digital format.

You may be surprised at how many people outside of the design industry are aware of and have even used Adobe Photoshop. The software application that is the industry standard for manipulating digital imagery is also the most commonly referred to when the topic comes up even among those who don't use Photoshop every day of their professional lives.

A salesman might say, "The folks in marketing are 'Photoshopping' a representation of what the final product will look like." Or, you might hear the host on *The Daily Show* say in reference to the story graphic for a news item, "that graphic of President Bush and Putin was badly Photoshopped. I apologize. The artists responsible for this outrage will be flogged." Or your relative might say "why did you Photoshop my head onto Mt. Rushmore?" Photoshop is a part of our culture as much as Xerox has come to mean photocopy.

However, because of its proliferation amongst such a large user base, Photoshop does different things for different users. And because most of the program's users employ the program for a specific purpose, what one user knows might not be helpful in solving another user's problem.

This book, then, is assembled to help all of Photoshop's diverse users quickly find answers to their specific challenges:

- How do I correct for red eye in my photographs? (Task 112 explains how.)
- How do I convert my document's color space? (Task 45 details the process.)
- How do I convert my photographs for Web display? (Task 235 shows the way.)

And these are only three questions this book addresses.

This book doesn't try to be an in-depth guide to using Photoshop to achieve a specific goal such as creating Web sites or publication graphics. Rather, this book serves as an indispensable reference, ready to provide you with quick-to-follow, easy-to-understand, step-by-step instructions to specific challenges culled from over 10 years of professional and instructional experience with Photoshop.

With over 250 common Photoshop challenges explained within 10 simple steps or less, you as the reader will have quick access to your problem's solution in a matter of minutes or seconds — whether you are scanning photographs for fun, correcting images professionally, or building a Web site for a nonprofit organization.

## How This Book Is Organized

This book is divided into 17 parts to organize the types of tasks you might want to accomplish. Within each part is a group of tasks; each task occupies a double-page spread in this book, meaning that you can find everything you need to complete a given task by holding the book open to two facing pages.

Beyond each task's numbered, straightforward instruction, the spreads are accompanied by tips, notes, cross-references, and cautions. These supplementary bits of information, while not integral to completing a task, can be used to enhance your understanding and mastery of a given challenge.

The book's parts are organized in a logical fashion. The initial chapters introduce you to the Photoshop CS interface, assisting new users with the application's environment. As you move through the book, the chapters build in terms of complexity based on the frequency of the operations for most users. More common tasks, such as selections and painting, are covered in the first quarter of the book, while more advanced tasks, such as automating your work flow and creating Web graphics, are in later parts of the book.

The book's parts are divided as follows:

### Part 1: Photoshop Basics

Setting the preferences, importing pictures from your scanner, and saving to different file formats. These are some of the items that you learn in this part to get you accustomed to Photoshop.

### Part 2: The Work Area

After learning the basics, it's time to get familiar with the tools and palettes in Photoshop. In this part you inspect the toolbox and numerous palettes and learn how to customize your workspace. While the image editing commands and palettes might seem a little overwhelming at first, this part will help get you comfortable with your Photoshop work space so you can say “revert to a previous state” with confidence.

### Part 3: Color Essentials

Unless you are trapped in time, like the 1980s, chances are you don't have a monochrome monitor that sports only green phosphorous. This part explains how to customize your color settings, calibrate your color monitor, and deal with the other important basics of color management.

### Part 4: Color Adjustments

Do you have an image showing a horse of a different color? This part introduces you to the many ways you can color correct your artwork in Photoshop CS.

## Part 5: Selections

For the most part, if you want to modify a photo or some other artwork in Photoshop CS, you first have to select it. Whether a simple rectangle or a complex, multipart freeform shape, selections can be made using a number of means. This part explains how to make, save, resize, rotate, and delete selections, as well as how to apply some simple modifications (such as a stroked edge).

## Part 6: Path Essentials

While not known as a vector-based imaging tool, Photoshop CS does have its fair share of path tools. These tools enable you to share paths with other programs like Adobe Illustrator to create clipping paths or geometric design elements.

## Part 7: Transformations

One of the more common uses of Photoshop CS is resizing and cropping a given image. Using any number of the application's transformations, you can not only resize and crop your images; you can twist, turn, bend and scale them before your eyes. This part shows you how.

## Part 8: Painting Essentials

Not all Photoshop users pick up the program to modify photographs. Using the application's painting tools, you can draw and paint with a variety of brushes, colors, and effects. This part details the different tools at your disposal, as well as how to modify them to achieve unique results.

## Part 9: Advanced Painting Techniques

In this part we get a little bit more advanced with Photoshop's painting options — from learning how to paint from history states to defining your own custom brushes. Once you mastered the tasks in this part, you might never pick up a real paintbrush again.

## Part 10: Channels and Masks

Channels and masks, too, contribute to Photoshop's reputation as a first-class digital imaging package. Masks enable you to hide certain parts of your image so you don't accidentally edit them, and channels enable you to store masks for later use. Mastery of these two features enables you to gain a greater degree of flexibility and creative control than you would have without making use of these features, and this part gives you the low-down on how to make the most of channels and masks.

## Part 11: Layer Essentials

When Photoshop 3 introduced layers, the design world went crazy. While layers might not induce you to perform euphoric jumps in the air, they will save you hours of time and make it much easier for you to modify your images. This part details how to create, organize, and modify content layers and layer sets.

## Part 12: Layer Styles and Shape Layers

Layer styles may be arguably one of the best time-saving additions Photoshop has ever seen. However, by enabling you to apply effects (such as drop shadow, bevel, and stroke effects) without stamping their results into your artwork, Photoshop not only saves you time, it also enables you to modify these effects on a selective basis without changing your original artwork. Also, using shape layers, you can create artwork that scales to any size while printing with crisp, sharp edges.

## Part 13: Type

You can not only use Photoshop to modify or improve your digital photographs, paintings, and layouts, you can also use it to treat typography. While allowing controls similar to most word processors, including a spell checker, Photoshop enables you to combine its other niceties, such as layer effects or path distortions, to live text. This part explains how to create and modify text in your artwork.

## Part 14: Filters

A filter provides an easy way to manipulate or create digital imaging effects and, out of the box, Photoshop comes with numerous sets of filter. From artistic to lighting effects, this part details how to make the most of these filters and filter effects.

## Part 15: Automations

Aside from the physical harm of repetitive stress injuries, replicating the same operations over and over can be downright mind-numbing. Photoshop provides a series of technologies that enable you to automate repetitive operations that you would perform on a single image or a set of images. This part fills you in on how to put Photoshop to work for you.

## Part 16: Print Essentials

When you are satisfied with the result of your work and deem your image perfect, you can share your art with friends and colleagues via e-mail, or you can print out a physical manifestation of your digital prowess. This part explains how to set up your printer and page setup options.

## Part 17: For the Web: ImageReady

ImageReady is Photoshop's companion application built for Web graphics optimization. Although we can't teach you how to create a Web site in 10 steps or less in this part, we sure can help you get started by detailing some key features of ImageReady that enable you to animate or optimize your images for Web display.

## Who Should Read this Book

Photoshop users are a diverse bunch. The only assured commonality they all share is that they use Photoshop on a computer; all else is open to the imagination and needs of the particular user. Because of this diversity, this book casts a wide net in determining its audience.

Beginners and intermediate users to Photoshop will likely gain the most benefit from this book. In many ways, this book is the excellent companion to Photoshop users who feel they have straightforward questions for which they want a straightforward, simple answer.

Although the book is designed more as a reference than a cover-to-cover read, newcomers to Photoshop will strongly benefit from reading Parts 1 and 2 in their entirety before moving on to specific areas of interest later in the book. Intermediate users should consider scanning the 17 different part titles to determine which aspects of Photoshop CS remain overlooked in their current experience; for example, automations, covered in Part 15, are a commonly ignored but incredibly powerful feature of Photoshop CS.

## Who Should Not Read This Book

If you are looking for a book devoted to special effects and techniques, this is not the book for you. This book is also not an indepth guide to using Photoshop to achieve more ambitious goals such as creating full-fledged Web sites or publication graphics. Our goal is to help you understand Photoshop and standard Photoshop techniques by giving you the necessary knowledge to find your way around this awesome application.

## Tools You Will Need

As mentioned earlier, there are two certainties that bind all Photoshop users: a personal computer and a copy of Adobe Photoshop. That's it.

For those with a personal computer but no copy of Photoshop, be sure to visit Adobe's Web site ([www.adobe.com](http://www.adobe.com)). With nearly every piece of software they release, Adobe releases a fully functional, free, 30-day trial version, and Photoshop CS is no exception. Although the file size and download time may be steep (upwards of 300 MB in some cases), the price can't be beat for the ability to learn the industry's mainstay application. When you're ready to buy the application outright after your demo version expires, visit DealNews ([www.dealnews.com](http://www.dealnews.com)) and search for Photoshop — chances are you'll find some deals that enable you to save a few hundred bucks of the street price of the software.

Lastly, to really gain the most benefit from this book, have a number of your own images on hand and ready to manipulate. While several tasks detail how to create certain artwork from a blank canvas, most tasks assume you have some digital artwork ready to open and modify. If you're new to the program and don't have any images to work with, there are a number of ways you can acquire imagery to work with.

First, you can visit this book's Web site to download nearly all of the images used as examples in this. While these images are free for you to experiment with, you cannot use them in your own published materials.

Second, you can use the Google image search site ([images.google.com](http://images.google.com)) to scan the Web for sample images you can work with following the instructions in this book. However, almost certainly you can not use the images you find for your own work without infringing on somebody else's copyright. Always check with the Web site from which you download images to see if they are in the public domain.

Last, but hardly least, you can go commercial. For some of the most beautiful stock photography images money can buy, visit LuckyPix ([www.luckypix.com](http://www.luckypix.com)). This stock house features an impressive lineup of conceptual imagery. You'll have to pay to use any of the images in any of your work (whether it is commercial or personal), but you can be certain that you'll be using amazing shots.

For a cheaper alternative, you can check out iStockPhoto ([www.istockphoto.com](http://www.istockphoto.com)) where designers and photographers pool their personal images into an amazing collection of 50-cent images. All the site's images are royalty-free, so once you've dropped your pocket change to download a photo, you can use the image for almost anything you might have in mind.

Additional software, such as plug-ins or companion applications, are also be listed on the web site. Although these software packages aren't covered in this book (nor are they necessary to complete any of the tasks), they can help you streamline the steps you have to perform to accomplish certain tasks.

## Icons

Each task includes several margin notes that provide additional information, tips, and caution.

### ***note***

Notes provide additional information or help in working with Photoshop.

### ***tip***

Tips point out an interesting idea or technique that will save you time, effort, money, or all three!

### ***caution***

Cautions are used to alert you to potential problems that you might run into when working with Photoshop.

### ***cross-reference***

Although this book is divided into tasks to make it easy to find exactly what you're looking for, few tasks don't rely on previously acquired skills. Cross-references point to other tasks in the book that are a prerequisite for or a compliment to the current task.

## What's on the Web Site

This book has a companion Web site that offers readers the following resources:

1. Images used in the book's examples.  
The book's examples, available for download as a Zip file, enable you to experiment with the artwork used to describe each task.
2. Links to other online Photoshop resources.  
There are a number of online communities and resources just a mouse click away. By having an up-to-date list of links, you can quickly find a community of Photoshop users using the application for similar purposes as yourself.
3. Downloads to enhance your Photoshop experience.  
Several actions and other accessories can extend how you use Photoshop. By grabbing these resources, you can quickly enhance your Photoshop experience.
4. List of companion and plug-in software.  
Adobe has incredibly strong support from other software developers working to increase Photoshop's capabilities and ease-of-use. The site contains links to each of the product's information pages.

## Summary

Having used Photoshop for over 10 years ourselves, we are often surprised at how many new tricks and tips there are to learn even yet today. With Photoshop CS, Adobe has introduced a new slew of helpful additions to the program, and likely some amusing “easter eggs” hidden behind some obscure key combination. Regardless of whether you are a newcomer to or old hand at Photoshop, you can benefit from having a trusted, easy-to-navigate reference book to answer both common and obscure questions. And what if a question of yours is not answered? By all means, please submit it via e-mail through the book's companion Web site. We'll assemble some of the best suggestions to include in any future editions of this title.

With that said, let's get to work!





# Part 1: Photoshop Basics

- Task 1: Setting File Handling Preferences
- Task 2: Recording Steps in the History Log
- Task 3: Setting Display and Cursor Preferences
- Task 4: Setting Transparency and Gamut Preferences
- Task 5: Setting Units and Rulers Preferences
- Task 6: Setting Guides, Grid, and Slices Preferences
- Task 7: Setting Plug-ins and Scratch Disk Preferences
- Task 8: Setting Memory and Image Cache Preferences
- Task 9: Navigating the HTML-Based Help System
- Task 10: Determining Necessary Options to Create a New Image File
- Task 11: Viewing Images with the File Browser
- Task 12: Organizing Thumbnails in the File Browser
- Task 13: Managing Folders and File Names from within the File Browser
- Task 14: Importing Digital Camera Images
- Task 15: Importing a PDF Image
- Task 16: Adding Notes to Image Files
- Task 17: Adding Audio Annotations to Image Files
- Task 18: Using the Save, Save As, and Save for Web Options
- Task 19: Utilizing the PSD Format to Keep Layers and Effects Intact

## Task

## 1

## Setting File Handling Preferences

**H**ow you handle your images after importing them into Photoshop is almost as important as creating the images themselves. In this set of preferences, you can specify how you want Photoshop to manage image previews, file extensions, and workgroup functionality. You can also set file compatibility and the number of files that should be displayed in the list of recent files on the File menu.

### notes

- A file saved as TIFF can be larger than 30,000 by 30,000 pixels but is limited to a 4GB file size. The Large Document Format has no file size limit.
- The options for maximizing compatibility and adding image previews with the image file increase the overall file size compared to not leaving them on. Be sure to determine what features you need if file size becomes a concern.

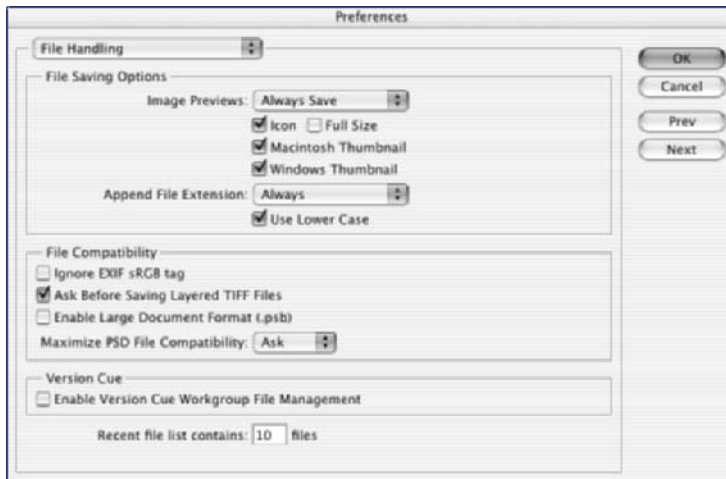
1. If you are a Macintosh user, go to the Photoshop menu and select Preferences ⇨ File Handling (see Figure 1-1). If you are a Windows user, choose Edit ⇨ Preferences and select File Handling.



**Figure 1-1:** Accessing the File Handling dialog box on Mac OS

2. In the File Preferences dialog box, as seen in Figure 1-2, the first set of preferences under File Saving Options concerns image previews. Image previews are small snapshots of the overall image. These images are referred to as thumbnails and allow for easier management of your files. You can set the image preview preference to Always Save, Never Save, and Ask When Saving.
3. The Macintosh version of Photoshop CS also enables you to select Icon, Full Size, Macintosh, and Windows Thumbnails. Select the Icon checkbox and the program displays the thumbnail as its file icon on the desktop. If you check Full Size, then the program saves a 72 points per inch (ppi) version of the file for use in other software applications that support low-resolution Photoshop images for quicker workflow. If you select Macintosh Thumbnail, you get a preview of the image in an Open dialog box; likewise the Windows Thumbnail option saves a preview for Windows operating systems.
4. The set of preferences under File Saving Options controls whether the program appends file extensions when saving files. A file extension consists of three (or four) letters preceded by a period at the end of a file name. While not needed for Macintosh operating systems, file extensions help Windows systems determine what kind of application is needed to open the file.

5. If you want Photoshop to ignore the EXIF sRGB tag when you import images from your digital camera, select the Ignore EXIF sRGB Tag checkbox under File Compatibility. The EXIF file provides information that comes from your digital camera and helps programs like Photoshop determine the color space for the digital photos.



**Figure 1-2:** The File Handling preferences dialog box

6. To be reminded about saving a TIFF file with layers, check Ask Before Saving Layered TIFF Files under File Compatibility. In order to share TIFF files with clients or colleagues working on different platforms, who might not have Photoshop, you would want to make sure not to send a TIFF file with layers.
7. If you work with large digital images, you might want to select the Enable Large Document Format checkbox. The Photoshop file format (.psd) is constrained to 30,000 by 30,000 pixels, whereas the Large Document Format (with the extension .psb) supports images larger than 30,000 pixels.
8. To ensure greater backwards compatibility for your files with older versions of Photoshop, check Always Maximize Compatibility for Photoshop (PSD) Files.
9. To turn on workgroup functionality, select Enable Version Cue Workgroup File Management.
10. The bottom part of the File Handling preferences dialog box enables you to specify how many files are listed in the file menu when you select File ⇨ Open Recent.

## Task 1

### tip

- While Macintosh systems don't require a file extension to handle files, in order to exchange files between Macintosh and Windows operating systems you will need to append the file extension to the file name.

### cross-reference

- You will not see thumbnails on just the desktop or Open dialog box. You will also see them in the File Browser, a new feature in Photoshop 7. Task 11 details how the File Browser handles images.

## Task

## 2

*note*

- Having a history log saved with your image can inflate the file size. The more you manipulate an image, the more actions get recorded.

## Recording Steps in the History Log

There are so many options in Photoshop, you might get carried away and forget what you did when you try to recreate an effect. Or you might need to make notes of how to recreate a certain effect in Photoshop for your coworkers so they can do it on their own (and stop pestering you for once). Photoshop CS enables you to keep a log of all your digital imaging movements. You can manage your history log options in the General preferences dialog box.

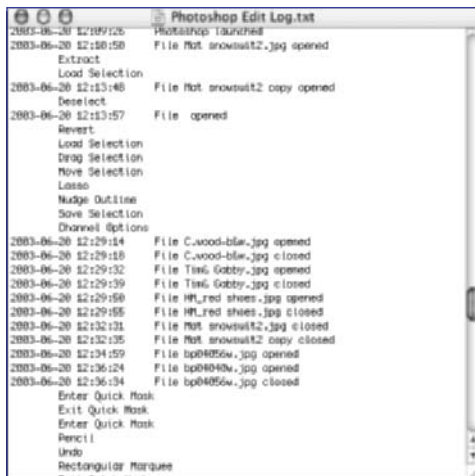
1. If you are a Macintosh user, select Photoshop ⇨ Preferences ⇨ General. If you are a Windows user, select Edit ⇨ Preferences ⇨ General.
2. To keep track of the steps you take in Photoshop CS, select the History Log checkbox (see Figure 2-1).



**Figure 2-1:** Turning on the History Log option

3. Click the Metadata option if you want to save the history log information with the file you are working on.
4. If you want to save the information to a separate text file, select the Text File option. Figure 2-2 shows an example of a history log.

5. To determine the location of the history log text file, click the Choose button to bring up the Save dialog box. Select a location where you want to store the text file and then click Save.
6. If you want the history log to be saved both as metadata and as a separate text file, select Both.
7. To specify the level detail stored in the history log, select Sessions Only, Concise, or Detailed in the Edit Log Items list box.



**Figure 2-2:** An excerpt from the history log text file set to Concise

8. When you are done, click OK to close the Preferences dialog box.

## Task 2

### tip

- Using the Detailed history log item is a good way to keep notes on how certain effects are created. Instead of writing out instructions by hand, you can have Photoshop write them to a separate text file. Then cut and paste the steps and email them to your Photoshop friends.

### cross-reference

- To learn more about keeping track of information associating with your digital images, check out Task 17 for attaching notes and audio annotations.

## Task

## 3

## Setting Display and Cursor Preferences

Icons are all over Photoshop. They enable you to quickly pick and choose from a wide array of editing options. In the Display & Cursor preferences dialog box you can choose whether to show channels in color, double the pixels of your images, or use dithering. You can also specify what icons you would like to see while editing an image.

### notes

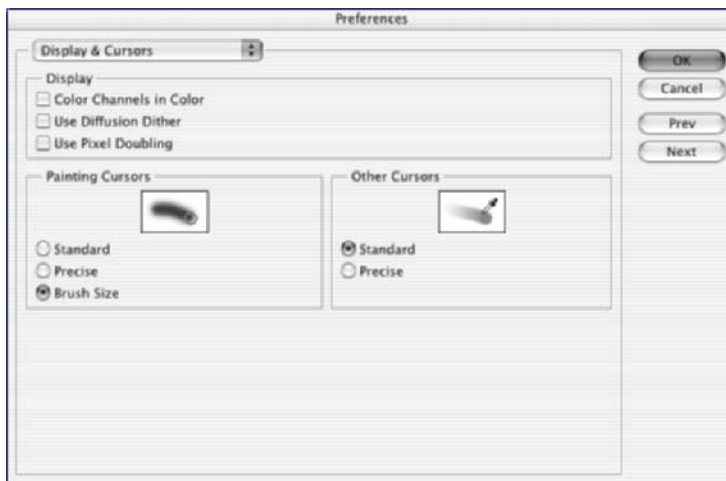
- The only real benefit of changing the channels to reflect the color is that it might help you realize which channel you are operating in. However, keeping the channels set to grayscale enables you to see the tone of the color more easily: White areas represent portions of the image where the color is at full opacity and the area where it is black is the absence of that color.
- The only time you might need to select Use Diffusion Dither is when you have a cheap video card on your system or an old laptop. Hopefully that will never happen to be you.
- While pixel doubling does speed up the preview of an image, it might not be to everyone's liking due to the jarring effect of having part of your image blurred out. Most computers powerful enough to run Photoshop will have enough processing power to render the file nicely.

1. For Macintosh users, go to the Photoshop menu and select Preferences ⇨ Display & Cursors (see Figure 3-1). For Windows users, select Edit ⇨ Preferences and select Display & Cursors. If you are in the dialog box from the previous task, you may select Display & Cursors from the drop-down menu at the top of the dialog box.



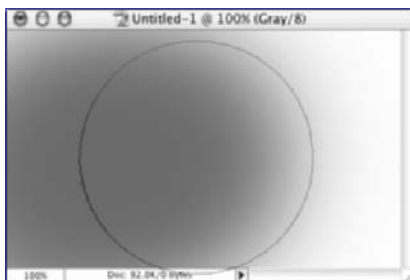
**Figure 3-1:** Accessing the Display & Cursor preferences dialog box

2. In the Display and Cursor preferences dialog box (see Figure 3-2), under Display, you can colorize each channel component. To have a channel reflect the color it represents, select Color Channels in Color, instead of the default grayscale representation in the color channels.
3. If you want to dither colors that your video card cannot render properly, select Use Diffusion Dither. Diffusion dithering is a method to position multicolored pixels in a scattering effect so as to simulate colors.
4. To speed up preview modes or command tools, select Use Pixel Doubling. The image resolution is halved by doubling the pixels, giving the image a temporary blurry effect that lasts until the preview mode or commands are finished.



**Figure 3-2:** The Display & Cursor preferences dialog box

5. Under Painting Cursors you can specify the type of cursor Photoshop displays when you are using the painting tools. These tools include the brush, pencil, art sprayer, color replacement brush, history and art history brushes, eraser, healing brush, rubber stamp, pattern stamp, smudge, blur, sharpen, dodge, burn, and sponge tools. You have three options: Standard, which uses the icon of the current painting tool; Precise, which resembles a crosshair with a small target pixel at its center; and Brush Size, which indicates the size of the brush currently selected as shown in Figure 3-3.



**Figure 3-3:** The paintbrush set at 100 pixels overlaps the image window. In this predicament, you should resize the window and continue painting.

6. Under Other Cursors you have two options: Standard and Precise. This option controls cursor appearance for the nonpainting tools, which include the marquee, lasso, polygon lasso, magic wand, crop, slice, patch, eyedropper, pen, line, paint bucket, gradient, magnetic lasso, magnetic pen, measure, and color sampler tools.

## Task

# 3

### tips

- Select the Brush Size as your painting cursor. The outline you get when painting provides a visual indicator of the brush size you are using. The other brush sizes do not give you this kind of helpful clue, which may come in handy if you accidentally pick a 400-pixel-sized brush.
- While using a tool in Photoshop, press Caps Lock and the precise cursor appears. Press Caps Lock again and the tool icon pops back.

### cross-reference

- Having the right cursor at the right time in production work can make digital imaging go faster. If you want to see how shortcut keys can make your work go faster, check out Task 21.



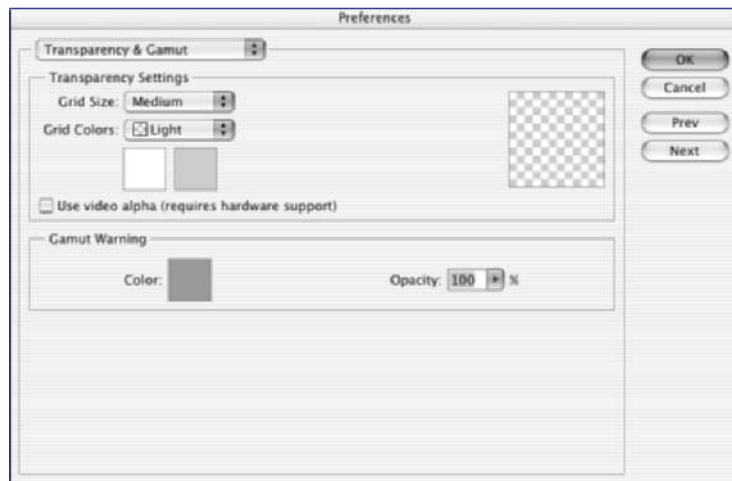
## Task

## 4

## Setting Transparency and Gamut Preferences

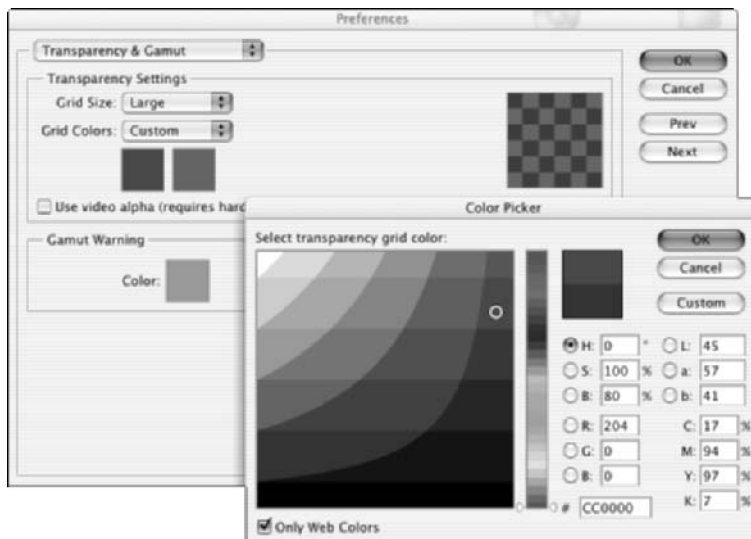
The grid has become somewhat of a culture icon to many Photoshop users. It's been a part of Photoshop for a long, long time to help users determine the level of transparency in their images. But now you get the chance to modify the appearance of this checkerboard-like grid to your own individual tastes. In the Transparency & Gamut preferences dialog box, you not only get to define the color for the out-of-gamut warning, but also customize the size of the classic Photoshop grid.

1. To bring up the Transparency and Gamut preferences dialog box on the Macintosh platform, go to the Photoshop menu and select Preferences ⇨ Transparency & Gamut. On the Windows platform, select Edit ⇨ Preferences and select Transparency & Gamut. If you are in the dialog box from the previous task, select Transparency & Gamut from the dropdown menu at the top of the dialog box.
2. To adjust the size of the checkerboard pattern, select Small, Medium, or Large from the Grid Size drop-down menu under Transparency Settings (see Figure 4-1). If you don't want to see a checkerboard pattern, select None. You will see a preview of the grid in the preview square that's off to the right under Transparency Settings.



**Figure 4-1:** The Transparency & Gamut dialog box

3. The Grid Colors dropdown menu enables you to pick from a predetermined set of colors and shades for the checkerboard grid pattern. Your preset options are categorized in two groups: shades and colors. The first group includes Light, Medium, and Dark options. The color options include Red, Orange, Green, Blue, and Purple colors.
4. To create a custom-colored checkerboard pattern for the grid, select Custom from the Grid Colors drop-down menu.
5. Click the swatch colors below the Grid Colors drop-down menu to bring up the Color Picker dialog box as shown in Figure 4-2. Pick the colors you want and then press OK. The colors you picked are displayed in the preview square.



**Figure 4-2:** Choosing a color for the Photoshop grid

6. If your graphics card supports the overlay of images on top of a live video signal and you want to make use of this feature, select the Use Video Alpha checkbox.
7. To change the color that's used to indicate a gamut warning, click the Color swatch under Gamut Warning. This brings up the Color Picker dialog box. Pick the color you want and then click OK.
8. To adjust the opacity of the gamut warning color, enter a percentage in the Opacity text field or click the triangle and adjust the slider.

## Task 4

### tips

- If you don't like the default sizes for the Photoshop grid, or if the image you are working on uses whites and grays and it's hard to tell what's transparent from the image, adjust the grid to your tastes.
- Changing the gamut color is always a good idea if you can't readily discern the warning color from a color in your work.

### cross-reference

- To learn more about out-of-gamut warning, check out Task 46 about proofing colors.

## Task

## 5

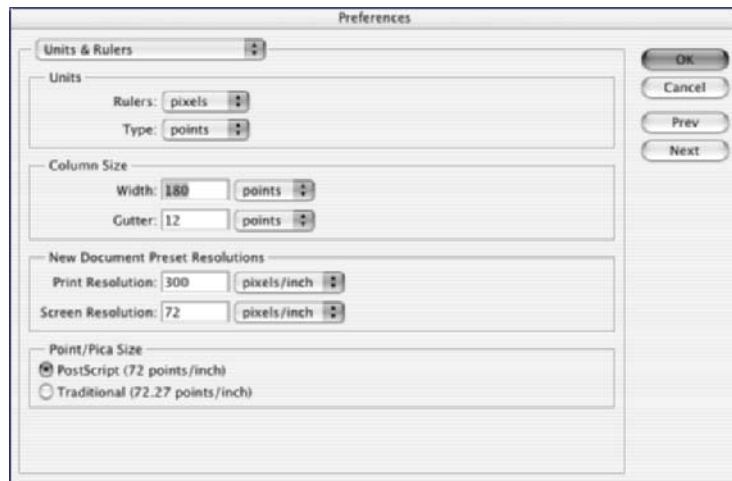
**notes**

- It's recommended that you use pixels for the rulers and points for type.
- Leaving the default print resolution at 300 ppi is acceptable, but check with your printer or client to ensure you are designing for the correct dimensions. You don't want to change measurements during the middle of a project and realize you need to start over.

## Setting Units and Rulers Preferences

The old builder's adage “measure twice; cut once” holds just as true in digital imaging as it does in woodworking. If you don't measure your images carefully in the correct units, you might end up with an image that is too small or too large for your purposes. In the Units & Rulers preferences you can choose your units for rulers, column sizes, resolutions, as well as the point or pica sizes.

1. If you are a Macintosh user, go to the Photoshop menu and select Preferences ⇨ Units & Rulers to open the Units & Rulers Preferences dialog box. If you are working on the Windows platform, choose Edit ⇨ Preferences and select Units & Rulers. If you are in the dialog box from the previous task, select Units & Rulers from the drop-down menu at the top of the dialog box.
2. In the Units & Rulers preferences dialog box (see Figure 5-1), under Units, you can select several units for Rulers: pixels, inches, cm (centimeters), mm (millimeters), points, picas, or percent.



**Figure 5-1:** The Units & Rulers preferences dialog box

3. Under Units , you can select the units for Type: pixels, points, or mm. A pixel is on grid unit on a computer screen. One point is equal to  $\frac{1}{72}$  inch and 25.4 millimeters (mm) is one inch.
4. Under Column Size, you can specify the Width and Gutter measurements for placing images into a desktop publishing program. These settings enable you to precisely place an image in a set number of columns.
5. The print and screen resolutions are set under New Document Preset Resolutions. When you are creating a new image, Photoshop presents the values you place here as editable settings before creating the image. These values can be set in pixels per inch or pixels per centimeter.
6. Under Point/Pica Size you find two options: PostScript and Traditional. PostScript sets picas at a value of 72 pixels per inch (ppi), whereas Traditional places the value at 72.27 ppi.
7. Another way to change units is in the Info palette, which also changes the preference setting. To change the units through this alternative method, select Windows ⇨ Info to open the Info palette.
8. Click the crosshairs in the lower lefthand corner of the Info palette. Select the units you want from the drop-down menu with the available units will appear as shown in Figure 5-2.

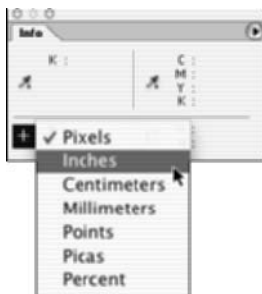


Figure 5-2: The units available from the Info palette

## Task

# 5

### tips

- To access the Units & Rulers preferences while working on an image, press Ctrl+R to show the rulers and then double-click a ruler.
- Since Photoshop uses PostScript and creates digital files, it's best to stick with the PostScript option under Point/Pica Size.

### cross-reference

- To see how to measure distance and angles in images, see Task 25.

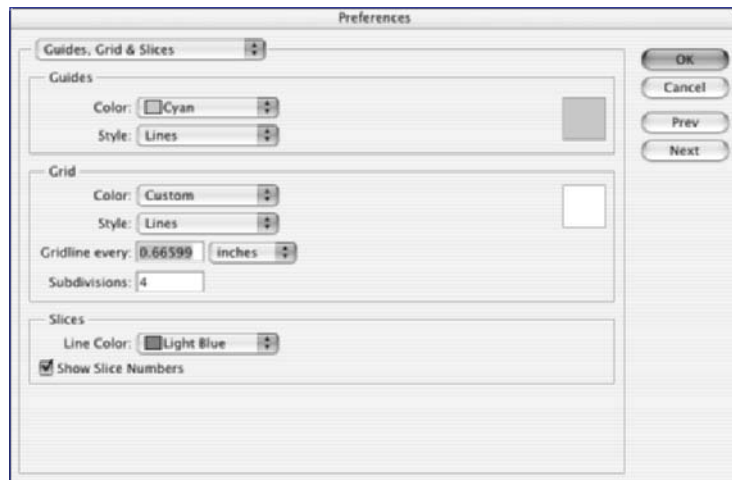
## Task

## 6

## Setting Guides, Grid, and Slices Preferences

The default color for guides and slices in Photoshop is light blue. When you are working on an image that contains the color blue or if you just don't like the default color, you can change the color of these helpful guides, grids, and slices to a more suitable color using the Guides, Grid & Slices preferences dialog box.

1. If you are a Macintosh user, go to the Photoshop menu and select Preferences ⇨ Guides, Grid & Slices to bring up this dialog box. As a Windows user, select Edit ⇨ Preferences and select Guides, Grid & Slices. If you are in the dialog box from the previous task, select Guides, Grid & Slices from the dropdown menu at the top of the dialog box. See Figure 6-1.



**Figure 6-1:** The Guides, Grid & Slices preference dialog box

2. To change the color of the guides, select from a predetermined list of colors in the drop-down menu or select Custom to pick your own color. If you select Custom, Photoshop's color picker pops up. Select the color you want and then press OK. The default guide color is light blue.
3. You can choose among two styles for guides: Lines (default) and Dashed Lines.
4. To change the color settings of the grid, you can select a color to your liking from a pre-determined list of colors in the drop-down menu or pick your own color by selecting Custom. If you select Custom, you'll get Photoshop's color picker (see Figure 6-2), which enables you to select the color you want. Press OK when finished.
5. You can choose from three styles for the lines: Lines (default), Dashed Lines, and Dots (see Figure 6-3).



Figure 6-2: Selecting a custom color for guides

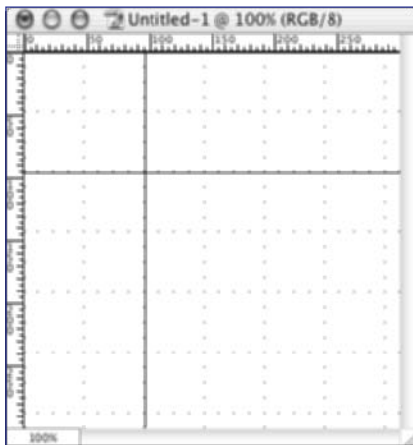


Figure 6-3: An example of a grid set to dots with two guides

6. If you want, you can change the intervals of the gridline. A gridline can be placed at any number of units per pixels, inches, cm (centimeters), mm (millimeters), points, picas, or percent. You can also select the number of subdivision lines that occur in between each gridline.
7. You can change the line color for slices, but only to a set of nine colors. The default color is, once again, light blue.
8. When you create slices with the Slice tool, they are automatically numbered starting with the first slice at the top left corner of the image. If you select Show Slice Numbers under Slices you can make those numbers visible.

## Task 6

### tips

- You might want to change the default colors for the slices and guides to a color that stands out more against image-rich designs. Try neon green (R: 153, G: 255, B: 0), or any other neon color.
- Keeping numbers on the slices is helpful for a couple of reasons. It helps in the automatic numbering of file names when creating Web-ready graphics out of the Slices. It also makes it easier to update only a slice of an image rather than having to rename the images all over again.

### cross-reference

- Guides are created after clicking rulers in an image area and dragging them into view. To learn more about rulers, see Task 26.

## Task

## 7

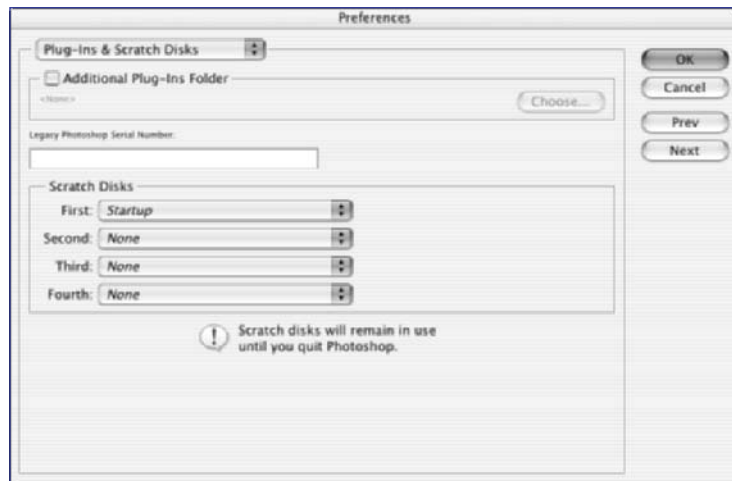
## Setting Plug-ins and Scratch Disk Preferences

**note**

- Photoshop continues to use scratch disks until you quit the program.

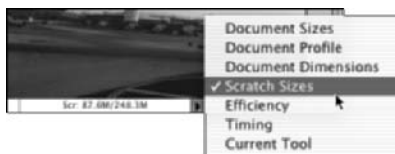
You might think that, out of the box and properly installed, Photoshop is ready to go. If you have extra plug-ins or extra hard disk space, it's not. While Photoshop is great at handling memory to furnish your digital imaging requests, it doesn't know the location of third-party plug-ins and where to find that extra hard disk space. Before opening up that next image, specify both of those items in the Plug-ins & Scratch Disk preferences dialog box.

- As a Macintosh user, you can open the Plug-ins & Scratch Disk preferences dialog box, shown in Figure 7-1, by going to the Photoshop menu and selecting Preferences ⇨ Plug-Ins & Scratch Disks. As a Windows user, choose Edit ⇨ Preferences and select Plug-Ins & Scratch Disks. If you are in the dialog box from the previous task, select Plug-Ins & Scratch Disks from the drop-down menu at the top of the dialog box.



**Figure 7-1:** The Plug-Ins & Scratch Disks preferences dialog box

2. To set an Additional Plug-Ins folder, first select the option next to the Additional Plug-Ins Folder heading. This opens a dialog box where you can locate and select the plug-ins folder.
3. After you have selected the folder, you need to restart Photoshop in order to use the new plug-ins.
4. If you have third-party plug-ins that work only with a previous version of Photoshop (versions 6 or earlier), you can enter its serial number in the Legacy Photoshop Serial Number input field.
5. You can assign up to four scratch disks. A scratch disk is a form of virtual memory Photoshop can use if your system doesn't have enough RAM to accomplish a given task. By default, Photoshop uses the hard drive or partition that the operating system is on as the primary scratch disk, which can be any drive or portion of a drive with free memory. You can assign up to 200 GB of scratch disk space on a given hard disk or partition; the more scratch disk space you assign to Photoshop, the better the system performs when handling your large image files. Again, you have to restart Photoshop in order for the new scratch disk settings to be active.
6. While editing an image, you can find out how much RAM is being used by the scratch disk in the status bar at the bottom of the image window. First click the triangle in the status bar.
7. Select Scratch Sizes and you will see two numbers on the status bar, after shorthand for Scratch Sizes, Scr (see Figure 7-2): The first number is the amount of RAM Photoshop currently uses to handle the image; the second number is the total amount of RAM available to Photoshop.



**Figure 7-2:** The status bar drop-down menu and the two Scratch Size values

## Task

# 7

### tips

- Scratch disks should only be on a local drive; they should not be accessed over a network.
- For best performance, select a large and defragmented drive or partition for your scratch disk. Also, large scratch disks should not be on the same drive as the images you are working on.

### cross-reference

- Setting plug-ins and scratch disk preferences provides greater control and flexibility in your work environment. Of course, having more memory and a larger image cache doesn't hurt either. For more information on memory and image cache, see Task 8.



## Task

## 8

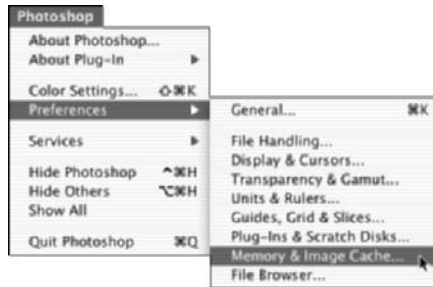
## Setting Memory and Image Cache Preferences

### note

- Setting Memory Usage to 100% is not really 100% if you slide the maximum RAM amount to be used by Photoshop to 100% in the Windows operating system. This occurs because the Windows operating system needs RAM as well in order to operate.

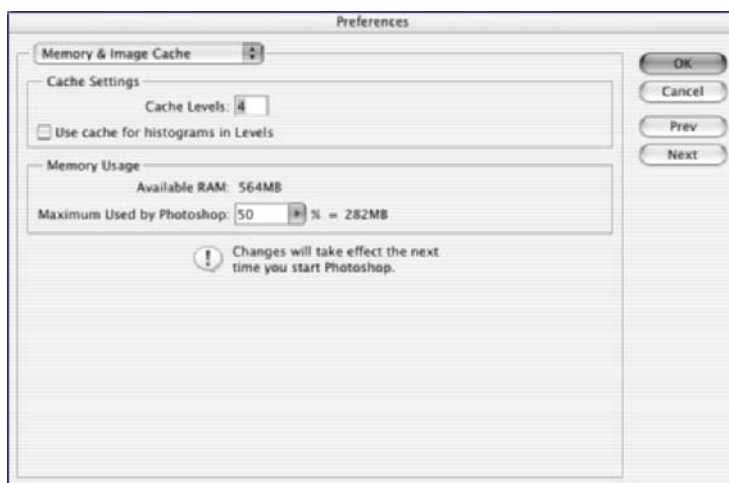
To help Photoshop perform better, it's always good to give it some fine-tuning from time to time. The image cache allows Photoshop to increase rendering times of frequently seen areas of an image. In the Memory & Image Cache preferences dialog box, you can set the right balance between speed and performance.

1. If you are a Macintosh user, go to the Photoshop menu and select Preferences ⇨ Memory & Image Cache (see Figure 8-1). As a Windows user, choose Edit ⇨ Preferences and select Memory & Image Cache. If you are in the dialog box from the previous task, you may select Memory & Image Cache from the drop-down menu at the top of the dialog box.



**Figure 8-1:** Accessing the Memory & Image Cache dialog box

2. The image cache enables Photoshop to increase screen redraw speeds during the editing process by caching, or storing in memory, previews of an image at various zoom levels. As you zoom in or out on the image during editing, it can then pull up the new redraw from the cache rather than reading it from your hard drive. To change the cache settings, enter an integer between 1 and 8 in the Cache Levels text box under Cache Settings (see Figure 8-2). The lower the cache level, the slower the image window redraws.



**Figure 8-2:** The Memory & Image Cache dialog box

3. To set a good balance of speed and quicker rendering for Cache Level, stick with the default value, which appears to offer a solid balance of speed and quicker rendering. Setting the cache to a value of 1 disables it — you wouldn't want to set it that low unless you always work at 100 percent magnification. Setting the cache at its highest setting of 8 causes it to store more preview sizes and would probably not be necessary unless you are working on an extremely large file.
4. Select Use Cache for Image Histograms if you want Photoshop to display histograms faster; however histograms are based on a *sampling* of pixels and not *all* of the pixels.
5. Under Memory Usage you can specify the percentage of maximum RAM to be used by Photoshop. However, you should never allocate more than 90% to Photoshop, or you will probably cause your system to crash.
6. Leave the maximum memory used by Photoshop setting at the default 50% at first. While working on images, you can check the Efficiency setting in the status bar from time to time. If you see it dropping below 100%, you can increase the allocation of memory to Photoshop incrementally until it goes back to 100%.
7. After resetting the memory allocation, you'll need to restart Photoshop in order for the new settings to be active.

## Task

# 8

### tip

- It's always a good idea to buy as much RAM as possible for your computer system. The more RAM you have the better Photoshop (and your other applications) run, and the faster you are finished with your work.

### cross-reference

- Allocating more scratch disks also helps increase response times from Photoshop. For more information on Scratch Disks, see Task 7.

## Task

## 9

## Navigating the HTML-Based Help System

### note

- In order to view the Help System, you need to have Netscape Navigator 4.75 (or higher) or Microsoft Internet Explorer 5.0 (or higher) installed with JavaScript enabled.

Sometimes we all need a little help to get us through the lonely, confusing times. And with so many options in Photoshop, we can get lonely and confused more often than we would like. Photoshop comes with an extensive Help System written in HTML, the markup language commonly used to create Web pages.

So, when in doubt, launch your browser and surf the Help pages until you find your answer.

- To access the HTML-based Help System select Help ⇨ Photoshop Help. You will notice the Help System, as shown in Figure 9-1, is divided into two areas. In the left frame is the main navigation area and on the right is the content area. There are five text links at the top of the navigation area: Using Help, Contents, Index, Site Map and Search.



Figure 9-1: The initial display of the Help System

- If you need help in navigating the content of the Help System, click Using Help to show a series of links in the content area that you can click for more information on using the various Help System features.
- Select Contents for a series of links that enable you to access the contents of the Help System chapter by chapter.

4. Select Index to view the index of the entire Help System. You can scan the Help index much as you would scan the index of this book, looking for keywords.
5. Click Site Map in order to view all topics in the Help System and all entries in the Index.
6. To search the Help System insert the keywords into the input field and click Submit. The results from the search are listed below the search form, as shown in Figure 9-2. Click a link to open the page with the information you want in the content window on the righthand side.

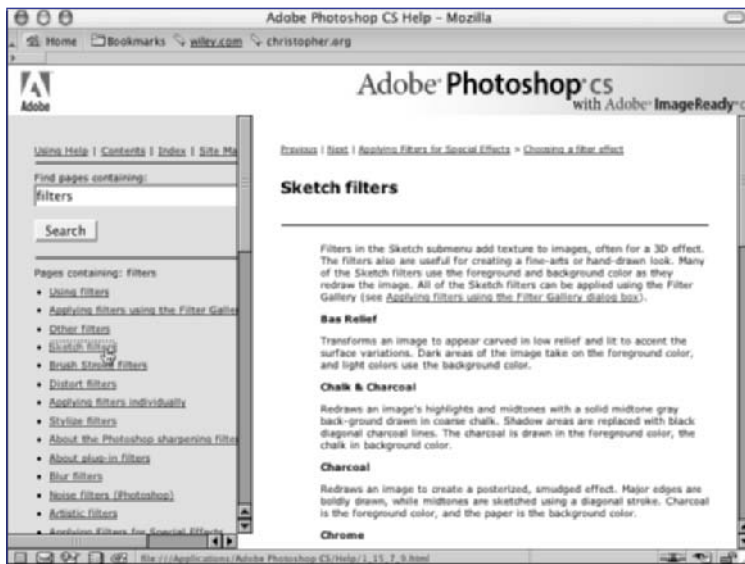


Figure 9-2: Search results listed below the Help search form

7. In order to navigate within the content window, use the Previous and Next text links at the top and bottom of the content area to return to the previous page or advance to the next page of the help content.
8. Users who are new to Photoshop might appreciate the Tutorials, Tips and Tricks, Color Management Setup and What's New Information links on the Welcome Screen. By default, the Welcome Screen is displayed when you first start Photoshop (unless you haven't checked the "Show this dialog at Startup" checkbox). You can also access this screen any time during your current session by selecting Help ⇨ Welcome Screen.

## Task

# 9

### tip

- The JavaScript powered Search in the Help System is somewhat slow. In order to speed things up, you might want to forget about the Search and click Index or Site Map. When the page appears in the navigation window, click in the window, and then use the browser's Find command to search for text on the current page. If the browser finds the text, it scrolls the Site Map to locate the text you want. You can then click a link to display the topic.

### cross-reference

- The HTML-based Help System is definitely a life-saver when figuring out the nuances of a large software application like Photoshop. To help other people work on your images, it's best to leave a note about key points. In Task 17, you can learn how to leave a text and audio note.

# Task 10

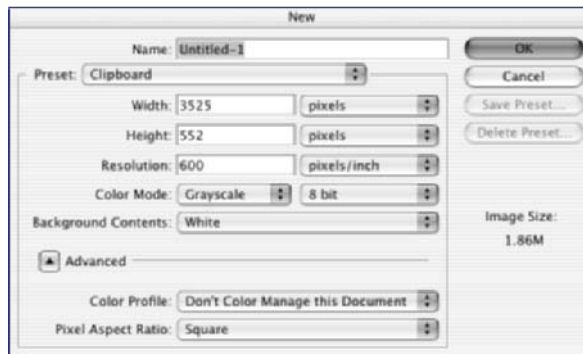
## note

- For Windows operating system users, if you want to match the width and height of the new image to that of any open image, first go to File ⇨ New, then click on Window ⇨ Documents and choose the file you want from the open documents menu list.

## Determining Necessary Options to Create a New Image File

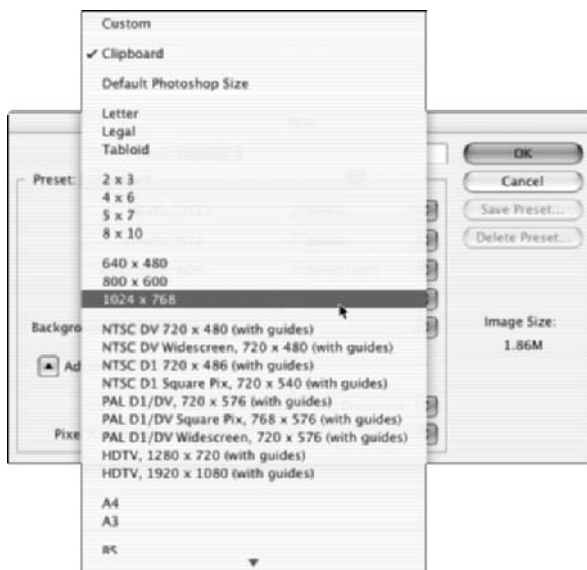
The File ⇨ New command is where you set up your digital canvas. How you set your preferences determines not only the basic size of the image, but also in which medium your image can be displayed. While you can always open a new file and change the settings, make sure to set them properly for the intended use of your image.

1. To create a new file, choose File ⇨ New. This command brings up the New image dialog box where you can specify the desired settings. By default, the settings are based on the image dimensions and resolution contained in the Clipboard. If the Clipboard does not contain image data, the image dimensions and resolution are based on the last image that was created.
2. The first choice offered is an input field where you can enter a name for the image (see Figure 10-1). If you choose not to name your image, Photoshop will still create the new image and use the default title in its place instead.



**Figure 10-1:** The New File dialog box

3. You can enter a custom size using the Width and Height input fields, and set the Resolution to a value of either pixels per inch or pixels per centimeter. You can also select the size of the image by choosing from a list of preset sizes, which includes commonly used settings for paper sizes, desktop and Web design sizes, and so on, as shown in Figure 10-2.



**Figure 10-2:** The preset sizes available in the New File dialog box

4. Select the type of Color Mode for your image from the drop-down menu. The list of choices includes Bitmap, Grayscale, RGB Color, CMYK Color, and Lab Color. Along with the Color Mode, you can also set the Color Depth for the image: 1, 8, or 16 bit.
5. To choose a color for the background layer of an image, select the color you want from the Background Contents list box. The White option fills the background or first layer with white, the default background color. Select the Background Color option to fill the background or first layer with the current background color. The Transparent option makes the first layer transparent, with no color values.
6. If the options for the Advanced settings are not available for a new document, click the triangle button in front of the Advanced heading at the bottom of the dialog box.
7. You can specify a color profile for the new document by selecting a profile from the Color Profile drop-down menu.
8. If you want to change the aspect ratio of pixels for video output, select an option from the Pixel Aspect Ratio drop-down menu. If you deal mostly with print or the Web, you will want to stick with Square as your selection.

## Task 10

### *tip*

- To create a new image based on the default dimensions and resolution, or the last entered setting, hold down Alt (Windows) or Option (Mac OS) when you choose File ⇨ New.

### *cross-reference*

- In order to work from scratch in Photoshop, you need to set up your new image settings correctly. Also make sure your monitor is calibrated for optimum display. See Tasks 37 and 38 for more information.

# Task 11

## notes

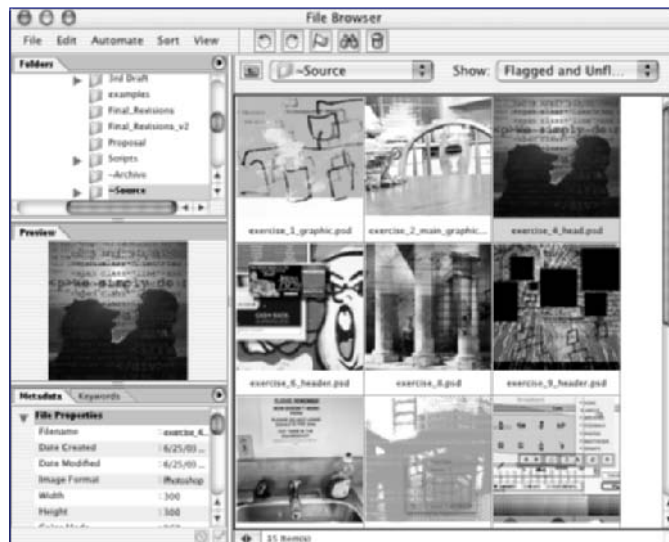
- If you want to look at a whole bunch of images in the File Browser folder, click the two arrows at the bottom left of the thumbnails. Clicking this icon hides the left column, making room for more thumbnails. Also, pressing Tab hides Photoshop menus, giving you more space to stretch the File Browser window and view more thumbnails on the screen.
- You can rotate an image in 90-degree intervals with the help of the File Browser. Click the Rotate buttons at the top of the File Browser; next, select how many degrees you want to turn the image and in what direction, and Photoshop will perform the rotations the next time the image is opened.
- In the File Browser Preferences dialog box, you can fine-tune the options to the settings that work best for you and your system. For example, if you have a lowend machine, you might want to instruct the File Browser not to process files larger than 25 MB and create smaller thumbnail sizes.

## Viewing Images with the File Browser

**K**eeping track of all the images on your hard drive can be a daunting task. Even if you take care to label each file name and tuck each file away into its proper folder as best you can, chances are you will still wind up with a lot of images that need to be sorted. And what if you are great at organization, but don't know which image is best for a particular project? Finding the image you want to work with on your hard drive can be a daunting task as well.

Photoshop 7 introduced the File Browser feature, and Photoshop CS supports more features. With great ease you can scan the thumbnails of your images on your hard drive until you've found just the image you are looking for.

1. To open the File Browser, select File ⇨ Browse or Window ⇨ File Browser.
2. By default, the File Browser is displayed in the palette well. To display the File Browser in a separate window, as shown in Figure 11-1, choose Show in Separate Window from the palette menu.



**Figure 11-1:** The File Browser in a stand-alone window

3. In the Folders tab, you can navigate the hard drive looking for folders with images. To view or hide a folder's contents, double-click the folder name.
4. On top of the thumbnails is a folder icon and drop-down menu that you can use to scan for folders in a linear fashion up and down the folder tree on your hard drive.
5. To move up one folder from your current location in the folder hierarchy, click the folder icon to the left of the drop-down menu located above the thumbnails.
6. When an image is selected, you can review the image and stored metadata (information about the image itself) in the lower lefthand corner of the File Browser.
7. You can edit certain preferences for the File Browser including the option to create custom-sized thumbnails and high-quality preview images. To bring up the File Browser Preferences dialog box (see Figure 11-2), go to the Photoshop menu and select Preferences ⇨ File Browser (Mac OS) or Edit ⇨ Preferences ⇨ File Browser (Windows).



**Figure 11-2:** The File Browser preferences dialog box

## Task 11

### tip

- To quickly bring up the File Browser, you can use the keyboard shortcut (Mac) Command+Shift+O or (Windows) Ctrl+Shift+O. (That's the letter "o", not the number zero.)

### cross-reference

- For more information on using palettes in the Palette Well, see Task #23.



## Task

## 12

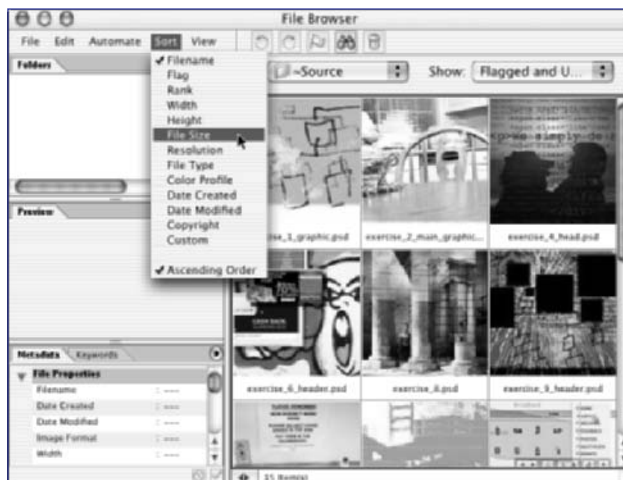
## Organizing Thumbnails in the File Browser

In addition to browsing images based on thumbnails, you can also sort the images based on a number of criteria. You can even rank the image based on a letter scale of A through E. This sorting method takes browsing images to a whole new level.

### note

- Photoshop stores thumbnail and file information in a cache in order to speed up loading times when you've visited a folder you've seen before. If you need to delete, or purge, the cache and free disk space, click File on the browser's toolbar and choose Purge Cache. However, be warned that purging the cache deletes ranking and thumbnail information.

- In order to change the display of files, click View on the File Browser's menu bar.
- To sort files, click Sort on the File Browser's menu bar. (adjacent to the View button), and choose a sorting option. As shown in Figure 12-1, you can select from a wide range of sorting methods: Filename, Flag, Rank, Width, Height, Resolution, File Type, Color Profile, Date Created, Date Modified, Copyright, and Custom.

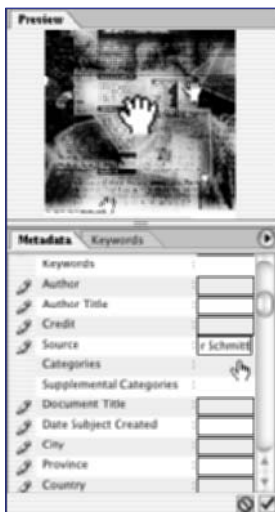


**Figure 12-1:** Selecting the sorting method in the File Browser

- Below the options for sorting methods, the order for the images can be displayed in ascending order by checking Ascending Order. This option displays files ordered from smaller to greater values of the

sorting method you picked. If you selected the Filename sorting method, numbers at the start of a file name are shown first, followed by letters in alphabetical fashion. If Ascending Order is not checked, the order of the files will be the reverse or in descending order.

4. To apply a ranking to an image first choose the Large Thumbnail with Rank display option.
5. Then next click in the Rank field, type a letter or number, and press Enter (Windows) or Return (Mac OS). Alternately, right-click (Windows) or Control-click (Mac OS) a thumbnail and choose a rank from the context menu.
6. To edit an image's Metadata fields, first click the image and wait until the browser shows the image and its metadata in the Preview and Metadata panes.
7. Scroll the Metadata pane looking for editable fields, which are flagged by a pencil icon in the lefthand column.
8. Click the righthand column of the field (see Figure 12-2) and enter the information. When you are done, click outside of the editable region.



**Figure 12-2:** Editing the Metadata information for an image

## Task 12

### *tip*

- To easily organize images, click and drag the image thumbnails around and put them into the order you want.

### *cross-reference*

- The File Browser not only enables you to sort images by several indicators, but also to manage folders and file images away. See Task 11 for more information.

# Task 13

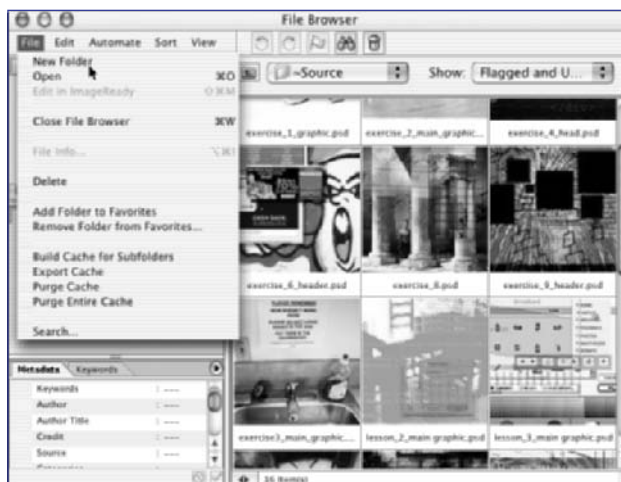
## Managing Folders and File Names from within the File Browser

In addition to looking for images, you can also organize your images in the File Browser itself. This method makes it easier to organize files because you can sort the images based on their thumbnails.

### note

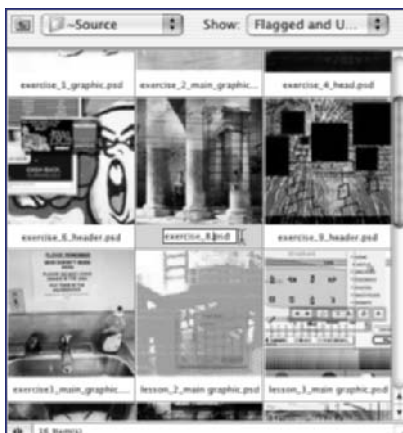
- While the File Browser is not a fully featured Digital Asset Management (DAM) solution for the serious professional who maintains thousands upon thousands of photos and images, it's helpful in managing and tracking a relatively small to medium number of images.

- In order to create a new folder, either select File ⇨ New Folder (see Figure 13-1), right-click in the Folders palette (Windows OS), or Ctrl-click and select New Folder (Mac OS).



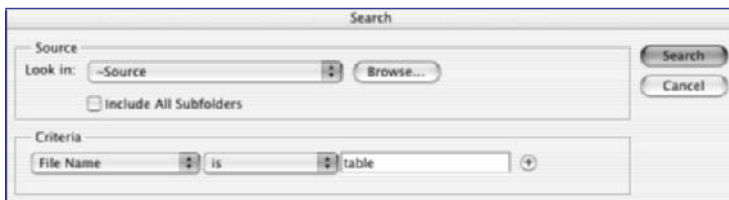
**Figure 13-1:** Selecting the option to create a new folder

- In the File Browser window, click the untitled folder name and wait for the text editing options to show. Then edit the folder's name. When you're done entering the folder name, click anywhere in the File Browser window to exit the editing mode.
- To move a file from one location to a new folder, simply select the image thumbnail and drag it to a different folder.
- To copy a file to a new location, press Alt (Windows OS) or Option (Mac OS) and drag the file to a different folder.
- To delete a file, click the file you want to delete. Then do one of the following: Click the Trash button at the top of the File Browser, drag the files to the Trash button, press the Delete key, or choose File ⇨ Delete.
- The File Browser enables you to rename files on your system. To rename one file, click the file name of the image in the File Browser to enter the text editing mode, then type the new file name (see Figure 13-2).



**Figure 13-2:** Changing the name of a file while in File Browser

7. To rename all the files in a folder, make sure that no files are selected. To rename a subset of files in a folder, select the files you want to rename. Then choose **Automate ⇨ Batch Rename**, and set the following options: **Destination Folder**, which is where you want the new files to go after they have been named; **File Naming**, and then choose the naming scheme you want for your images based on preset options; and **Compatibility**, which enables you to specify which operating systems you want the files to be handled.
8. To search for an image in the File Browser, click the **Search** button on the left of the File Browser toolbar or select **File ⇨ Search** to open the Search dialog box, as shown in Figure 13-3.



**Figure 13-3:** The Search dialog box

9. Enter your search criteria and press **Search**. The Search results are displayed in the File Browser.
10. To apply an action to all the files in a folder, make sure that no files are selected. To apply an action to a subset of files in a folder, select the files you want to manipulate. Then choose **Automate ⇨ Batch** to open the Batch dialog box. Finally, choose the action you want to apply to the Filter, specify any other settings, and press **OK**. (See Task 128 for more information on Actions.)

## Task 13

### tip

- After you have renamed a file, the order of files in the File Browser is not automatically updated to reflect your changes. To refresh the view, choose **View ⇨ Refresh**. Closing and reopening the File Browser also refreshes the view.

### cross-reference

- To learn how to view and organize images with the File Browser, see Tasks 11 and 12.

# Task 14

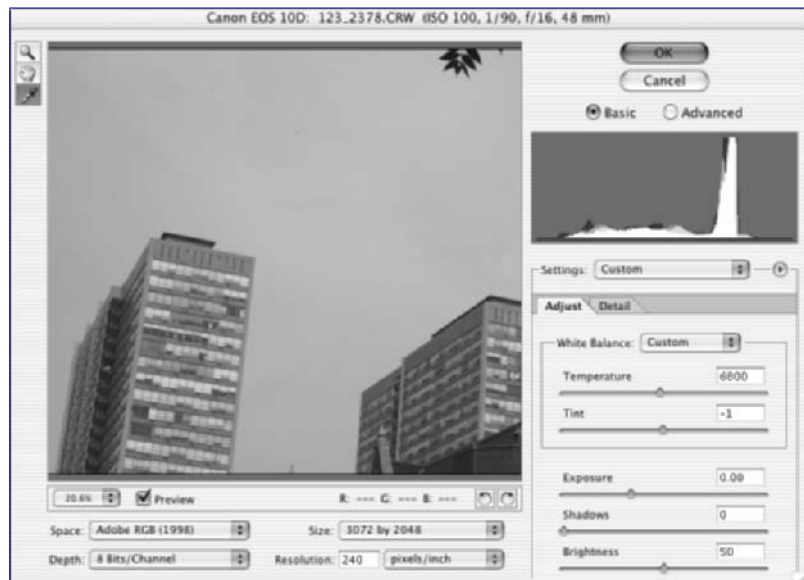
## Importing Digital Camera Images

**M**ost digital cameras save a digital snapshot in the JPEG format. Saved settings like smoothing, sharpening, or white balance are controlled by the camera and then are fixed when it is saved to the JPEG file format.

However, more and more of today's digital cameras can encode image files into a file format that's known as RAW. This file format records everything that the digital camera can throw at it and doesn't lock the settings making the image editable in Photoshop's Camera Raw dialog box.

The Camera Raw dialog box is akin to the darkroom, where photographers can manipulate the printing of the film. Before the image window is opened in Photoshop, the Camera Raw dialog box opens up allowing you to make modifications to the image. When you are finished, Photoshop inputs your corrections and opens the image to prepare it for digital editing.

1. To bring up the Camera Raw dialog box, first save the RAW digital files onto your hard drive. These files have the .crw file extension.
2. Select File ⇨ Open, select an image, and click Open to display the Camera Raw dialog box, shown in Figure 14-1.



**Figure 14-1:** The Camera Raw dialog box

3. Below the preview window you'll find a variety of options, including the Zoom drop-down menu, Preview checkbox, RGB value indicators, and buttons to rotate the image. To zoom in and out of the win-

dow, select a new percentage value in the drop-down menu. The RGB value indicators display the values of red, green, and blue if you move the cursor over the preview window (see Figure 14-2). If the Preview checkbox is marked, changes made in other areas of the Camera Raw dialog box are reflected dynamically in the preview window.



**Figure 14-2:** Showing the RGB values

4. At the bottom of the dialog box are options to change the color space, image size, color depth, and resolution of the image.
5. To the right side of the dialog box and below the histogram of the image, under Settings, you can adjust the settings for the Selected (or current) Image, Camera Default, and Previous Conversion, or create a blend of Custom settings.
6. If you click the Basic option in the upper righthand corner of the dialog box, you can manipulate the settings for Adjust and Detail. The Adjust Settings subset enables you to pick new values for the White Balance, Exposure, Shadows, and Brightness.
7. To edit the Sharpness, Luminance Smoothing, and Color Noise Reduction, click the Detail Settings Subset tab.
8. If you click the Advanced option, you can edit the subsettings for Lens and Calibrate. Clicking the Calibrate Subsettings tab enables you to edit the Shadow Tint as well as the hue and saturation for red, green, and blue. The Lens Subsettings tab enables you to edit Chromatic Aberration and Vignetting.
9. When finished, click OK. The file will then be processed and opened into a new image window, ready for digital imaging.

## Task 14

### tips

- For a list of digital cameras supported by Camera Raw, check out [www.adobe.com/products/photoshop/cameraraw.html](http://www.adobe.com/products/photoshop/cameraraw.html).
- When you purchase a digital camera, check the specifications to make sure that the camera can output images into the RAW format since this will give you greater control over your images. However, if you are a shutterbug looking for the convenience of a digital camera, a digital camera that saves images into JPEG format will work just fine.
- You can save the settings for an image by clicking the triangle icon to the right of the Settings dropdown menu.

### cross-reference

- Now that you have acquired your images, learn how to manipulate them into other file formats. See Task 18 for more information.

## Task

## 15

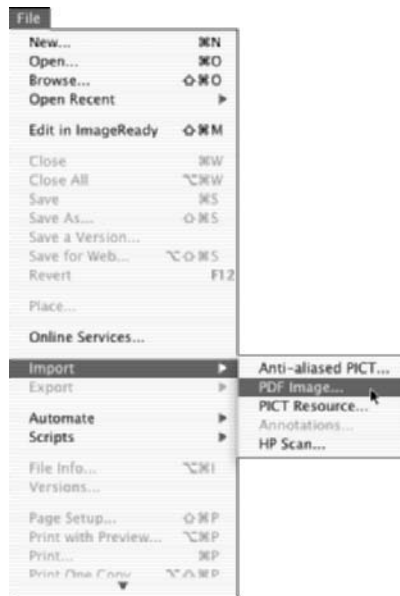
## Importing a PDF Image

*note*

- If you need to send the PDF file to someone who doesn't have a PDF reader, share the free Adobe Acrobat Reader download link which is <http://www.adobe.com/products/acrobat/readstep2.html>.

Adobe's Portable Document Format (PDF) is a great way to exchange documents with people in the office or across the world. It is the primary format used by Adobe's Illustrator and Acrobat programs. PDF files display fonts, page layouts, and graphics — including vector and bitmap — and can also contain electronic document navigation features such as hyperlinks. If you want to work with images inside a particular PDF file, without opening the entire PDF in Photoshop, you can! While Photoshop will allow you open whole PDF pages and bring them into the work area, you can also pick just an image out of the PDF.

1. To import an image in a PDF, first select File ⇨ Import ⇨ PDF Image as shown in Figure 15-1.

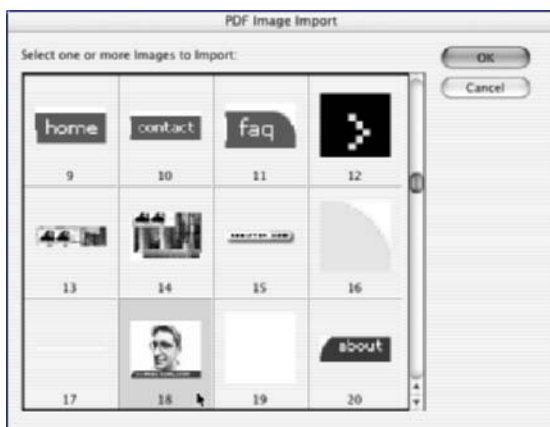


**Figure 15-1:** Selecting to import an image located in a PDF file

2. In the Select PDF for Image Import dialog box choose the PDF file from which you want to import images, and then click Open, as shown in Figure 15-2.
3. If you want to open only a specific image from the PDF file, select it and click OK.
4. To select more than one image, press and hold the Shift key while clicking on images you want in the PDF Image Import dialog box.
5. You can import a multipage PDF file and convert it to a PSD file. To open the Convert dialog box, choosing File ⇨ Automate ⇨ Multi-Page PDF to PSD.



**Figure 15-2:** Choose the target PDF to extract the desired image



**Figure 15-3:** Select the image you want to import

6. Under Source PDF, click Choose and select the PDF images you want to convert to Photoshop files.
7. Select the range of pages you want Photoshop to convert under Page Range. Set the resolution and color mode under Output Options.
8. Enter the file name which will be used as base. Photoshop will append indicators at the end of the file name to specify which page it represents.
9. If you want to hide the warnings, check the Suppress Warnings checkbox.
10. When you are done, press OK.

## Task 15

### tip

- Press Esc to cancel the import operation before all images are imported.

### cross-reference

- To learn how to import images through a digital camera or scanner, see Task 14.



# Task 16

## Adding Notes to Image Files

While pictures may speak a thousand words, you might find yourself wanting to make sure a couple of your own words are added for good measure. In Photoshop, you can add text notes around an image to let other workers know details about that image.

### note

- For Web designers, notes are a great way to store information regarding color schemes, potential Web-safe colors, and other information that a Web producer might need to know to produce your Web page correctly.

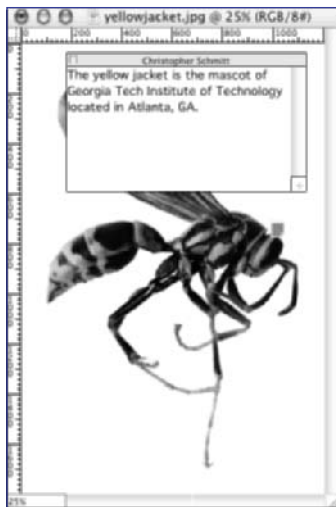
1. Select the Notes Tool from the bottom left of the Tools palette.



**Figure 16-1:** Selecting the Note Annotation Tool

2. Set the options as needed in the context menu: author's name, which appears in the title bar of the notes window; the font and size of the text; and the color for the note icon and title bar of the note windows.
3. Select where you want to place the note and click to begin typing. Or you can click and drag to create a custom-sized window.

4. Click inside the note window and type the text. (See Figure 16-2.) If you want to type more than there appears to be room for, don't worry. A scroll bar will appear, allowing you to scroll up and down the note text.



**Figure 16-2:** A note with text for a fellow collaborator to review

5. When editing the text, you can use the standard keyboard shortcuts available on your operating system for Undo, Cut, Copy, Paste, and Select All. Also, another way of accessing the editing tools in Windows operating systems is to right-click in the text area and choose the commands from the context menu. Macintosh users can select the commands from the Edit and Select menus.
6. You can switch between different script systems (for example, Japanese or Cyrillic) if you have the required software installed. To access a different script system in a note, right-click (Windows) or control-click (Mac OS) to display the context menu and then choose a script system.
7. To collapse the note to an icon, click the close box in the upper left-hand corner.

## Task 16

### *tip*

- Notes are a great way to share information, but always be sure to be concise and succinct. Even though you can fit a lot of text into a note, they are still tiny notepads.

### *cross-reference*

- To see how to add an audio note to an image, see Task 17.

**Task 17****note**

- In Windows operating systems, see if you can get sound input by checking Sound Recording Setup in the Sounds and Multimedia properties. And for Macintosh operating systems, check the Sound ⇄ Input in the System preferences.

## Adding Audio Annotations to Image Files

When text and an image won't do, you can add the sound of your voice with Audio Annotations. Working in the same manner as text-based Notes (see Task 16), Audio Annotations allow you to tack on a brief audio message to help aid in image development.

1. Make sure you have a working microphone hooked up to your computer and that it accepts audio input from your preferred recording device.
2. Select the Audio Annotation Tool (as shown in Figure 17-1) from the bottom left of the Tools palette. If you see only the Notes Tool, press down on the Notes Tool until you see a submenu that includes the Notes Tool and the Audio Annotation Tool.



**Figure 17-1:** Selecting the Audio Annotation Tool

3. Set options as needed in the context menu: author's name, which appears in the title bar of the notes window; and the color for the note icon and title bar of the note windows.
4. Select where you want to place the note in the file and click where you want to place the annotation icon.
5. Click Start and then speak into the microphone.



Figure 17-2: The dialog box to start and stop an audio message

6. When you're finished, click Stop. A speaker icon (see Figure 17-3) will appear where you initially clicked to start recording your Audio Annotation.



Figure 17-3: The speaker icon representing the presence of an Audio Annotation

## Task 17

### tip

- Make sure your audio notes contain salient points, as adding audio to a file will make a noticeable increase in the size of the file.

### cross-reference

- Can't stand the thought of having people listen to your voice? Share the written word through text notes using the Note Tool. See Task 16 for more information.

# Task 18

## Using the Save, Save As, and Save for Web Options

**A**fter you have your image set, you need to make sure you can use it again at some point in the future. You can use the Save commands in Photoshop to leave the file in its current format, or save it in a different file format. And with Save for Web, you can optimize your images for electronic media.

### notes

- In Photoshop, if you choose a format that does not support all features of the document, the program displays a warning at the bottom of the dialog box. If you see this warning, save a copy of the file in Photoshop format or in another format that supports all of the image data.
- If you created slices on an image while editing it in Photoshop, you can alter the optimization settings for each slice in the Save for Web dialog box. While previewing the optimization settings, select the Slice Select tool and then click a slice of the image to select it. With the slice selected, you can alter its optimization settings.

1. To save changes to a file you are currently working on, select File ⇨ Save.
2. To save a file under a different name or location or both, choose File ⇨ Save As. This opens the Save As dialog box, as shown in Figure 18-1. Afterwards type a file name, choose a location for the file, and then hit Save. To save a file in a different file format, select Choose File ⇨ Save As. Then you need to choose a format from the format pop-up menu. Specify a file name and location, choose your saving options, and then click Save.



**Figure 18-1:** The Save As dialog box

3. To save an image in a format that's suitable for delivery on the Web, choose File ⇨ Save for Web to open the Save for Web dialog box.
4. While in the Save for Web dialog box, shown in Figure 18-2, you can prepare your image in different optimizing formats by clicking one of the four tabs at the top of the image area. The Original tab enables you to view the image without optimization. The Optimized tab applies the current optimization settings that are displayed to the right of the image area. The 2-Up tab enables you to see the original image and the image with the optimization settings applied. The 4-Up tab shows you four views of the image in a two-by-two arrangement. The top left image is the original while the other three have

different levels of optimizations applied to the image. At any point while viewing the Save for Web dialog box you can switch between tabs in order to help find the best optimization settings for the image.

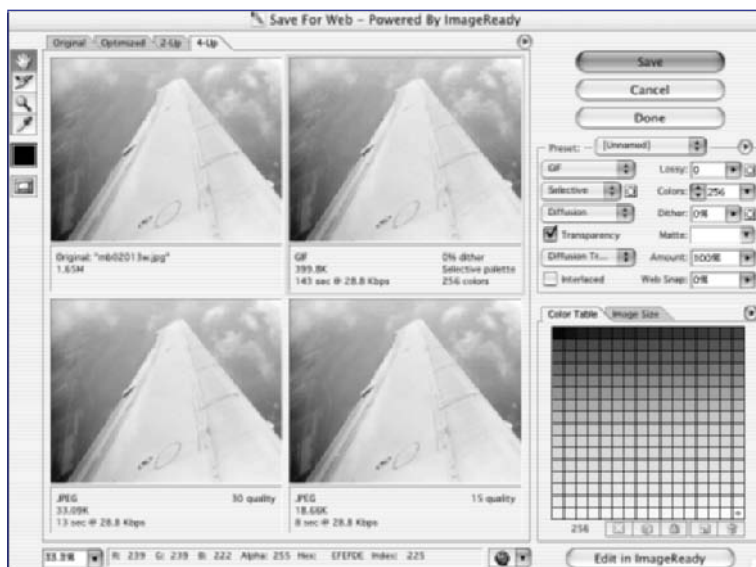


Figure 18-2: The Save for Web dialog box

5. If your image is not entirely visible in the Save for Web dialog box, select the hand tool on the lefthand side of the image area. Then click the image and drag it to bring hidden parts of the image into view. You can also use the Zoom tool (signified by the magnifying glass icon) to magnify or reduce the view. To select the Zoom tool, click in an image window you want to zoom in. Then hold down Alt (Windows) or Option (Mac OS), and click to zoom out. Alternatively, you can specify a magnification level in the Zoom text box at the bottom of the Save for Web dialog box.
6. On the right side of the image area in the Save for Web dialog box is the optimization settings that will be applied to the image. The optimization settings will change depending on which file format you select to view. Changing the settings will be applied to the image if you have selected the Optimization tab. If you have selected the 2-Up or 4-Up tab, the settings will be applied to the image that has a black border around the windowpane.
7. When you have determined the optimization settings you want, click Save to open the Save Optimization As dialog box.
8. In the Save Optimization As dialog box you can rename the file to something other than Photoshop's suggested name and change the location of where the file is saved and settings for HTML and slices output. The settings for HTML and slices output come in handy if you use a slice tool while working on an image before saving the image for the Web.

## Task 18

### tip

- When possible, use the 2-Up and 4-Up views to see how your image looks at different image settings.

### cross-reference

- Part 17 of this book deals with Adobe ImageReady, which is distributed with Photoshop CS. ImageReady does a superb job at preparing and creating images for the Web, and you can learn all about that in Part 17.

# Task 19

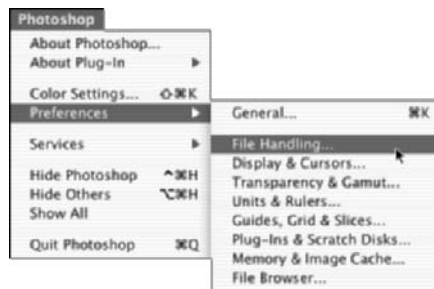
## notes

- As you go back in versions of Photoshop when editing your images you will lose support for the features listed here. For example, if you use layer effects in Photoshop 6, they will no longer be present if you open and save the file in Photoshop 4.
- In the File Format menu, you will notice a file format known as Photoshop 2. This means your Photoshop file will be converted to the file format that's compatible with Photoshop 2.0. If you save your file in this format, the supported features in the later versions will be stripped out.

## Utilizing the PSD Format to Keep Layers and Effects Intact

If you want to insure the most flexibility in your images, make sure to save your images in the Photoshop Document (PSD) format. The PSD format is the only format that supports all of the features found in Photoshop itself. You can specify the default format in which to save files in the File Handling preferences dialog box.

- If you are a Macintosh user, go to the Photoshop menu and select Preferences ⇨ File Handling (see Figure 19-1). If you are working in Windows, choose Edit ⇨ Preferences and select File Handling.



**Figure 19-1:** Accessing the File Handling preferences dialog box

- To insure greater backwards compatibility for your files with older versions of Photoshop, check Always Maximize Compatibility for Photoshop (PSD) Files.
- If you work on or save an image using an earlier version of Photoshop, unsupported features are discarded.
- If you familiarize yourself with the new features in this version of Photoshop, you can gauge to what extent your PSD file is backward compatible with earlier versions of the software. New features unique to Photoshop CS are Hard Mix blend mode, new adjustment layers, Layer Comps, placing text on a path, Photo Filter, Shadow/Highlight Correction, video format pixel aspect ratios, color replacement brush tool, and filter gallery.

5. Likewise, if you are familiar with the features of past versions of Photoshop, you can anticipate your digital imaging needs more easily. Features unique to Photoshop 7 are the Linear Burn, Linear Dodge, Vivid Light, Linear Light, and Pin Light blending modes and the Layer Mask Hides Effect and Vector Mask Hides Effect advanced blending options. Features unique to Photoshop 6.0 are layer sets, layer color-coding, layer clipping paths, fill layers, layer styles, editable type, and advanced type formatting. Photoshop 6.0 also added new layer effects. Photoshop 5.0 also introduced layer effects; however, effects added in later versions of Photoshop are not supported. Photoshop 5.0 added color samplers, spot channels, and embedded ICC profiles. And Photoshop 4.0 featured adjustment layers and guides.
6. To save a file in the Photoshop file format, click Save and choose Photoshop from the Format drop-down menu.
7. Select the location where you want to save the file.
8. Select the options you want (see Figure 19-2), and press OK.



**Figure 19-2:** Saving a file in Photoshop format

## Task 19

### tip

- It's always best to save an image in the PSD format as a source file and use Save As option to create working versions of the file as needed for other projects.

### cross-reference

- To learn more about File Handling preferences, see Task 1. To learn more about dealing with other file formats, see Task 18.





## Part 2: The Work Area

- Task 20: Using the Toolbox, Options Bar, View Modes, and Jump Commands
- Task 21: Using and Editing Shortcut Keys
- Task 22: Using the Navigator, Info, and Histogram Palettes
- Task 23: Using the Floating Palettes, Palette Options, and the Palette Well
- Task 24: Zooming in on Your Work with the Zoom and Hand Tools
- Task 25: Measuring Distance and Angles in Images with the Measure Tool
- Task 26: Using Rulers and Setting Ruler Options
- Task 27: Viewing and Using Grids for Precision Work
- Task 28: Placing, Moving, and Locking Guides for More Precise Control
- Task 29: Using the Snap To Command with Grids and Guides
- Task 30: Undoing, Redoing, Stepping Forward and Backward
- Task 31: Using the History Palette to Revert to Previous States
- Task 32: Creating a Duplicate Window or New Document from Current State
- Task 33: Creating Tool Presets to Streamline your Workflow
- Task 34: Using the Preset Manager to Access and Organize All Preset Types
- Task 35: Customizing and Saving Your Workspace

## Using the Toolbox, Options Bar, View Modes, and Jump Commands

2. To select a tool, click the tool's icon. If the icon has a small triangle at its lower right corner, hold down the mouse button to view the hidden tools that are related in operation to the main tool (see Figure 20-2). Then click the tool you want.



**Figure 20-2:** Hidden options for the Select tool

3. To show the options bar (see Figure 20-3), select Window ⇨ Options and then click a tool in the toolbox.



**Figure 20-3:** The options bar

4. To move the options bar from its default location at the top of the screen to a new location, click the gripper on the option bar's left edge and drag it to its new location.
5. To reset the settings of a tool's optional settings, click the tool icon on the options bar, and then choose Reset Tool or Reset All Tools from the context menu.
6. To get a better view of an image you are working, you can change the screen display mode using the window controls located above the Edit in ImageReady button that is at the bottom of the toolbox. The left button shows the default view with the window along with the menu bar at the top and scroll bars on the sides. The center button displays a full-screen window with a menu bar and a 50 percent gray background, but no title bar or scroll bars. The right button displays a full-screen window with a black background, but no title bar, menu bar, or scroll bars. When viewing artwork in this view, select the Hand tool to move the image around the black background.
7. You can take an image from Photoshop to another application by *jumping*. If you want to jump an image from Photoshop to ImageReady, either click the Jump To button located at the bottom of the toolbox or select File ⇨ Jump To ⇨ Photoshop or File ⇨ Jump To ⇨ ImageReady.

## Task 20

### tips

- A great way to view your images without visual distractions from Photoshop menus, icons, and background images on your desktop is to select the full-screen mode (the third icon in the viewing mode set) and press Tab, which removes the toolbar and palettes, leaving only the image against a black background.
- To toggle the view modes, simply press the letter F in succession to cycle through the view modes. Also, if you want to toggle the appearance of the menu while in Full Screen mode, press Shift+F.

### cross-reference

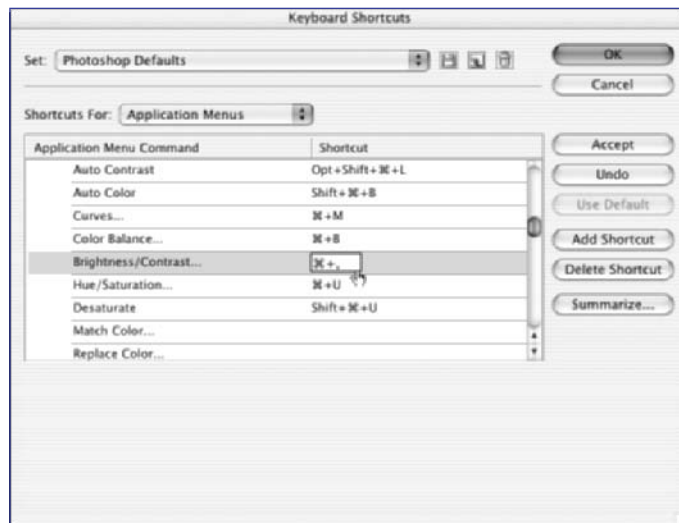
- The toolbox is one of the most often used elements of Photoshop and works in tandem with the palettes, which are discussed in Task 23.

# Task 21

## Using and Editing Shortcut Keys

Some users prefer to use the Photoshop toolbox, palettes, and menus to access the application's digital imaging tools. Others prefer to use keyboard commands to quickly execute common functions. Follow these steps to create your own keyboard shortcuts within Photoshop or generate a summary of your existing shortcuts.

1. To create or edit your own keyboard shortcuts, select Edit ⇨ Keyboard Shortcuts to open the Keyboard Shortcuts dialog box.
2. If you want to create a new set of Keyboard Shortcuts based on the original set of shortcuts supplied in Photoshop, click the Copy icon to the right of the Set drop-down menu at the top of the Keyboard Shortcuts dialog box. This opens a Save dialog box, which enables you to save the keyboard shortcuts file (with a .kys file extension) to a location of your choice. The default location is the Keyboard Shortcuts folder in the Photoshop application folder.
3. To modify a shortcut, select the set of shortcuts you would like to edit in the Shortcuts drop-down menu. There are three sets of shortcuts: Application Menus, Palette Menus, and Tools.
4. Find the item you want to create or edit the shortcut and click in the Shortcut column to create an editable text region where you can enter the new shortcut.



**Figure 21-1:** Entering a keyboard shortcut for the Brightness/Contrast command

5. Enter the shortcut you want into the editable region. Note that keyboard commands must begin with a Ctrl (Windows) or Command (Mac) and/or a Function key to be successfully entered into the Shortcut column.
6. Click Accept to enter the new custom keyboard shortcut.
7. To undo the recent shortcut addition, click Undo.
8. To add an additional shortcut to an item that already has a shortcut, press Add Shortcut and follow the steps to enter the custom shortcut.
9. To delete a keyboard shortcut, select the shortcut and press Delete Shortcut.
10. To generate an HTML file that lists all the shortcuts for the active set of shortcuts, press Summarize. This opens a Save dialog box, which enables you to save the HTML file to a location of your choice. To view the list of shortcuts summaries, open the file in your Web browser as shown in Figure 21-2.



Figure 21-2: Viewing the keyboard shortcuts summary list in a Web browser

## Task 21

### tips

- There are some keyboard shortcuts that Photoshop reserves for specific functions. If you try to use one of these shortcuts, you'll see a stop sign icon with an exclamation mark at the bottom of the Keyboard shortcuts dialog box.
- Print out the keyboard shortcuts, staple them, and keep them near your computer for easy reference.

### cross-reference

- There are shortcut settings for almost every function and tool in Photoshop to help Photoshop users work better and faster. You can learn more about streamlining workflow with the Preset Manager in Task 34 and customizing your Workspace in Task 35.

# Task 22

## Using the Navigator, Info, and Histogram Palettes

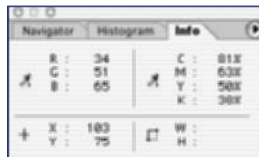
The Navigator palette enables you to zoom in, out, and around an image with greater ease than the Magnification tool found in the toolbox. The Info Palette provides constant feedback about the pixel underneath the cursor. It shows readouts of the color values of up to four sampled markers placed on an image as well as showing the x and y position of the cursor over the image window. The Histogram palette provides information about the shadows, midtones, and highlights of the image.

1. To view the Navigator palette, shown in Figure 22-1, select Window ⇨ Navigator.



**Figure 22-1:** The Navigator palette

2. To move around the image area, drag the red rectangle in the view box.
3. To zoom in on a specific selection, Command-drag (Mac) or Ctrl-drag (Windows) in the view box.
4. At the bottom left-hand corner of the Navigator palette, you can also manually enter a zoom percentage and then press Return or Enter.
5. To show the Info palette (see Figure 22-2), select Windows ⇨ Info.

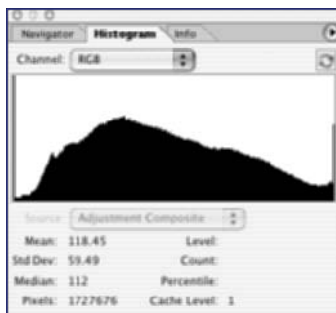


**Figure 22-2:** The Info palette

6. To change the units in the Info palette, click the triangle in the palette and choose Palette Options. In the dialog box, you can select

from Actual Color (which is the image's current color mode), RGB, Web Color, HSB, CYMK, Lab, Total Ink, Proof color, and Grayscale, or the current layer Opacity.

7. In addition to color feedback, the Info palette also displays information on the width, height, angle, and horizontal skew of a transformed layer, selection, or path that is in the middle of its transformation.
8. To show the Histogram palette (see Figure 22-3), select Windows ⇨ Histogram.



**Figure 22-3:** The Histogram palette

9. To show all the available channels in the Histogram palette, click the triangle in the palette and choose All Channels View. If you want to view one histogram with selected information readouts, select the Expanded view. If you want just the compact readout, choose Compact.
10. If you are working with an image with more than one layer, you can adjust the main histogram. By changing the options in the Source drop-down menu you can adjust the main histogram to display information about the entire image, the currently selected layer in the Layers palette, or an adjustment composite. The adjustment composite, if selected, will show a dynamic comparison between histograms to an image and the adjustments being performed on the image as they are taking place.

## Task 22

### tips

- Instead of a percentage, you can enter a ratio (for example, 1:1 or 3:1) and then press Return or Enter.
- To size the image dynamically, drag the zoom slider at the bottom of the Navigator palette, or click the zoom out or zoom in buttons on either side of the slider.

### cross-reference

- To learn more about histograms, see Task 48.



# Task 23

## note

- Be sure to arrange the palettes to your liking. Feel free to change the default setup of the palettes. The more comfortable you are in the working environment, the more likely the quality and speed of your work will improve.

## Using the Floating Palettes, Palette Options, and the Palette Well

Floating palettes provide better control over the tools and work environment in Photoshop. In the latest incarnation of Photoshop, you'll find more than 15 palettes ranging in functionality from zooming in on an image to customizing the Brush tool.

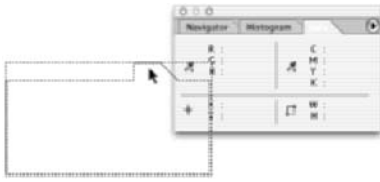
The Palette Well is located at the right side of the options bar. In the Palette Well you can store your palettes so that they are out of your way, but still available for quick access.

- In order to view a palette that is not visible in your work area, select the palette you want from the Window menu (see Figure 23-1).



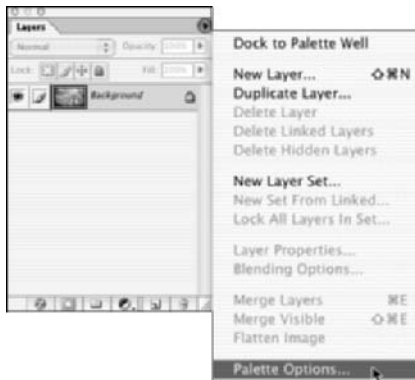
**Figure 23-1:** Below the Arrange and Workspace options in the Window edit menu, you can see the list of palettes available in Photoshop.

- To hide or show all open palettes including the toolbox, press Tab. To hide or show all open palettes except for the toolbox, press Shift and Tab.
- To access a particular palette in a group of palettes, click it.
- To move a palette out of a group, click its tab and drag it out of the palette grouping to your work area, as shown in Figure 23-2. To add a palette to a group, click the palette of interest and drag it to the group.



**Figure 23-2:** Removing a palette from its group

5. If you want to access additional options for a palette, click the triangle on the right side of the palette's tab.



**Figure 23-3:** Accessing the Palette Options for the Layers palette

6. To store a palette in the Palette Well, click the palette and drag it into the Palette Well area or select Dock to Palette Well from the Palette Options menu. To remove a palette from the Palette Well, simply click and drag it out of the Palette Well.
7. To use a palette when it is in the Palette Well, click its tab to open the palette menu. To close the palette menu, click anywhere outside the palette.
8. To access an active palette's options when it is inside the Palette Well, click the small triangle to the right of the palette's name.
9. To show or hide the palette of a tool that is in the Palette Well, click the Toggle Palette button that is to the left of the Palette Well.

## Task 23

### tip

- Tinker with each palette. Familiarize yourself with their options and functionality. It's the beginning of a beautiful relationship.

# Task 24

## notes

- You can also zoom in and out on an image by selecting View ⇨ Zoom In and View ⇨ Zoom Out.
- If you don't want the image window to resize as you zoom in and out with the Zoom tool, clear the Resize Windows To Fit checkbox on the option bar.

## Zooming in on Your Work with the Zoom and Hand Tools

**P**ictures may be worth a thousand words, but sometimes you just want a couple of lines out of the thousand. Photoshop enables you to zoom in on an image as well as move around with the Zoom and Hand tools.

1. Select the Zoom tool from the toolbox.
2. To magnify a portion of an image, click a spot in the image window (see Figure 24-1) or click and drag over a portion of the image that you wish to zoom in.



**Figure 24-1:** The default icon for the zoom tool is a magnifying glass with a plus sign in the middle.

3. To zoom out, press Alt-click (Windows) or Option-click (Mac) in the image window, as shown in Figure 24-2.



**Figure 24-2:** When zooming out, the icon changes its plus sign to a negative sign.

4. The options bar has three buttons: Actual Pixels, Fit On Screen, and Print Size. The Actual Pixels button is used to see the image at its actual pixel size. Fit On Screen displays the entire image. The Print Size button shows a print preview of the image.
5. To work in a different part of an enlarged image that is not fully viewable in your work environment, choose the Hand tool from the toolbox and then click and drag inside the image window. (See Figure 24-3.)



**Figure 24-3:** Using the hand tool to move around an image

6. Press Alt (Windows) or Option (Mac) with the Hand tool selected to zoom out with the click of the mouse; press Ctrl (Windows) or Command (Mac) to zoom in.
7. To fit the image on the screen, double-click the Hand tool.

## Task 24

### *tips*

- The shortcut key for Fit On Screen is Command (Mac) and the number 0 or Ctrl (Windows) and the number 0.
- The shortcut key for Actual Pixels is Command+Opt+ (the number) 0 (Mac) or Ctrl+Alt+ 0 (Windows).

### *cross-reference*

- You can also zoom in and out of an image with the Navigator palette. See Task 22 for more information.

## Task

## 25

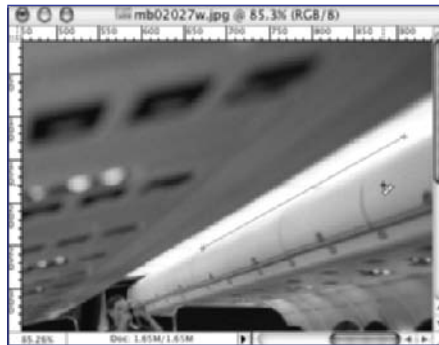
## Measuring Distance and Angles in Images with the Measure Tool

**W**hen you need to know the distance from point A to point B, use the Measure Tool. This tool not only determines the distance between two points, it can also measure the angle of two lines connected together at an endpoint.

### note

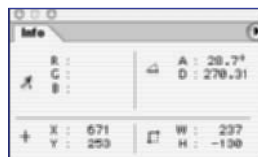
- If you select another tool and then select the Measure tool again, the line you have previously drawn reappears.

1. To access the Measure tool, click the Eyedropper tool in the toolbox and select the Measure tool from the context menu. You can also press Shift+I multiple times until you see the Measure tool.
2. In the image window, click a spot and then drag across the image to the second spot of interest. (See Figure 25-1.)



**Figure 25-1:** Two endpoints and a line between them

3. Look at the Info palette, shown in Figure 25-2, to view the angle and distance measures of the connecting line between the two points.



**Figure 25-2:** Gleaning distance measurements from the upper righthand corner of the Info palette

4. To move one of the two points at any time, use the Measure tool to select a point and move it around in the image window.
5. To move the entire line, select the middle section of the line and move it in the image window.
6. To measure an angle, press the Option (Mac) or Alt (Windows) keys and drag a new line from one of the line's two end points. The angle formed by these two lines *as well as the distance of the second line* is displayed in the Info palette.



**Figure 25-3:** Two lines and three endpoints make an angle

7. To modify the angle, click and drag one of the two endpoints.
8. You can grab and move the entire angle by clicking any part of the angle except the endpoints.

## Task 25

### tip

- To get rid of a line or angle, select any part except the endpoints and move it off the image area, or click the Clear button in the options bar.

### cross-reference

- You can view the measurements of selections in the Info palette every time you make a selection. See Task 22 for more details.

# Task 26

## Using Rulers and Setting Ruler Options

**R**ulers help you more precisely place and arrange elements in the working image environment. The following steps show you how to toggle the rulers and how to modify the default ruler to fit your individual work needs.

### note

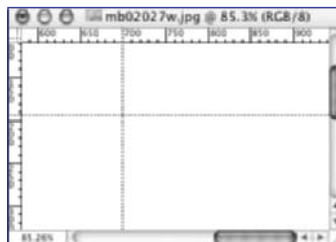
- If you want to reset the origin point of the rulers quickly, double-click the intersection square where the two rulers meet in the upper left-hand corner.

1. To hide or show rulers while viewing an image, select View ⇨ Rulers. You can also use the keyboard shortcut Command+R (Mac) or Ctrl+R (Windows).
2. When moving your mouse pointer over an image, dashed lines show the location of the pointer in the rulers (see Figure 26-1).



**Figure 26-1:** The dashed lines are in line with the x and y axes of the cursor.

3. To move the zero origin point for the rulers, click and drag from the intersection of the rulers in the upper left-hand corner into a new location in the image window.
4. Review the location of the zeros in the rulers after moving the origin point. They should have moved to correspond with the location as shown in Figure 26-2.



**Figure 26-2:** The origin point is being moved away from the upper left-hand corner.

5. To place the origin point precisely, you may snap the origin point to a guide. First, select View ⇨ Snap To ⇨ Guides.
6. Drag a guide onto the image area towards the guide where you would like the origin point to be placed.
7. Drag the origin point onto the image area, where the origin snaps to guide.
8. To use grids to place the origin point, select View ⇨ Snap To ⇨ Grids.
9. Drag the origin point onto the image area, where you should notice the origin snap to the intersecting points of the grid. Place the origin point to its new location.

## Task 26

### *tip*

- To switch to a new set of ruler units, right-click (Windows) or Ctrl-click (Mac) the rulers and select the unit you want from the context menu.

### *cross-reference*

- Guides and grids are extremely helpful and compliment rulers very well in the digital imaging environment. For more information, check out Tasks 27 and 29.



# Task 27

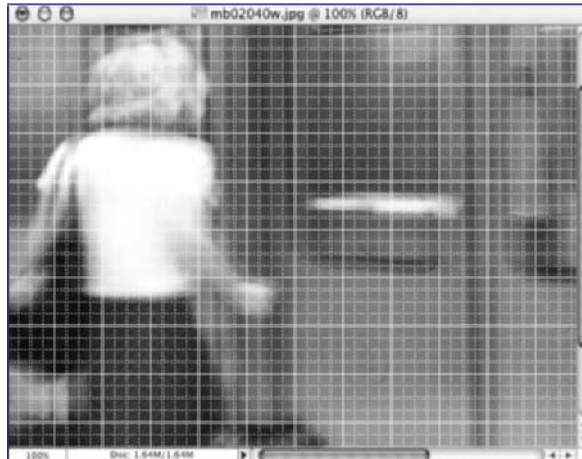
## notes

- Using a grid enables you to align elements perfectly.
- ImageReady does not support the Photoshop grid. If you are working on an image using grids and jump to ImageReady, you won't see it anymore.

## Viewing and Using Grids for Precision Work

**G**rids divide an image into quadrants with main divisions and subdivisions. The representation of the grid cannot be printed or incorporated into your designs. Instead a grid is a very useful aid for the placement and accuracy of the design elements in an image.

1. Create a new image or open a pre-existing image file.
2. Select View ⇨ Show ⇨ Grid to show the grid. You can also use the keyboard shortcut Ctrl+’ (Windows) or Command+’ (Mac). Figure 27-1 shows the major gridlines and minor subdivisions. With the default grid settings, the major divisions are composed of solid color while the subdivisions are lines where every other pixel is default grid color.



**Figure 27-1:** By default, the gridlines settings are one gridline every 0.65535 inches with 4 subdivisions.

3. To position elements along the grid, drag and move elements in the image window along the gridlines. (See Figure 27-2.)



**Figure 27-2:** Placing a white box and text elements with the help of grid lines

4. To quickly center elements in an image window, select Photoshop ⇧ Guides, Grid and Slices to open the Guides preferences dialog box.
5. Under Grid, enter 50 and select percent from the drop-down menu.
6. Press OK. Your grid now has centered quadrants.

## Task 27

### *tip*

- If the colors of the grid are hard to see when overlaid on your image, go to the Guides, Grids and Slices preferences dialog box and select a different color.

### *cross-reference*

- To modify the divisions and units of the grid itself, see Task 4, while Task 29 shows how to learn more about snapping elements to grids.

# Task 28

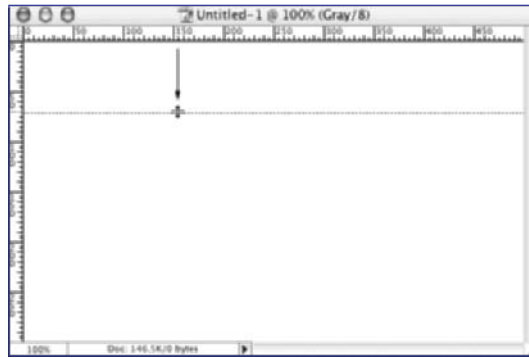
## note

- When specifying the position of a guide in the dialog box you can enter any known unit amount. The measurement unit of guides can be different from the measurement unit of the rulers.

## Placing, Moving, and Locking Guides for More Precise Control

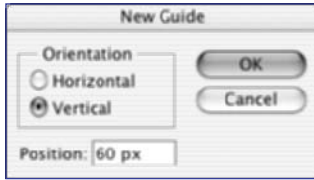
While grids are a construction of regularly placed lines, guides are individual lines that can be dragged and placed at any point in the document. Just like the grid, guides are not printable and are used for the placement of elements in the image window.

- In order to place a guide into the image window, select View ⇧ Rulers to show rulers. You can also use the keyboard shortcut Command+R (Mac) or Ctrl+R (Windows).
- Click the horizontal or vertical ruler and drag toward the center of the image work area to show a guide. (See Figure 28-1.)



**Figure 28-1:** Click and drag from a ruler to position a new guide.

- Place the guide where you would like to use it in the image work area.
- To move a guide after it has been placed, select the Move tool.
- To lock all guides to prevent them from being moved, select View ⇧ Lock Guides.
- To change a guide from vertical to horizontal or vice-versa, Option-drag (Mac) or Alt-drag (Windows) as you move the guide.
- You can specify an exact location for a guide without having to drag a guide into place. First, select View ⇧ New Guide to open the New Guide dialog box, shown in Figure 28-2.



**Figure 28-2:** The New Guide dialog box is used for placing new guides with precision.

8. Select either horizontal or vertical orientation.
9. Enter how far away you want the guide to be positioned from the ruler.
10. To remove guides, move them one at a time using the Move tool or select View ⇨ Clear Guides to remove them all at once.

## Task 28

### *tip*

- The keyboard shortcut for locking the guides is Ctrl+Alt+; (semi-colon) (Windows) or Command+Opt+; (Mac).

### *cross-reference*

- Learn how to snap elements to guides in Task 29. Also, you can modify the style and color of the guides by changing the values in the preferences as demonstrated in Task 5.

# Task 29

## Using the Snap To Command with Grids and Guides

The Snap To command enables you to place elements with greater precisions and ease along guides or grid lines. Instead of eyeballing the placement of elements in an image window, you can tell Photoshop to attract and place an element when it is within 8 pixels of a grid intersection or guide.

### note

- When snapping an element to a guide, the image can be slid up and down on a vertical guide or left and right on a horizontal guide.

1. With an image file open, select View ⇨ Show ⇨ Grid, as shown in Figure 29-1. You can use the keyboard shortcut Command+` (apostrophe) (Mac) or Ctrl+I (Windows).



**Figure 29-1:** Turning on the grid in an image window

2. Select View ⇨ Snap To ⇨ Grid. (See Figure 29-2.)
3. Select an image element and position it along the grid.
4. Notice that as you move the element, the element is drawn to the nearest grid line.
5. Place the element near where you would like it to be (within eight pixels) and let Photoshop snap the element into place.
6. To snap an item to a guide, select View ⇨ Show ⇨ Guides or use the keyboard shortcut Command+; (semi-colon) (Mac) or Ctrl+; (Windows).



**Figure 29-2:** Selecting the Snap To command

7. Select View ⇨ Snap To ⇨ Guides.
8. Click-drag from one of the rulers into the image window to create a guide.
9. Drag your element within eight pixels of the guide to have it snap into place.
10. Create a custom grid with at least two guides to help in the placement of elements (see Figure 29-2). If you have custom spots in an image you want elements placed, create intersections at those spots with two guides. Then position elements at the intersection of those rulers.

## Task 29

### tip

- If you have a particular element you don't want to snap to a grid or ruler, you can quickly toggle the view of the guide or grid to temporarily disable the Snap To functionality. When the image has been properly placed, toggle the guides and grids back on.

### cross-reference

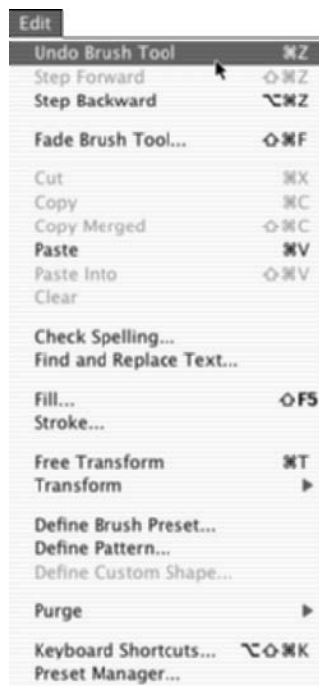
- Learn to set up rulers, guides, and grids in Tasks 26, 27, and 28.

# Task 30

## Undoing, Redoing, Stepping Forward and Backward

It's a fact that humans make mistakes. Thanks to a particular feature in Photoshop you can backtrack a misplaced step in your digital imaging world. With Photoshop, you can quickly undo recent steps or changes to the state of an image. You can also reapply a previously undone action.

1. If you want to reverse the most recent modification you made to a digital image, select Edit ⇨ Undo (see Figure 30-1) or press Ctrl+Z (Windows) or Command+Z (Mac).



**Figure 30-1:** Selecting the command to undo a brush stroke

2. If you think you were too quick to judge when issuing the Undo command, you can choose Edit ⇨ Redo to reverse the last Undo command (see Figure 30-2).
3. To undo more changes, select Edit ⇨ Step Backward from the menu bar. You can specify the number of steps that can be undone using the History States text box in the General preferences dialog box. (The default number is 20.) When you've cycled through the specified number of history states, the Undo command on the edit menu appears grayed out, signaling that there are no more steps to be undone.
4. After removing several steps, you can also go back and reapply the steps you made by selecting Edit ⇨ Step Forward as shown in Figure 30-3.

# Task 30



**Figure 30-2:** Selecting to redo the brush stroke



**Figure 30-3:** Selecting to reapply (or undo) more than the last change

## tips

- The keyboard shortcut for stepping backward is Ctrl+Option+Z (Mac) and Ctrl+Alt+Z (Windows).
- The keyboard shortcut for stepping forward is Ctrl+Shift+Z (Mac) and Ctrl+Shift+Z (Windows).

## cross-reference

- You can also undo select steps using the History palette. Refer to Task 31 for more information.



# Task 31

## Using the History Palette to Revert to Previous States

The History palette records your edits, or states, while you are working in Photoshop. The History palette lists the commands you've carried out and enables you to move backward and forward between the states of an image you are working on.

### notes

- When you delete a state from the History palette as discussed in Step 4, you cannot undo your action.
- While you can move backward and forward in the states, you can still use the shortcut keys or select Step Forward or Step Backward from the Edit menu.
- The default number of history states is 20; you might want to modify this number in the General preferences dialog box, depending on the complexity of your task.

1. To show the History palette, select Window ⇨ History, or click the History palette tab.
2. To go back, or revert, to a previous state of an image, click the name of the state in the History palette or drag the slider on the left-hand side up or down on the palette as shown in Figure 31-1.



**Figure 31-1:** The History palette with a previous state selected

3. To delete one or more states, click the name of the state, and choose Delete from the History palette menu to remove that change and those that came after it.
4. Or drag the state to the Trash button to delete that change and those that came after it.
5. Or select Clear History from the palette menu to delete the list of states from the History palette, without changing the original image.
6. If you want to get rid of all states from all open files in Photoshop, select Edit ⇨ Purge ⇨ Histories (see Figure 31-2).

Task **31**

**Figure 31-2:** Clearing the past states of an image

7. Or you can press Alt (Windows) or Option (Mac) and select Clear History from the palette menu to remove the list of states from the History palette.

***cross-reference***

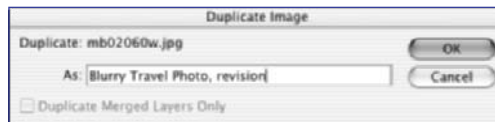
- To learn the keyboard shortcuts for quick undo and redo, see Task 30. To learn more about the options available from the History palette, such as Snapshots, see Task 131.

**Task 32**

## Creating a Duplicate Window or New Document from Current State

**T**he Duplicate function creates an identical copy of your working image file, including all layers, channels, and layer masks. Because of this, duplicating image windows is a great way to easily experiment in different directions without worrying about damaging the original file.

1. If an image is not already open, select and open the one you want to duplicate.
2. Choose Image ⇨ Duplicate.
3. If you want, you can enter a custom name for the duplicated image in the Duplicate Image dialog box as shown in Figure 32-1.



**Figure 32-1:** Adding a descriptive name for the duplicate image

4. To copy only the visible layers in your image, merging them into one layer into a new image window, select the Duplicate Merged Layers Only checkbox.
5. Press OK to show the duplicate image.
6. To duplicate an image and bypass the custom name dialog box, press Alt (Windows) or Option (Mac) while selecting Image ⇨ Duplicate. The application generates a copy of the image with “(copy)” appended to the filename.
7. You can also create a copy of an image using the History palette. While making changes to an image, first select a previous state by moving the slider that is positioned between the two columns in the History palette.
8. Click the Create New Document from Current History State icon, as shown in Figure 32-2.



**Figure 32-2:** Clicking the Create New Document from a past history state

## Task 32

### *tips*

- Photoshop does not automatically save an image that was created using the Duplicate command. To save a duplicate file for future use remember to save the file as you work on it.
- To preserve the original image when working, open an image file and start working, create a duplicate and save it.

### *cross-reference*

- To review the saving options in Photoshop, see Task 17. To learn more about history states, see Task 31.

# Task 33

## Creating Tool Presets to Streamline your Workflow

Users of Photoshop can fine-tune their tools for a variety of reasons. For example, when using the Type tool on images for print and Web, my typefaces will be very different in terms of size, color, and the choice of typeface for each medium. With the Tool Presets palette, you can store presets for Web and print media and call them up with a click of a button thereby reducing repetition.

### note

- While presets can be used for different media, Tool Presets can be saved and used for different projects as well. Very handy!

- To create a preset for a tool, select the tool you want and set the options you want in the options bar.
- Click the Tool Preset button on the left side of the options bar, or choose Window ⇨ Tool Presets to display the Tool Presets palette, shown in Figure 33-1.



Figure 33-1: The Tool Presets palette

- Now either click the Create New Tool Preset button or select New Tool Preset from the palette menu.
- At the prompt, enter a name for the tool preset (see Figure 33-2), and press OK.

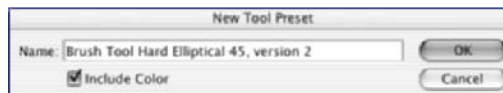


Figure 33-2: Entering a name for the tool preset

- The preset will then be listed automatically for you, as shown in Figure 33-3, in the Tool Preset palette.



**Figure 33-3:** The new preset listed in the Tool Preset palette

6. In order to pick a tool preset, either click the Tool Preset button on the options bar, selecting a preset from the drop-down menu; or choose Window ⇨ Tool Presets and then select your preset in the Tool Presets palette.

## Task 33

### *tip*

- You can also call up the Tool Presets palette and pick presets that way. To show the palette, select Window ⇨ Tool Presets.

### *cross-reference*

- Task 34 explains how to manage your presets.

# Task 34

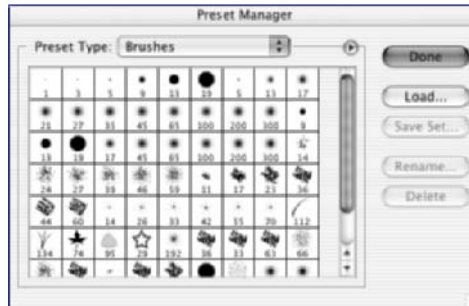
## Using the Preset Manager to Access and Organize All Preset Types

If you work consistently in Photoshop, you will no doubt make numerous presets for your projects. To help you organize your presets, Photoshop provides a Preset Manager.

### notes

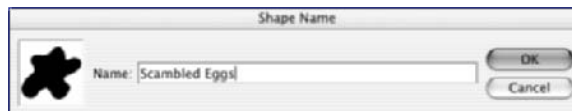
- To rename multiple presets at once, select the presets in question and then select **Rename**. A Shape Name dialog box will appear right after each other in succession, allowing you to rename each one at a time.
- To change the view of the presets, click the small triangle to the right of the Preset Type dropdown menu and choose **Text Only**, **Small Thumbnail**, **Large Thumbnail**, **Small List**, or **Large List**.

1. To access the Preset Manager, shown in Figure 34-1, select **Choose Edit ⇨ Preset Manager** or select **Preset Manager** from any palette.



**Figure 34-1:** The Preset Manager

2. To change tool presets, choose the tool whose presets you want to change from the Preset Type drop-down menu.
3. In order to rearrange preset items, click an item and drag it up or down in the preset tools list. This technique enables you to move commonly used presets higher up in the menu for faster selection.
4. To rename a preset, double-click the icon (see Figure 34-2) or name of the preset to edit the name.



**Figure 34-2:** Renaming a preset

5. To reset the collection of Tool Presets to the default libraries, select Reset Preset Type from the palette menu.
6. To save a modified set of presets, press the Save Set button to open the Save dialog box. Each type of preset library uses its own file extension and should be saved in its own folder under the Presets folder in the Photoshop application folder on your hard drive.

**Task** **34*****cross-reference***

- Create your own individual presets in Task 33.



# Task 35

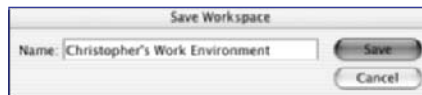
## Customizing and Saving Your Workspace

You can customize and save the arrangement of how Photoshop displays the palettes and toolbox within the application window. This is a useful option if you share Photoshop with others and would like to reset Photoshop to your needs. Saving your workspace is also a fast way to reorganize your working environment after a long day of digital imaging.

### notes

- You can always start with the default palette locations by deselecting Save Palette Locations in the General preferences dialog box.
- If you want to reset the palettes to their default locations and groupings, select Window ⇨ Workspace ⇨ Reset Palette Locations.

1. To save your custom workspace, first position the palettes and toolbox to your liking on the screen.
2. Select Window ⇨ Workspace ⇨ Save Workspace to open the Save Workspace dialog box, as shown in Figure 35-1.



**Figure 35-1:** Saving a workspace under a descriptive name

3. Enter a name in the text box and click Save.
4. To load a custom workspace, select Window ⇨ Workspace, and choose the workspace you want from the submenu, as shown in Figure 35-2.



**Figure 35-2:** Selecting a previously saved workspace

5. If you want to delete a Workspace, choose Window ⇨ Workspace ⇨ Delete Workspace.
6. Select the workspace you want to delete.
7. Click Delete.

**Task** **35*****cross-reference***

- Learn more about floating palettes, as well as palette options and the Palette Well, in Task 23.



## Part 3: Color Essentials

- Task 36: Establishing and Customizing Initial Color Settings
- Task 37: Calibrating a Macintosh Monitor
- Task 38: Calibrating a Windows Monitor
- Task 39: Setting Foreground and Background Colors Using the Color Picker
- Task 40: Using the Color Palette to Choose Colors
- Task 41: Adding, Renaming, and Deleting Colors from the Swatch Palette
- Task 42: Creating, Saving, and Loading Swatch Libraries
- Task 43: Using the Eyedropper Tool to Sample Single Colors or Areas of Color
- Task 44: Using the Color Sampler Tool to Place Color Sample Readout Markers
- Task 45: Converting an Image into a Different Color Mode
- Task 46: Proofing Colors for Specific Outputs
- Task 47: Changing or Converting a Color Profile

# Task 36

## Establishing and Customizing Initial Color Settings

**P**hotoshop enables you to take easier control of color management. You can create initial color settings for your working space as well as set color management policies on how to handle new images or newly opened images.

You can also save your color settings for future reference or share them with other Adobe applications, like Illustrator, or other people working on the same project.

### note

- For descriptions of the options in the Color Settings dialog box, move your cursor over a section heading or menu item and look in the lower area of the dialog box.

1. To open the Color Settings dialog box, select Photoshop ⇨ Color Settings (Mac) or Edit ⇨ Color Settings (Windows).
2. If you are new to Photoshop and don't know much about color settings, you might want to work with Photoshop's predefined color managements settings. You can choose from nine predefined settings from the Settings list in the Color Settings dialog box, shown in Figure 36-1. Select the profile you want and click OK.



**Figure 36-1:** Selecting the U.S. Prepress defaults

3. To generate custom settings, first specify your settings under Working Spaces and Color Management Policies, and then click Save.
4. Type in the name you want for your color settings file, and then click Save.
5. To make sure that your new color settings file is saved for future use in the Color Settings dialog box, save the file to the following location: on Windows, save the file in the Program Files\Common Files\Adobe\Color\Settings folder; on Mac OS 9.x, save the file in the System Folder/Application Support/Adobe/Color/Settings folder; and on Mac OS X, save the file in the User/CurrentUser/Library/Application/Support/Adobe/Color/Settings folder.
6. Then you will be prompted to add comments that you want attached with your configuration file as shown in Figure 36-2. The comments that you write will be displayed in the Description area of the Color Settings dialog box when you select your custom settings. After you have entered your comments, press OK.



**Figure 36-2:** Enter your color management description.

## Task 36

### tip

- The shortcut to access the Color Settings dialog box is Shift+Command+K (Mac) or Shift+Ctrl+K (Windows).

### cross-reference

- To help you establish the best color setup, it's best to calibrate your monitor. To learn more, see Task 37 if you are a Macintosh user or Task 38 if you are a Windows user.

# Task 37

## Calibrating a Macintosh Monitor

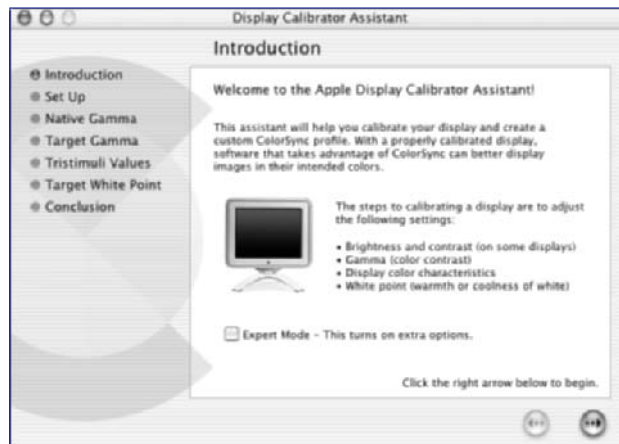
**P**roper calibration ensures color consistency on your monitor. In the case of Macintosh computers, Photoshop uses information from an operating system level tool to calibrate your monitor. You can find this tool in the Monitors (Mac OS 9) or Displays (Mac OS X) control panel.

When calibrating your monitor you will be asked to set the white point of the monitor, color balance, gamma, and the contrast and brightness.

### notes

- Adobe used to have a tool called the Adobe Gamma Control Panel, which operated in similar fashion to Apple's Calibrator Assistant. If you are using Mac OS 9 and want to use Adobe's tool instead of the one provided by Apple, go to the Goodies folder on the Adobe Photoshop CS CD-ROM.
- Your saved color profile will be available to all other software applications that use color profiles.

1. The first step in monitor calibrating is to wait at least a half hour after turning on your computer system to make sure your monitor has stabilized or "warmed up." While waiting, take notice of your surroundings: Make sure the light is consistent and reduce the number of reflections or hot spots that might hit your monitor which could interfere with your color perception.
2. Bring up the Display Calibrator Assistant shown in Figure 37-1. If you are using Mac OS 9, Select Apple ⇨ Control Panels ⇨ Monitors and press the Color button. On Mac OS X select Apple ⇨ System Preferences, click Displays and select the Color tab in the Display control panel, and then click the Calibrate button.



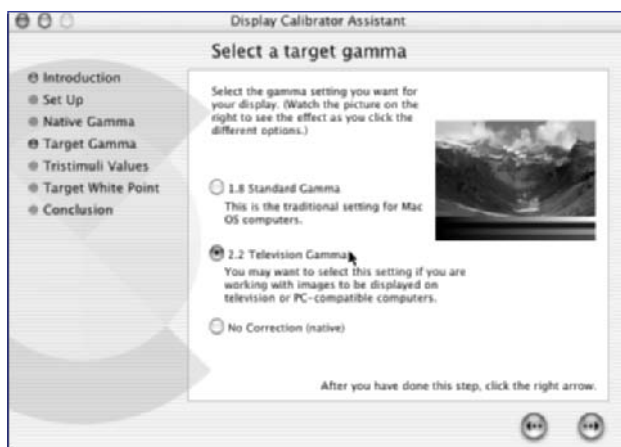
**Figure 37-1:** The first page of the Display Calibrator Assistant

3. Click the arrows in the lower right to step forward and backward through the calibration procedure. Please note that if you are using a flat-panel LCD display some of the following steps in the calibration process do not apply and you will not see them as you step through the assistant. To get started, click the right arrow.
4. Set your contrast to its highest levels, and then adjust the brightness so that the center shape is barely visible and the background is black.

**Task 37**

(It helps to squint your eyes when you do this.) When you are satisfied with the setting, click the right arrow.

5. Adjust your display's native gamma. Use the Slider until the image in the center matches the gray box it rests in. If you have checked Expert mode at the start of the process, there will also be options to adjust Red, Green, and Blue separately. When you are satisfied with the setting, click on the right arrow to advance to the next step.
6. Select the target gamma as shown in Figure 37-2. Select the gamma you want to use: No Correction leaves the display at its native gamma, 1.8 Standard Gamma is the common setting for Mac OS computers, and 2.2 Television Gamma is the standard for television and PC monitors. If you selected the Expert Mode checkbox on the assistant's introductory screen at the start of the process you will also see a slider bar that enables you to select a custom gamma value. When you are satisfied with the setting, click the right arrow to advance to the next step.



**Figure 37-2:** Selecting the right target gamma

7. Select the kind of chemical phosphors your monitor uses by choosing the description that is similar to your display. When you are satisfied with the setting, click on the right arrow to advance to the next step.
8. Choose a target white point. If you selected the Export Mode checkbox on the assistant's introductory screen, you will see a slider bar that enables you to fine-tune your settings. When you are satisfied with the setting, click on the right arrow.
9. Name your color profile and save it to the following location: On Mac OS 9, select the System Folder ⇨ Color Sync ⇨ Profiles folder; on Mac OS X, select Users ⇨ the current user ⇨ Library ⇨ ColorSync or choose Library ⇨ Profiles ⇨ Profiles.

**cross-reference**

- After you have saved your color profile, you can use it as the RGB working space found in the Color Settings. See Task 36 for more about Color Settings.



# Task 38

## Calibrating a Windows Monitor

If you are using Windows, you can calibrate your monitor with the Adobe Gamma application, which is part of your Photoshop installation. When calibrating your monitor, you will be asked to set the white point of the monitor, color balance, gamma, and the contrast and brightness.

### notes

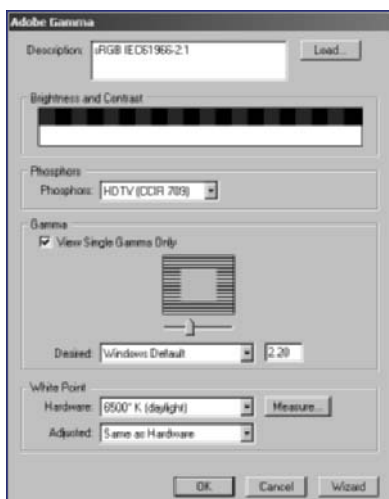
- When using the Wizard, you will be able to adjust the same settings that you see in the Adobe Gamma dialog box.
- While working in the Adobe Gamma dialog box, you can switch to Wizard mode at any time simply by pressing the Wizard button.

1. Turn on your computer and wait for at least a half hour after turning on your system to make sure your monitor has stabilized or “warmed up.” While waiting, take notice of your surroundings: Make sure the light is consistent and reduce the number of reflections or hot spots that might hit your monitor which could interfere with your color perception.
2. Select Start ⇨ Settings ⇨ Control Panel ⇨ Adobe Gamma. You can also find the Adobe Gamma application on your hard drive in the Program Files/Common Files/Adobe/Calibration folder.
3. You now have two options: you can adjust the settings in the Adobe Gamma dialog box, shown in Figure 38-1, or use the Adobe Gamma Wizard.



**Figure 38-1:** The Control Panel dialog box

4. To use the Adobe Gamma Wizard, shown in Figure 38-2, click the Wizard button in the lower right of the Adobe Gamma dialog box. The wizard steps you through the calibration process.
5. To adjust the settings manually, simply change the settings under Brightness and Contrast, Phosphors, Gamma, and White Point in the Adobe Gamma dialog box.
6. To adjust the settings under Brightness and Contrast, first turn the brightness and contrast on your monitor all the way up. This shows a row of alternating black and dark gray squares where you might have seen a black strip before. Then slide the brightness down until the dark gray boxes are a shade lighter than the black boxes. Once that's adjusted properly, move to the next set of preferences.

Task **38**

**Figure 38-2:** The Adobe Gamma Wizard

7. Leave the setting under Phosphors as is; in most cases the application will show the proper value selected. However, if you know without doubt that the value displayed is wrong, check with your monitor's manual to make doubly sure and then change the value.
8. Under Gamma, select the View Single Gamma Only checkbox. Now, hold on to the knob on the slider and squint. (This is otherwise known as the Clint Eastwood method of calibration.) What you want to do is to adjust the slider so that the gray value of the inner square is equal to the values of the outer square. After you have picked the value you feel is right for your system, select the Desired (Gamma) from the drop-down box. If you are new to color management issues and are using a Windows platform, it's best to stick with Windows Default.
9. Under White Point you have two options. You can select the white point that the monitor manufacturer recommends. Refer to the manual for your monitor to determine which value to use. If you can't find the white point value listed in the manual, click Measure and follow the instructions. From the Adjusted list, select Same as Hardware or select a value that closely mimics the color temperature value of your hardware.
10. When you are finished, click OK to close the Adobe Gamma dialog box and open the Save As dialog box, which enables you to save your new color profile in the WINNT/System32/Spool/Drivers/Color folder. Photoshop can now use your color profile as its RGB working space.

*cross-reference*

- Got a Mac instead of a Windows machine? To calibrate a Macintosh monitor, see Task 37.

# Task 39

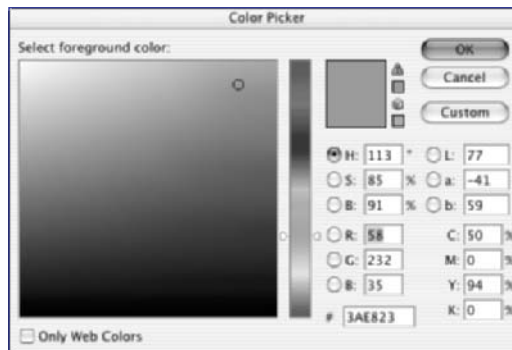
## note

- If you see an exclamation point in the Color Picker next to the new color choice box, the color is outside the printable gamut. This means there is no combination of the printer inks cyan, magenta, yellow, or black that will reproduce that color.

## Setting Foreground and Background Colors Using the Color Picker

Even though there are a million colors you can pick from in Photoshop, sometimes you just need one to edit an image. With so many colors to choose from, selecting a specific color could be a time-consuming task. That's where the Photoshop Color Picker dialog box comes in. This handy tool enables you to select the color you want from a large color field, a color spectrum bar, or to input manually the color values for different color models.

1. To access the Color Picker dialog box (see Figure 39-1), click the foreground or background color selection box in the toolbox, click the active color selection box in the Color palette, or double-click the foreground or background color in the Color palette.



**Figure 39-1:** The Color Picker dialog box

2. Pick a color using the color field. The color field is the large square to the left side. When you click inside this field you see a small circle marking the location of your click; the color you selected is shown in the small square to the upper right of the color field. In the smaller square to the upper left-hand corner are two colors: the color you just selected on the top and the old color your new color will replace.
3. To change the hue of the color field, you can click the desired hue in the vertical color slider to the right of the color field, or move the

slider up and down. As you adjust the color slider, color variations appear in the large color field square. The color slider, selecting hues, is often used in conjunction with the large color field square to refine and easily pick color choices.

4. If you are preparing material for electronic delivery (for example, Web graphics, multimedia purposes), then you enter the R (red), G (green), and B (blue) values. If all values for R, G, and B are set to zero, then the color is black. If they are all set to 255, the color is white. This is due to the additive nature of these colors: The higher the values you add, they will equal white. If you set R to 255 and the rest to zero, you will have a red at 100%.
5. Just like RGB, you can enter numerical values for CYMK as well as HSB and Lab.
6. If you know the hexadecimal value of the color, you can enter it into the text field next to the pound sign. Hexadecimal values are often used when specifying colors for Web pages. Web designers will find this method of entering values of great use.
7. When finished, click OK. Your new color will be shown in the toolbox below the selection of tools as shown in Figure 39-2.



**Figure 39-2:** You can view your (foreground and background) colors below the set of tools in the toolbox.

## Task 39

### *tip*

- If you want only Web-safe colors and their values displayed in the Color Picker, select the Only Web Colors checkbox in the lower left corner of the Color Picker dialog box.

### *cross-reference*

- You can use the color palette to help select colors as well. See Task 40 for more information.

## Task 40

# Using the Color Palette to Choose Colors

**T**he Color palette is a miniature version of the Color Picker, but still powerful and just as easy to use when it comes to selecting colors.

The Color palette contains a set of color sliders that enable you to change the color value, an option to select either the foreground or background colors, text inputs to manually change the values of a color, and a color spectrum bar for clicking of colors.

### note

- If you don't like the colors changing dynamically as you use the color sliders, you can turn off the feature by clearing the Dynamic Color Sliders checkbox in the General preferences dialog box.

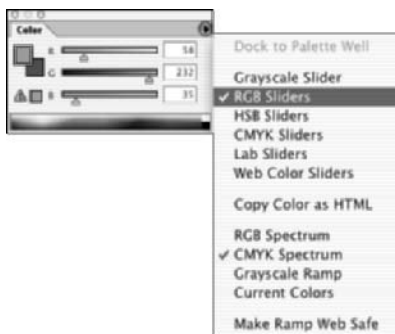
1. To access the Color palette, shown in Figure 40-1, select Window ⇨ Color or, if already visible in the work environment, click the Color palette tab.



**Figure 40-1:** The Color palette

2. Before editing a color selection, make sure the appropriate selection box, foreground or background, is active. In Figure 40-1 the foreground color box, the square in the upper lefthand corner, is selected. You can tell by the black outline around the box, which one is currently selected. In this example, if you want to switch to the background color, simply click the other color selection box.
3. To edit a color selection, you can drag one of the color sliders. In Figure 40-1, the color values RGB are present and you can slide the values of red, green, and blue independently of each other. Or enter the values of the colors in the text boxes next to the color sliders.

4. You can also click in the color spectrum at the bottom of the Color palette to select the color you want.
5. If you want to work with different color sliders or a different color spectrum than RGB, click the triangle option to the right of the tab (see Figure 40-2). This opens a popup menu that enables you to switch sliders to the Grayscale, HSB, CMYK, Lab, and Web Color models or select a different color spectrum for display on the bottom of the Color palette.



**Figure 40-2:** The Color palette options display.

6. Web designers will appreciate the Copy Color as HTML and Make Ramp Web Safe items on the Color palette's options popup menu. Select Copy Color as HTML to copy the currently selected color as a value suitable for pasting into a Web document. Select Make Ramp Web Safe to make the color spectrum showcase only colors that are safe for online display.

## Task 40

### tip

- While selecting a color in the color spectrum, Alt-click and Photoshop selects the color for the inactive color selection box.

### cross-reference

- Photoshop's Color Picker is a more advanced device to select colors. Learn about it in Task 39.

# Task 41

## note

- Colors added to a swatch aren't lost after you close Photoshop. They are saved to the Preferences file and will show again the next time you launch Photoshop. However, a Preference file is not a good solution if you want to keep your color selections. Save the colors into a library by clicking the triangle icon and selecting Save Swatches.

## Adding, Renaming, and Deleting Colors from the Swatch Palette

While working on a project, you might need to use a set of colors repeatedly throughout a project. Whether the colors are the official colors of your company, your favorite sports team, or the color schemes for Web sites, managing those colors becomes necessary. The Swatch palette is where you can view a set of color arrangements as well as edit your own color selections to create your own swatch library.

1. To bring up the Swatches palette, shown in Figure 41-1, select Window ⇨ Swatches or click the Swatches palette tab.

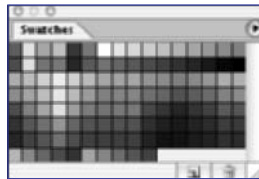
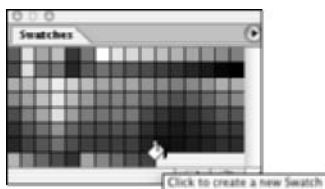


Figure 41-1: The Swatches palette

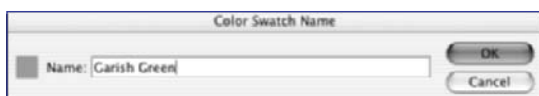
2. To pick the foreground color, click the color you want in the Swatches palette.
3. To select a background color, press and hold Ctrl (Windows) or Command (Mac) and then select the color you want in the Swatches palette.
4. To add an existing color to the Swatches palette, be sure the color you want to add is shown in the foreground color selection box, and select the New Swatch button located towards the bottom right-hand corner of the Swatches palette or choose New Swatch from the Swatches options popup menu. The swatch is appended to the end of the current list of displayed swatches.

- Alternatively, move your mouse pointer over a blank area of the Swatches palette until it changes into a paint bucket icon as shown in Figure 41-2. Then click to open the Color Swatch Name dialog box. Enter a name for the color and press OK to add the color to the palette. Again, be sure the color you want to add is shown in the foreground color box.



**Figure 41-2:** Your mouse pointer changes into a paint bucket icon when placing a color into a new area on the Swatches palette.

- To rename a swatch, double-click the swatch to open the Color Swatch Name dialog box. Enter the new name and click OK.
- To delete a color from the Swatches palette, drag the swatch from the palette and position it *over* the trash icon at the bottom right-hand side of the palette. Alternatively, you can press Alt (Windows) or Option (Mac) and move your cursor over the swatch when the cursor changes into a pair of scissors (see Figure 41-3), click.



**Figure 41-3:** The scissor icon indicates that a swatch is just one click away from being deleted.

## Task 41

### tip

- You can change the view of the swatches by selecting Small List from the palette's option popup menu. To return to the default view, select Small Thumbnail from the option popup menu.

### cross-reference

- Confused by what a color selection box or foreground and background color is? See Task 39 to learn more about it.



# Task 42

## Creating, Saving, and Loading Swatch Libraries

While editing the Swatches palette, you might need to make the color selections more permanent. Saving a swatch to a library means that you can easily recall your color choices if you reset Photoshop or you need to share your colors with co-workers.

### note

- When saving a library of swatches for future reference, be sure to save them inside the Presets/ Swatches folder in your Photoshop application folder. This ensures Photoshop will load the library you used last in the Swatches palette options menu after you quit and restart the application.

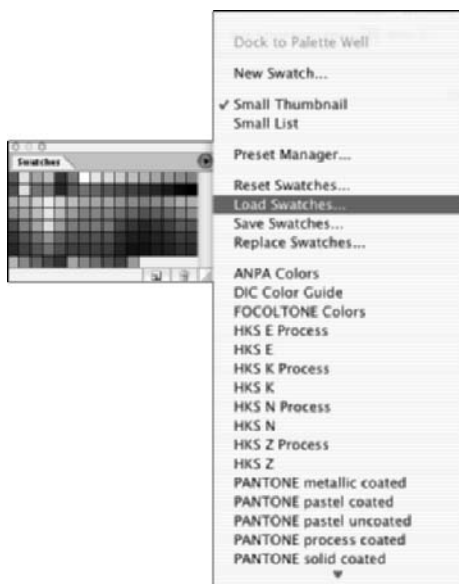
- To create your own color library, edit an existing library of swatches to your own liking.
- Select Save Swatches from the Swatches palette's options popup menu to open the Save dialog box shown in Figure 42-1.



**Figure 42-1:** Saving a collection of swatches as a library

- Select a location for the swatch library other than the default location, type in a filename, and click Save.
- To load a library of swatches into the Swatch Palette, select Load Swatches from the palette's options menu (see Figure 42-2). This opens the Load dialog box.

# Task 42



**Figure 42-2:** Getting ready to load a different Swatches library

5. Select the library file you want to use and click Load to append the library of swatches to the swatches currently displayed in the Swatches palette.
6. To replace the existing swatches in the Swatches palette, select Replace Swatches from the palette's options menu, select the library you want to use, and click Load to display your new color choices.
7. To add a library of swatches, you can also select a library from the list of libraries at the bottom of the palette's options menu. After selecting the library you want, you will be prompted to append or replace the library to the existed swatches on the palette (see Figure 42-3). To replace the existing library click OK.



**Figure 42-3:** Choose whether you want to append or replace the current Swatches library in the Swatches palette.

## tip

- If you've made a mess of things with the color selections, select Reset Swatches from the options menu. This will bring back the default set of colors Photoshop uses for the Swatch palette and you can choose to either append them to your current selection of swatches or replace them.

## cross-reference

- To learn how to add or delete colors in the Swatches palette, see Task 41.

**Task 43**

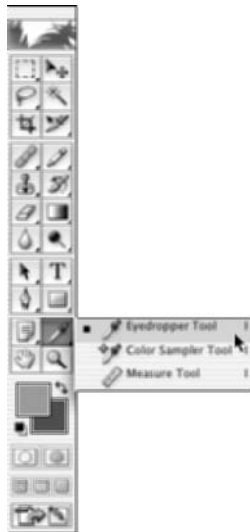
## Using the Eyedropper Tool to Sample Single Colors or Areas of Color

The Eyedropper tool enables you to select color areas in an image and make it a new foreground or background color. You can use this feature to create, for example, custom swatch libraries. But first, you need to learn how to capture your colors.

**note**

- When selecting a foreground color, you can click and drag the cursor over an image window and the color selection will be dynamically updated. This also works for the background color when you press Alt (Windows) or Option (Mac).

- To select the Eyedropper tool, click the Eyedropper icon in the toolbox (see Figure 43-1) or press I. (or Shift and the letter I, if the icon is not visible in the toolbox).



**Figure 43-1:** The Eyedropper tool is selected.

2. Move your mouse pointer over the area of an open image window and click to select a pixel.
3. To change the sample size used by the eyedropper, which is usually set to 1 pixel, select Point Sample, 3 by 3 Average, or 5 by 5 Average in the options bar. Point Sample gives you the color value of the pixel you selected, while the other sampling options provide an average color value of the chosen area.



**Figure 43-2:** The options available for the sample size

4. If you want to select the background color selection, press (Windows) Alt-click or (Mac) Option-click while in an open image window.
5. To copy the color information to the clipboard when using the Eyedropper tool, right-click (Windows) or Ctrl-click (Mac). This is great shortcut when using Photoshop while having another application like a Web page editor open.

## Task 43

### tip

- You can use the eyedropper tool anytime while using any painting tool (Line tool, Pencil tool, and Gradient tools, for example) by pressing Alt (Windows) or Option (Mac). This changes the tool's cursor icon to an eyedropper, enabling you to select a color.

### cross-reference

- After you have selected a color, you can add it to a swatch and create your own swatch libraries. See Tasks 41 and 42 for more information.

# Task 44

## Using the Color Sampler Tool to Place Color Sample Readout Markers

The Color Sample tool is similar to the Eyedropper tool. However, unlike the Eyedropper tool, the Color Sampler tool enables you to drop up to four color markers anywhere on an image and get their readouts in the Info palette.

### notes

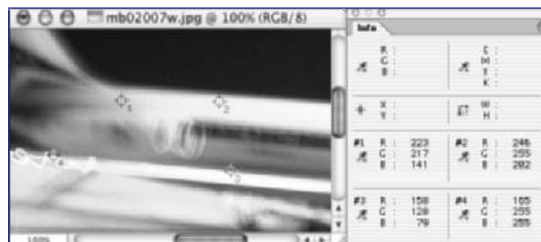
- Color markers use the top visible layer to collect color information. If the top layer is removed or becomes invisible, it will immediately collect data from the next top layer.
- Color markers won't move if a layer is moved. However, they will move if you rotate the canvas of an image.

1. Select the Color Sampler tool from the toolbox (see Figure 44-1) or press I or, if the tool is not visible in the toolbox, Shift+I.



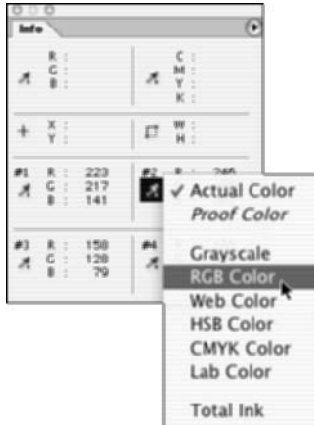
**Figure 44-1:** The Color Sampler tool looks like the Eyedropper tool, but has crosshairs in the upper lefthand corner.

2. Click areas in the image window where you want to place color markers. (You can have only four color markers at one time placed on an image window.)
3. Select Window ⇨ Info to open the Info palette.
4. If you don't see the color marker information as shown in Figure 44-2, go to the Info palette's options menu and select Color Samplers.



**Figure 44-2:** At the bottom of the Info palette are the values for the four color makers.

5. If you want to change the color model used by the color markers, click the small eyedropper icon below the color marker number in the Info palette. This opens a menu where you can select the color model of your choice, as shown in Figure 44-3.



**Figure 44-3:** The menu to change the color model used by the color markers

6. To move a color marker to a different location, be sure the Color Sampler tool is selected, and then click and drag the marker to a new location in the image window.
7. To hide or show the color makers, select View ⇄ Extras, or press Ctrl+H (Windows) or Command+H (Mac).
8. To delete a color marker, select the Color Sampler tool and click and drag the marker out of the document window, or hold down Alt (Windows) or Option (MacOS) and click the marker. To delete all color markers, click Clear in the options bar.

## Task 44

### tip

- Color markers, if left on an image, will be saved along with the file in the Photoshop format. So, you can use them repeatedly without having to move them back into position.

### cross-reference

- The Info palette is used in conjunction with the color markers to provide color information. To learn more about the Info palette see Task 22.

# Task 45

## Converting an Image into a Different Color Mode

**P**hotoshop enables you to convert an image into eight color modes: Bitmap, Grayscale, Duotone, Indexed Color, RGB Color, CMYK Color, Lab Color or Multichannel.

### notes

- If you want to convert your image into a color mode that is unavailable (the item is dimmed in the menu), you must first convert the image into another color mode.
- When converting modes you might notice unwanted color shifts. For example, when changing an image from RGB to CMYK for printing purposes your colors might appear dull. This is due to the conversion from the brighter colors available under RGB, an additive color system, to the darker colors used in printing in CMYK, a subtractive color system.

With conversions you will notice some color shifts; you'll also notice that you cannot switch directly from one color mode into another. Still, once you get the hang of this feature, you'll learn to appreciate it. For example, you can use it to prepare an image originally used for print in a CMYK color mode for the Web by converting it to the RGB color mode.

1. Open an image you want to convert from one color mode into another.
2. Select Image ⇨ Mode to see the list of available color modes (see Figure 45-1). The list of options varies depending on the color mode of the source image.

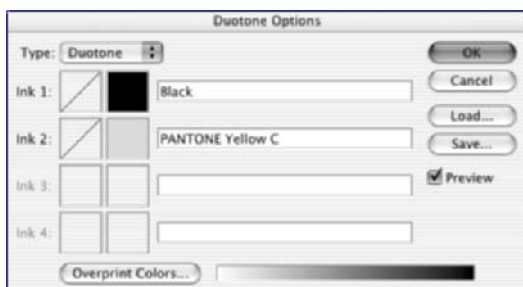


**Figure 45-1:** The color modes menu with available options if the source image is in RGB

3. If you are starting with an RGB image you can select Grayscale to show the image in black, white, or 254 shades of gray.

**Task** 45

4. If an image is in Grayscale, you can convert it to Bitmap mode. When in Bitmap mode, you see only full colors; here: 100% white and 100% black.
5. If you convert an image to Index Color, the image is reduced to one channel and a color table of up to 256 colors is produced.
6. If you convert an image into RGB Color mode you can modify the image with all available tools and filters.
7. To prepare an image for printing on a color printer or performing color separations, convert it into CMYK Color.
8. If you convert an image to Lab Color you end up with three channels: one for lightness, a channel for the colors from red to green, and another channel for the colors blue to yellow.
9. To apply two or more colors to an image, use the Duotone mode. However, this mode is only available after an image has been converted to Grayscale. When you select the Duotone mode, Photoshop opens the Duotone dialog box, shown in Figure 45-2, which enables you to select the additional colors you want.



**Figure 45-2:** The Duotone dialog box

10. To manipulate numerous color channels, select the Multichannel mode. It uses many 256-level grayscale channels.

***cross-reference***

- Before changing colors, make sure your monitor is calibrated correctly. See Tasks 37 or 38.



# Task 46

## Proofing Colors for Specific Outputs

When preparing an image for printing, you typically create a proof. The proof will be used to judge the colors in the image before they are sent to the printer (as well as judging the final product against the proof). Photoshop enables you to create a soft proof. A soft proof is Photoshop's best representation on your monitor of how your work will look for chosen outputs.

While you should continue to make hard proofs (printouts that best represent how your work should look) for your images that are intended for print, soft proofs enable you to see an overview of how well your image will reproduce in its target environment.

### notes

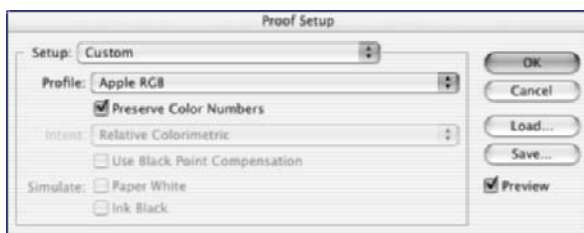
- Saving a Custom proof setup enables you to use it again for this or other projects.
- You can see the name of the current proof profile next to the color mode in the document's title bar when viewing a soft proof in the image window.

1. To show a soft proof, choose View ⇨ Proof Setup to open the Proof Setup dialog box and select the proof profile space that you want to simulate (see Figure 46-1).



Figure 46-1: Selecting the proofing model

2. To define your own setup, select Custom from the Setup list in the Proof Setup dialog box, shown in Figure 46-2.



**Figure 46-2:** The Custom dialog box enables you to define a proofing setup.

3. If you want to see how your work will look when printed, select Working CMYK soft-proofs colors using the current CMYK working space as identified in the Color Settings dialog box. You can also pick from Working Cyan Plate, Working Magenta Plate, Working Yellow Plate, Working Black Plate, or Working CMY Plates soft-proofs specific CMYK ink colors using the existing CMYK working space.
4. Macintosh RGB or Windows RGB soft-proofs colors in an image using either a standard Mac OS or Windows monitor's color space as the color proof. Neither option is available for Lab Color or CMYK Color documents.
5. If you want to make soft proofs for work that will be delivered via a monitor, select Monitor RGB soft-proofs colors in an RGB document using your current monitor color space as the proof profile space. This option is unavailable for Lab and CMYK documents.
6. Choose Simulate Paper White to proof the specific shade of white exhibited by the print medium set by the document's profile. This option is not available for all profiles and is available only for soft proofing, not printing.
7. Choose Simulate Ink Black to preview the actual dynamic range defined by a document's profile. This option is not available for all profiles and is available only for soft proofing, not printing.
8. To see the Color Proof while viewing an image without having to go through the Proof Setup dialog box, select View ⇨ Proof Colors. If you go this route, Photoshop uses the last setting that you supplied in the Proof Setup dialog box. To toggle this view, select View ⇨ Proof Colors.

## Task 46

### *cross-reference*

- You can use your own color profile when viewing a soft proof. For more information on creating a color profile see Task 36.

## Task 47

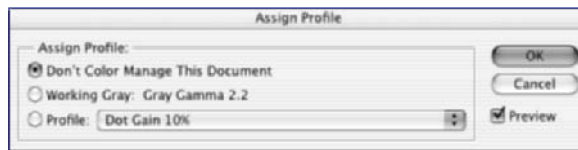
### note

- If you opt to change a color profile in an image, this may dramatically cause colors to shift on your monitor.

## Changing or Converting a Color Profile

After you've calibrated your monitor and set up your color profiles to be just right you might discover that you will need to use another color profile on in image. This might be due to a client image that has come from a different authoring environment, or you simply need to prepare an image for a certain output device. Photoshop enables you to change or remove a color profile altogether from an image.

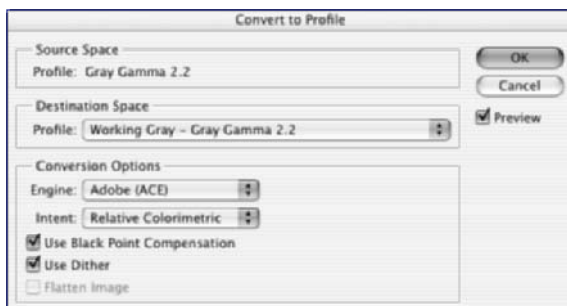
1. To change or remove a color profile from an image, select Image ⇨ Mode ⇨ Assign Profile to open the Assign Profile dialog box, shown in Figure 47-1.



**Figure 47-1:** The Assign Profile dialog box

2. To remove a color profile, select the Don't Color Manage This Document option.
3. To apply the current color mode to the document, select the Working option.
4. To select a new color profile, select the Profile option and choose the profile you want from the list.

5. To preview the effects of the new profile assignment in the document, select Preview.
6. To convert an image to a different color profile, first select Image ⇨ Mode ⇨ Convert to Profile to open the Convert to Profile dialog box, shown in Figure 47-2.



**Figure 47-2:** The Convert to Profile dialog box

7. Under Destination Space, choose the color profile to which you want to convert the document's colors from the Profile drop-down list.
8. Under Conversion Options, select a color management engine, a rendering intent, and black point and dither options.
9. To flatten all layers of the document onto a single layer upon conversion, select the Flatten Image option.
10. If you want to preview the profile conversion, select Preview.

## Task 47

### *tip*

- If you select the Flatten Image option, the preview becomes more accurate.

### *cross-reference*

- Learn how to create your own color profile in Task 36.



## Part 4: Color Adjustments

- Task 48: Determining Detail and Tonal Range of an Image with the Histogram
- Task 49: Using the Auto Adjustments for Quick and Simple Corrections
- Task 50: Specifying Auto Correction Options
- Task 51: Adjusting the Tonal Range of an Image Using Levels
- Task 52: Setting White and Black Points Using Levels
- Task 53: Adjusting Color in an Image More Precisely with Curves
- Task 54: Using the Color Balance Command to Modify the Mixture of Colors
- Task 55: Using the Brightness/Contrast Command to Regulate Those Values within an Image
- Task 56: Using the Hue/Saturation Command to Alter the HSL Values in an Image
- Task 57: Editing the Range of the Hue/Saturation Sliders
- Task 58: Matching Colors between Images with the Match Color Command
- Task 59: Using the Replace Color Command to Change a Selected Color or Colors
- Task 60: Using Selective Color to Increase or Decrease Specific Color Components
- Task 61: Applying Gradient Mapping to Add a Stunning Color Effect to an Image
- Task 62: Using the Photo Filter Command
- Task 63: Using the Shadow/Highlight Command
- Task 64: Using the Invert Color Command to Inverse Color Values in an Image
- Task 65: Equalizing Levels of Brightness and Dark with the Equalize Command
- Task 66: Adjusting the Threshold to Get a High-Contrast, Black-and-White Image
- Task 67: Posterizing an Image to a Specified Number of Tonal Levels
- Task 68: Using the Variations Command to Adjust Values with the Help of Thumbnail Views

# Task 48

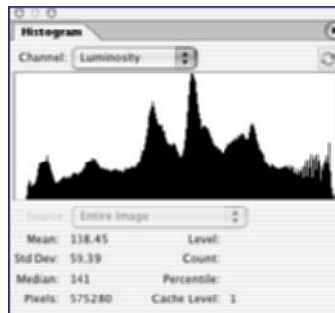
## Determining Detail and Tonal Range of an Image with the Histogram

If you are planning to do some digital editing on an image, it's best to look at the histogram before starting your work. The histogram provides the detail and tonal range of an image by showing the distribution of shadows, midtones, and highlights. With this information, you can then take the necessary steps to correct the tone of an image.

### notes

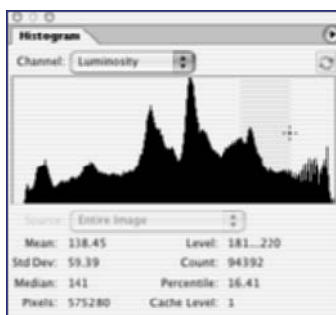
- If you want to add spot channels and alpha channels to the histogram, press Alt (Windows) or Option (MacOS) when selecting Image ⇨ Histogram. When the histogram dialog box is visible, you can select the channel you want from the Channel list.
- Check the histogram for equal distribution in the middle of the histogram. The midtone region of the photograph is where most of the image's content comes from. If there isn't a nice valley, but instead one central peak in your histogram, there might not be enough image information to continue working on the image.

1. To show the Histogram palette of an entire image, select View ⇨ Histogram Image ⇨ Histogram.
2. In the Histogram palette options menu, select Expanded View to display the Histogram palette complete with a chart and image details as shown in Figure 48-1. The histogram represents the intensity values from darkest (0) at the far left to brightest (255) at the far right. The black bars shooting upward from the bottom of the graph represent the total number of pixels with a given value.



**Figure 48-1:** The histogram dialog box

3. To show a histogram for only portions of an image, use the Marquee tool and select the portion of the image that interests you. The histogram graph automatically redraws itself.
4. For images in RGB, CMYK, and indexed-color modes, you can select options from the Channel list at the top of the palette to review other, individual channels.
5. In order to determine information about a specific point on the histogram, put your mouse pointer over the graph. You will see the data that relates to that point below the histogram.
6. To see information about a range of values instead of one point, move your cursor to a position inside the histogram and drag to the left or right, as shown in Figure 48-2.

Task **48**

**Figure 48-2:** Getting information for a range of values in a histogram

7. When reviewing an image and its histogram, take a look at its shadows, midtones, and highlights. In Figure 48-3, you can see an image and its histogram. You can tell from the histogram that there aren't any true blacks (on the left side) or whites (on the right side) since there aren't any peaks in the graph. However, there are a good deal of midtones in the image. In order to correct this image, the Levels command would be a good place to start.



**Figure 48-3:** Getting information from the histogram for a particular image.

8. When you are finished examining the histogram, press OK.

***cross-reference***

- Turn to Task 43 to learn how to sample single colors or areas of color.



# Task 49

## Using the Auto Adjustments for Quick and Simple Corrections

### note

- When using the Auto Levels command, you might experience some color changes in the image because it corrects the image based on the channels of an image.

Photoshop enables you to quickly perform image edits with a set of auto adjustments that correct image levels, contrast, and color. The Auto Levels command moves the Levels sliders automatically to set highlights and shadows. The Auto Contrast command adjusts automatically the overall contrast and mixture of colors in an RGB image. The Auto Color command adjusts the contrast and color of an image by using the colors available in an image.

In general, these auto corrections enable you to quickly touch up an image by applying some minor corrections. For example, when using the Auto Levels and Auto Contrast commands, Photoshop doesn't pay attention to the .5% of each end of the tonal range (black and white).

1. Open or select an image you want to adjust.
2. To use the Auto Levels command, select Image ⇨ Adjustments ⇨ Auto Levels.
3. Review your image for changes by comparing the original image with the adjusted image, as shown in Figure 49-1. If you don't like the changes, select Edit ⇨ Undo.



**Figure 49-1:** A before and after representation of what Auto Levels can do

4. To use the Auto Contrast command, select Image ⇨ Adjustments ⇨ Auto Contrast.
5. Review your image for changes by comparing the original image with the adjusted image as shown in Figure 49-2. If you don't like what you see, select Edit ⇨ Undo.



**Figure 49-2:** A before and after representation of what Auto Contrast can do

6. To automatically adjust the colors of an image, select Image ⇨ Adjustments ⇨ Auto Color, as shown in Figure 49-3.



**Figure 49-3:** Selecting the Auto Color command

7. Review your image for changes by comparing the original image with the adjusted image. If you don't like the changes, select Edit ⇨ Undo.

## Task 49

### tip

- The Auto Contrast command works best on photographic images. Images with flat areas of colors are not affected as much.

### cross-reference

- You can control the Auto Corrections settings. For more information, see Task 50. If you want more precise corrections, see Tasks 51 through to 53.

# Task 50

## Specifying Auto Correction Options

The Auto Correction Options dialog box enables you to modify the default settings for automatically adjusting the overall tonal range and contrast of an image as well as to assign initial values to shadows, midtones, and highlights.

### note

- You can also modify the auto-correct options by going through the Curves dialog box. Select Image ⇨ Adjustments ⇨ Curves and press Options.

- To set the Auto Correction options, select Image ⇨ Adjustments ⇨ Levels to open the Levels dialog box.
- Click Options to open the Auto Color Correction dialog box, shown in Figure 50-1.



**Figure 50-1:** The Auto Color Correction dialog box

- Under Algorithms, select the option you want to use to adjust the tonal range of the image. Enhance Monochromatic Contrast maintains the color relationship in the channels by clipping all channels the same, but makes highlights appear lighter and shadows appear darker. Enhance Per Channel Contrast clips the channels individually increasing the tonal range in each channel to produce a more dramatic correction. Find Dark & Light Colors determines the average lightest and darkest pixels in an image and uses them to maximize contrast while minimizing clipping.
- To have Photoshop move, or “snap,” colors that near the neutral color value to become neutral, select the Snap Neutral Midtones checkbox.
- Under Target Colors & Clippings, specify by how much you want Photoshop to clip black and white pixels. The default value is 0.5%.
- To assign color values to the darkest, neutral, and lightest areas of an image, click a color in their respective swatches to open the Color Picker (see Figure 50-2).

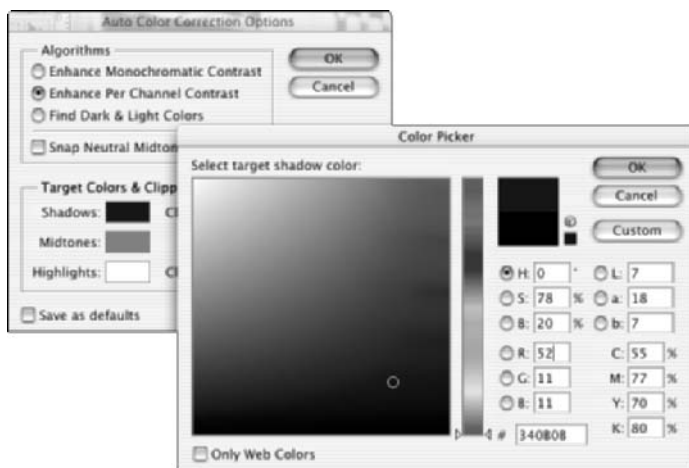


Figure 50-2: Picking the color in the color field for Shadows

7. To save your changes to the Auto Levels autocorrect options, click the Save as Default checkbox and then click OK. Photoshop will use these settings the next time you click the Auto button in the Levels or Curves dialog box. If you don't save your changes as default, then your settings are only available for the current edit step.

## Task 50

### tip

- When setting a clip value for the shadows and highlights in your image, use a value between 0.5% and 1% for best results.

### cross-reference

- Learn more about modifying an image through Curves in Task 53.

# Task 51

## Adjusting the Tonal Range of an Image Using Levels

The Levels dialog box is one of the more powerful tools at the disposal of Photoshop users when editing an image. With the Levels command you can adjust the tones of your image — from highlights to midtones and shadows.

### notes

- You can also adjust the input and output levels manually by entering values in the input text boxes.
- If you notice white spaces between the pixels in an adjusted histogram, don't worry. Unless the gaps are large or near other large areas of a low pixel count, your image is fine.

1. Open an image you want to modify.
2. Select Image ⇨ Adjustments ⇨ Levels to open the Levels dialog box, shown in Figure 51-1, or press Ctrl+L (Windows) Command+L (Mac).

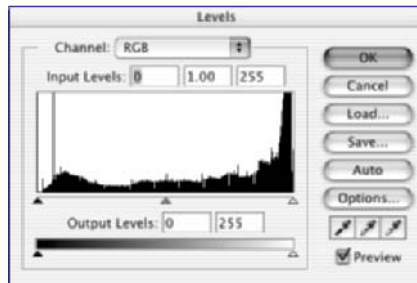


Figure 51-1: The Levels dialog box

3. Select the Preview dialog box to verify that your changes are reflected automatically in the image window.
4. To manipulate the tones for a color channel, select a channel from the Channel list at the top of the Levels dialog box.
5. To manipulate more than one channel at a time, select the channels of interest before accessing the Levels dialog box by following these steps: Open the Channel palette and press and hold Shift while selecting the channels you want to adjust. Next, launch the Levels dialog box and you will see the abbreviations for the selected channels in the Channel list. To edit an individual channel, simply select it from the Channel list, as shown in Figure 51-2. In this example, both the red and green channels are selected — the abbreviation RG stands for Red and Green.

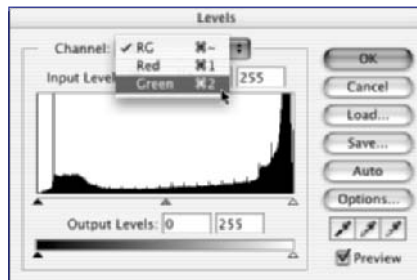
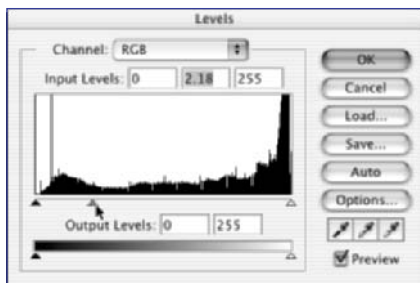


Figure 51-2: Selecting the channels to adjust in the Levels dialog box.

**Task 51**

6. To adjust the shadows and highlights manually, you can do one of two things: adjust the input black and white sliders below the graph or drag the black and white sliders below the gradient bar in the Levels dialog box.
7. To correct the midtones of an image, use the gray Input Levels slider, shown in Figure 51-3. Sliding the gray Input Levels slider to the left will lighten the midtones while sliding it to the right will darken them.



**Figure 51-3:** Adjusting the midtones in an image by sliding the gray Input Levels slider.

8. To adjust the tonal range of the image using Auto Correction settings, click Auto.
9. When you are finished making your tonal adjustments, press OK.
10. To view the adjusted histogram, reopen the Levels dialog box or, even better, open the Histogram palette by selecting Windows ⇨ Histogram.

***cross-reference***

- To determine or modify the Auto Color Correction settings, see Task 50.

**Task 52**

## Setting White and Black Points Using Levels

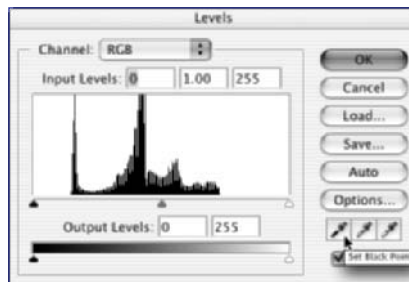
**Y**ou can use Levels to set the lightest and darkest areas of an image to black and white. When the new values for these areas are set, you can save the settings for future reference. For example, if you have taken a roll of film and the black and white areas are a bit off, you can load the settings for all the pictures in the roll of film without having to manually readjust each image.

1. Open the image you want to modify (See Figure 52-1.)



**Figure 52-1:** The image before setting the black and white points.

2. Select Image ⇨ Adjustments ⇨ Levels to open the Levels dialog box or press Ctrl+L (Windows) or Command+L (Mac).
3. Select the Set Black Point eyedropper tool as shown in Figure 52-2.



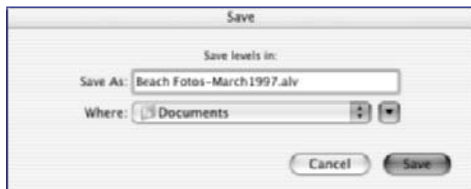
**Figure 52-2:** Choosing the Set Black Point eyedropper tool

4. In the image window, click the area where you want darkest colors to be represented.
5. Go back to the Levels dialog box and choose the Set White Point eyedropper tool.
6. Click in the image window where you want to have the whitest area.
7. Review the image to make sure the adjustments are acceptable (see Figure 52-3). Repeat steps 3 through 6 to make further changes if necessary.



**Figure 52-3:** The image after setting the black and white points.

8. To save your settings for future reference, click the Save button in the Levels dialog box.
9. In the Save dialog box, enter a filename for the level settings and select a location where you want to save the settings file, as shown in Figure 52-4. Level settings files are saved with the .alv extension.



**Figure 52-4:** Saving your new level settings

10. Click Save to close the dialog box.

## Task 52

### *tips*

- You can also set the gray point of the image. Select the eyedropper tool in the center and click a representative gray area in the image window.
- While you can go straight for the black and white areas of an image, feel free to experiment with weird placements for black and white points in an image. Who knows — you might like the results more than the original image.

### *cross-reference*

- To learn how to adjust colors with greater control, see Task 53.



## Task

## 53

## Adjusting Color in an Image More Precisely with Curves

Instead of the Levels command, which is used in conjunction with the histogram, you can also manipulate a line along a graph using the Curves command. The line starts from the lower left-hand side to the upper right-hand side of the graph.

### note

- The Curves dialog box displays intensity values for RGB images from 0 to 255, with shadows on the left. CMYK images are displayed in values of percentages from 0 to 100 with high-lights on the left. If you want to flip the display, click the arrows in the center of the bottom bar.

The concept of curves comes in when you click a line and drag its anchor points. Photoshop then adjusts the line by creating a curved line that goes through the new point. You can add up to 15 points on the line. While it looks easy, the effects to the image are dramatic with the slightest change in the line or curve.

1. Open an image you want to modify.
2. Select Image ⇨ Adjust ⇨ Curves to open the Curves dialog box, shown in Figure 53-1. Alternatively, you can also press Ctrl+M (Windows) or Command+M (Mac). The vertical bar represents the new color values that correspond to the Output value that is listed below the chart. The horizontal bar reflects the original intensity values of the pixels and corresponds to the Input value listed below the chart.

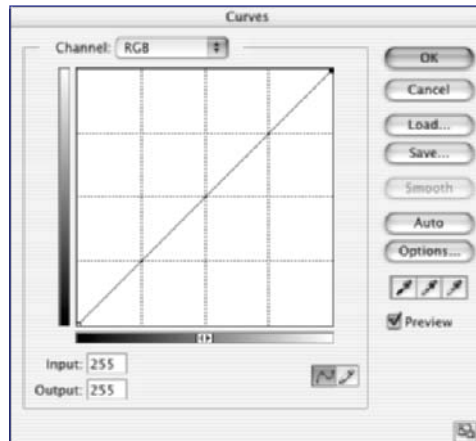
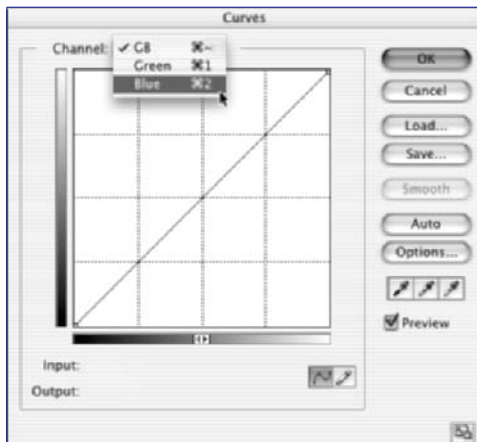


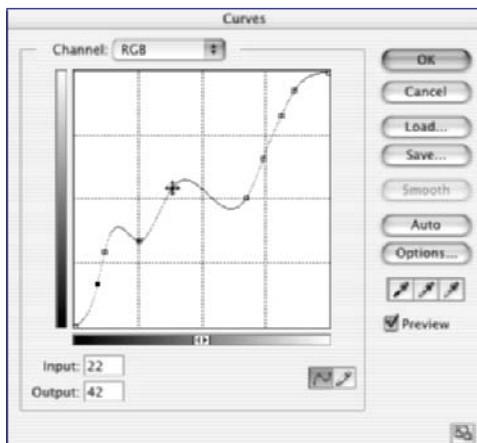
Figure 53-1: The Curves dialog box

3. If you are editing an image in RGB color mode, the default channel will be RGB. However, as is the case with the Levels command, you can select individual channels and adjust them independently of each other.
4. To manipulate more than one channel at a time, you must select the channels before accessing the Curves dialog box. Open the Channel palette and press and hold Shift while selecting the channels you want to adjust, and then open the Curves dialog box. You will see the selected channels in the Channel drop-down list. In Figure 53-2, both the green and blue channels are selected — the abbreviation GB stands for Green and Blue.
5. To adjust the colors in an image, position the mouse pointer over the line and click to add an anchor point to the curve, as shown in Figure

53-3. You can add up to 15 anchor points to your line. Placing an anchor point enables you to isolate certain color values in your image from changing when moving other anchor points along the curve.



**Figure 53-2:** Selecting the channels you want to adjust in the Curves dialog box



**Figure 53-3:** Adjusting the line into a curve

6. You can draw your own curve instead of bending the curve through anchor points. Click the Pencil icon at the bottom of the Curves dialog box to select the Pencil tool. Next move the mouse pointer over the chart and then click and drag to create a line. When you are done drawing the line, click Smooth to smooth out the curve.
7. To remove the anchor points, you can do one of the following: Select an anchor point and then drag it off the chart area, select the anchor point and press Delete, or Ctrl-click (Windows) or Command-click (Mac) on the anchor point.
8. Click Auto to snap the curve based on the settings in the Auto Corrections Options dialog box.

## Task 53

### tips

- To add more grid lines to the Curves dialog box, press Alt-click (Windows) or Option-click (Mac) inside the chart area. Perform the step again to have the grid lines revert back to their default setting.
- When drawing your own curve with the pencil, you can create straight lines by pressing and holding the Shift key and then clicking in two separate areas in the chart.

### cross-reference

- For more information on using auto corrections, see Task 49.

# Task 54

## Using the Color Balance Command to Modify the Mixture of Colors

The Color Balance command enables you to alter the colors in an image using sliders. You might find its range useful for changing colors gradually or for creating dramatic color shifts.

### note

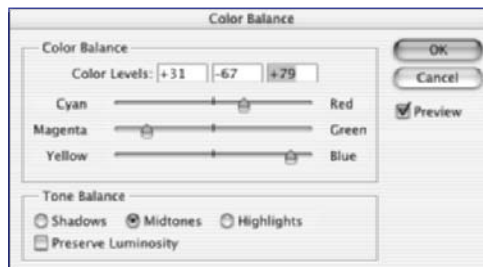
- The Color Levels input text boxes above the slider represent the color modifications in the image for red, green, and blue respectively. You can input values from -100 to 100. These numbers will dynamically change as you drag the sliders.

1. Open an image you want to modify. (See Figure 54-1.)



**Figure 54-1:** This image will be used to demonstrate the effects of the Color Balance command.

2. In the Channels palette, be sure that you have the composite channel active and not an individual color channel. Otherwise the Color Balance command will not be available for use.
3. Select Image ⇨ Adjustments ⇨ Color Balance to open the Color Balance dialog box, shown in Figure 54-2.



**Figure 54-2:** The Color Balance dialog box

4. Make sure the Preview checkbox is checked so you can view the changes you make in the dialog box in real time.
5. To increase the amount of a certain color in the image, drag the slider towards the name of the color in the dialog box. Figure 54-3 shows what happens after adjusting the settings with the Color Balance command.



**Figure 54-3:** An example of what you can do with the Color Balance command.

6. To decrease the amount of a certain color in the image, drag the slider away from the name of the color in the dialog box.
7. To modify a different tone, check them under Tone Balance.
8. To maintain the tonal balance of the image, select the Preserve Luminosity checkbox. We didn't use this setting for the before and after figures used in this task in order to better demonstrate the effect of the Color Balance command. If we hadn't, you wouldn't be able to tell since the luminosity was kept even though we adjusted the colors.
9. When you are finished, click OK.

## Task 54

### tip

- If you are in RGB or CMYK mode, you can make sure you are working on the composite layer by pressing Ctrl+~ (Windows) or Command+~ (Mac).

### cross-reference

- You can use the Selective Color command to modify specific colors in an image. See Task 60 for more information.

**Task 55**

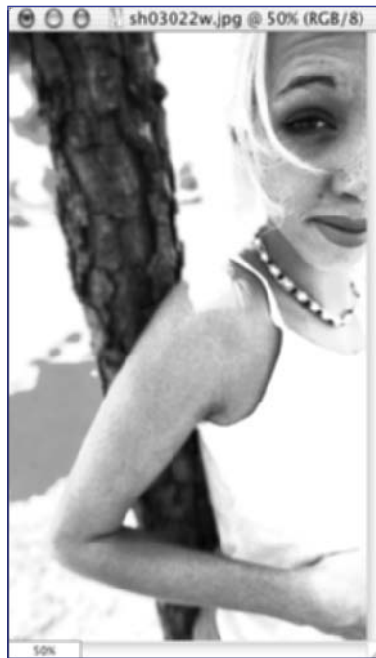
## Using the Brightness/Contrast Command to Regulate Those Values within an Image

**note**

- While the Brightness/Contrast dialog box is easy to use, it is also limiting. If you want to manipulate the highlights, midtones, or shadows independently you must use the Levels dialog box.

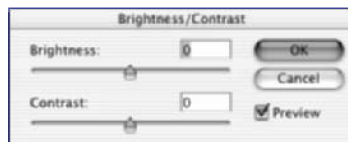
While the Curves and Levels commands enable you to adjust the tonal range of an image with precise detail, the Brightness/Contrast command enables you to make adjustments to an overall image with ease. What you give up in terms of precision, you gain in ease of use.

1. Open an image you want to modify (see Figure 55-1).



**Figure 55-1:** An image that will be used to demonstrate the effects of the Brightness/Contrast command

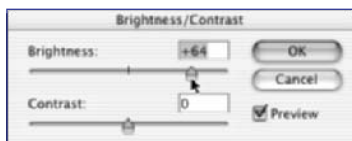
2. Select Image ⇨ Adjustments ⇨ Brightness/Contrast to open the Brightness/Contrast dialog box, shown in Figure 55-2.



**Figure 55-2:** The Brightness/Contrast dialog box

Be sure the Preview checkbox is selected so you can see the effects of your changes in real time.

3. Drag the sliders to adjust the brightness and contrast, as shown in Figure 55-3. Dragging a slider to the left decreases the current value; dragging a slider to the right increases the value. The values for Brightness and Contrast are on a scale of -100 to 100.



**Figure 55-3:** Manipulating the brightness of an image

4. You can also enter values for the Brightness and Contrast controls manually. Figure 55-4 shows the effects of modifying the brightness and contrast of an image.



**Figure 55-4:** The effects of adjusting the Brightness slider

5. When you are finished, click OK.

## Task 55

### tip

- Since the Brightness/Contrast command does not have a keyboard shortcut, you can make your own custom keyboard shortcuts. See Task 21 for more details.

### cross-reference

- To use the Levels dialog box, see Task 54 and 55.

# Task 56

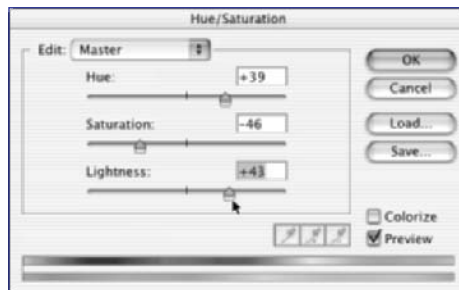
## Using the Hue/Saturation Command to Alter the HSL Values in an Image

### note

- You can use the Color Sampler command to place color markers on an image while using the Hue/Saturation dialog box. While the dialog box is active and you are editing in Master edit mode, press Shift and click the image where you want to drop a color marker.

The Hue/Saturation command enables you to manipulate the hue, saturation, and lightness (HSL) values of an image or the color components. Hue refers to an actual color. Saturation identifies how much of that color is present. Lightness refers to the brightness of a color. You can also use this command to adjust the colors of an image, to create a duotone effect to an RGB image, or to grayscale image that has been converted to an RGB mode

1. Open an image which you want to modify and select Image ⇨ Adjustments ⇨ Hue/Saturation to open the Hue/Saturation dialog box, shown in Figure 56-1. You can also press Ctrl+U (Windows) or Command+U (Mac).

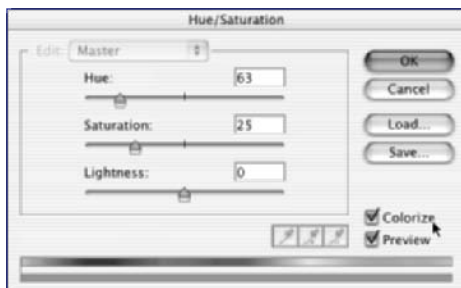


**Figure 56-1:** The Hue/Saturation dialog box

2. To modify all the colors simultaneously, select Master in the Edit drop-down list at the top of the dialog box.
3. To modify specific colors, select the color you want from the Edit list. Your options include Reds, Yellows, Greens, Cyans, Blues, and Magentas.
4. To adjust the hue, drag the slider to the left or right. You can also enter a value in the Hue text box that's off to the right. The values for hue range from -180 to 180 — a full 360 degrees in the color wheel. So as you use the slider, you are moving through a color wheel away from the default color, which initially is set to zero.
5. To adjust the saturation, drag the slider to the left or right, or enter a value from -100 to 100 in the Saturation text box. Moving the slider all the way to the left (of -100) removes any instance of color from

the image, leaving the appearance of grayscale. However, it does not convert the image to the Grayscale mode. Going in the opposite direction to 100 applies the full amount of a color to the image.

6. To adjust the lightness, drag the slider to the left or right or enter a value in the Lightness text box. The values for saturation range from -100 to 100. Moving the slider all the way to the left (-100) causes an image to turn black while moving the slider to the right causes it to turn completely white.
7. To colorize a grayscale image, first convert the image from Grayscale mode to RGB by selecting Image ⇨ Mode ⇨ RGB Color. (For more information on converting between color modes, see Task 45.)
8. Open the Hue/Saturation dialog box.
9. Select the Colorize checkbox in the lower right of the dialog box (see Figure 56-2). Notice that selecting the Colorize checkbox renders the Edit list inactive. Your image should be converted into a monotone. If you have a color other than black or white set as your foreground, Photoshop will use that color for the monotone image.



**Figure 56-2:** Select the Colorize checkbox to colorize a grayscale image.

10. Use the Hue slider to select a new color and change the values of Lightness and Saturation to achieve the result you want.

## Task 56

### tip

- Experiment with the Hue/Saturation command; it provides a great way to produce off-the-wall color effects with great ease.

### cross-reference

- For more information on how to adjust the range of the slider values in the Hue/Saturation dialog box see Task 57.



# Task 57

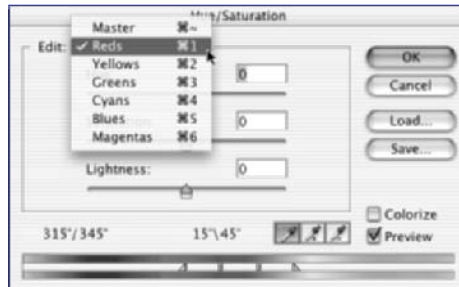
## notes

- When you move a slider from one color to another color along the gradient bar, the name of that color will be updated in the Edit drop-down list.
- If you have a short fall-off by moving the triangles and slider bars closer together, you might produce unwanted banding effects in your image.

## Editing the Range of the Hue/Saturation Sliders

The Hue/Saturation dialog box enables you to manipulate the hue, saturation, and lightness of colors. The Hue/Saturation dialog also makes it possible to edit the range of colors you want to manipulate, enabling you to add or subtract many adjacent colors.

1. Open an image to which you want to modify.
2. Select Image ⇨ Adjustments ⇨ Hue/Saturation to open the Hue/Saturation dialog box. You can also press Ctrl+U (Windows) or Command+U (Mac).
3. Select a color from the Edit drop-down list. Between the color gradients at the bottom of the dialog box, you'll now see a pair of adjustment slider bars within a pair of slider triangles as shown in Figure 57-1. The default placement of these elements represents 90 degrees of the color bar. The color range is the space between the slider bars and represents 30 degrees. The space between the triangles and the bars represents the fall-off from the color range; both take up 30 degrees.

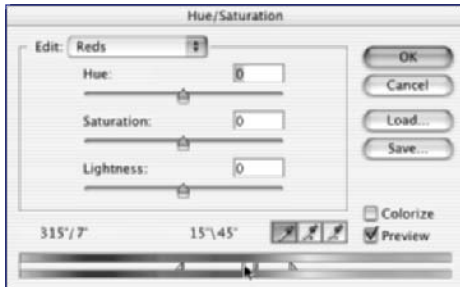


**Figure 57-1:** Editing the color range in the Hue/Saturation dialog box

4. To modify the range, you can slide the fall-off on either side of the color range by click-dragging the space between a triangle and bar to the left or right.
5. To select another color area, click between the two bars and drag it to the left or right.

**Task 57**

6. Ctrl-drag (Windows) or Command-drag (Mac) the color bar itself to place a different color in the center.
7. To modify the range of the color area, click-drag a slider bar. Creating more space inside the two blocks (as shown in Figure 57-2) increases the range, while squeezing the bars together decreases the range.



**Figure 57-2:** Modifying the range of colors

8. To edit the range of the colors use the eyedropper tools that are located in the lower right of the Hue/Saturation dialog box. Select the eyedropper and click in the image to pick the color range you want to edit.
9. Use the eyedropper tool with the plus sign (+) to put additional colors into the color range. You can also use the normal eyedropper tool and Shift-click the colors you want to add.
10. To take away colors from a set range, you can use the eyedropper with the minus sign (-). Alternatively, you can also use the normal eyedropper tool and Alt-click (Windows) Alt or Option-click (Mac) the colors you want to subtract.

***cross-reference***

- To learn how to modify all the colors of an image at once or create a monotone effect, see Task 56.

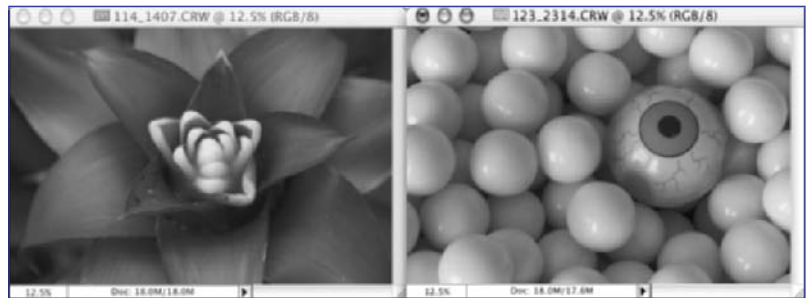
## Task

## 58

## Matching Colors between Images with the Match Color Command

Suppose you have a photo or image with a color palette that you want in another image. With the Match Color command, you can have the best of both worlds, or images in this case. The Match Color command also enables you to select only portions of an image and bring in a new color palette from another image.

1. Open an image you want to alter (see Figure 58-1).



**Figure 58-1:** Images that will be used to demonstrate the effects of the Match Color command.

2. Click the window of the image whose colors you want to change to make it active.
3. Select Image ⇨ Adjustments ⇨ Match Color to open the Match Color dialog box, shown in Figure 58-2.
4. Select the source image that contains the color palette you want to adjust in the targeted image by picking the filename from the Source drop-down list under Image Statistics. The image preview window to the right displays the source image.
5. Under Image Options, you can specify the Luminance, Color Intensity, and Fade values of the source image's palette onto the target image.



Figure 58-2: The Match Color dialog box

- When you are finished matching colors between the two images (see Figure 58-3), click OK.

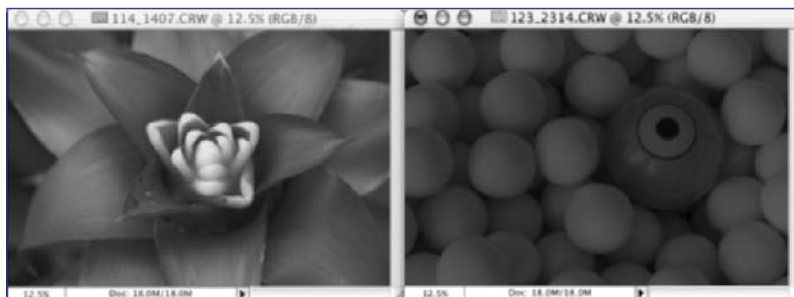


Figure 58-3: The results of the Match Color command

## Task 58

### tips

- You can also color match selections of an image. Select the area you want to match using the Marquee tool first, and then open the Color Match dialog box.
- You can save and load statistics, the information that tells Photoshop how the color matching was applied, in order to reuse them for color matching other images. To save and load statistics, click the corresponding buttons under Image Statistics.

### cross-reference

- To learn more about replacing a color or colors, see Task 59.

## Task

## 59

## Using the Replace Color Command to Change a Selected Color or Colors

### note

- While using the Replace Color Command is nice as an all-in-one stop for selecting and changing colors, it doesn't allow for saving the selections for later use.

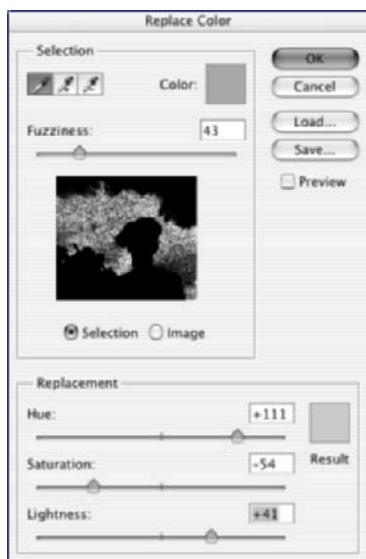
Traditionally, if you wanted to change a color or colors in an image, you would first have to use a selection tool like the Magic Wand tool or create a Quick Mask to pick the colors. Only after you've made the selection could you modify the colors. If you want to select and change colors in one step, use the Replace Color command.

1. Open an image you want to modify.
2. Select Image ⇨ Adjustments ⇨ Replace Color to open the Replace Color dialog box, shown in Figure 59-1.



**Figure 59-1:** The Replace Color dialog box.

3. Under Selection, you'll find the Selection and Image options (see Figure 59-2). These options determine how you will view the image preview in the dialog box. Choose Selection if you want to highlight the areas of color that will be picked for color replacement. By default, the preview window in the dialog box will display as a solid black mask — don't worry, that will change to depict the selected area when an initial color is sampled. To see the image or a previously selected portion of the image in the preview area rather than the mask, select Image.



**Figure 59-2:** A side-by-side comparison of the Replace Color dialog box. Notice the Selection preview box.

4. To select a color you want to modify, click the thumbnail in the dialog box or, if you can see the image on screen, the image itself.
5. To add colors to a selection, use the eyedropper tool with the plus sign (+). You can also work with the regular eyedropper tool and Shift-click areas in the image that show the colors you want.
6. To subtract colors from a selection, use the eyedropper with the minus sign (-). You can also use the regular eyedropper tool and Alt-click (Windows OS) or Option-click (Mac) while clicking in the image.
7. To increase or decrease the range of colors for a selection you have in place, you can drag the Fuzziness slider under Selection or input a value in the Fuzziness text box.
8. To change the color of selected areas, adjust the Hue, Saturation, and Lightness sliders or input values in the corresponding text boxes under Replacement.
9. When you are finished, click OK.

## Task 59

### *tips*

- On Mac OS, you can switch back and forth between the Selection and Image views in the preview pane by pressing the Ctrl key.
- You can restrict the work area that will be affected by a Replace Color command by drawing a selection around the areas you want to change before you begin.

### *cross-reference*

- The Replace Color command combines the functionality of the Hue/Saturation (see Task 56) and Color Range (see Task 73) commands.

# Task 60

## notes

- You can use the Selective Color command with both RGB and CMYK images, even though it manipulates images based on CMYK colors.
- When you choose to modify the colors by applying the Relative method, you are adding or subtracting by a percentage of the available color already in the image.
- You can save Selective Color settings for future reference using the Save and Load buttons.

## Using Selective Color to Increase or Decrease Specific Color Components

The Selective Color command provides yet another way for modifying the color in an image. When you open an RGB or CMYK image, you will be able to modify various colors based upon so-called process colors (cyan, yellow, magenta and black). Even though you open an image that's based in CMYK color mode, you could still select the color red and modify how much of cyan, magenta, yellow, and black will contribute to create that color in the image.

1. Open an image you want to modify.
2. Select Image ⇨ Adjustments ⇨ Selective Color to open the Selective Color dialog box, shown in Figure 60-1. If the command is inactive (dimmed), double-check that you are not working on an individual color component. You will need to use a composite color channel.

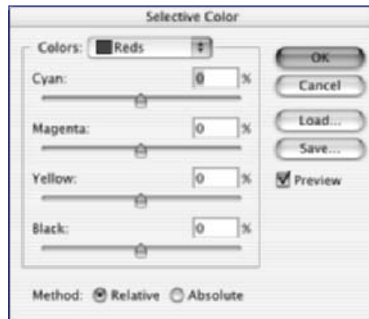


Figure 60-1: The Selective Color dialog box

3. To select a color you want to change, select a color from the Colors drop-down list. Your options include the primary additive colors (red, green blue), the subtractive colors (cyan, yellow, magenta), as well as whites, neutrals, and blacks.

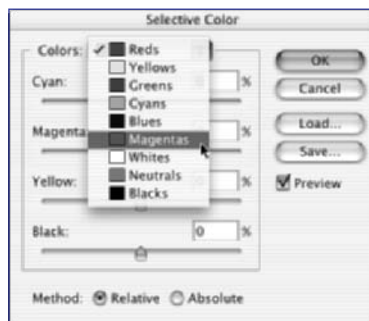
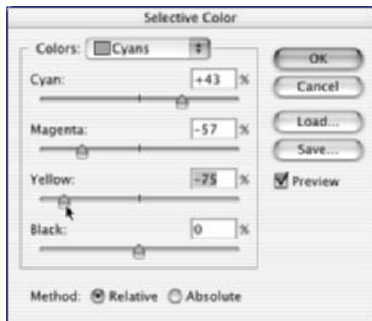


Figure 60-2: The list of colors available for modification

4. You can also use the sliders below the Color drop-down list to specify how much or how little of the colors cyan, magenta, yellow, and black you want to add (see Figure 60-3). You may also enter a value in the text boxes to the right of each respective value. The numerical range for each color is -100 to +100.



**Figure 60-3:** Adjusting the colors

5. At the bottom of the dialog box are two options for manipulating the colors. Select Relative if you want to adjust the amount of cyan, magenta, yellow, or black by percentages relative to what you start with. Example: Beginning with a color that is 70% Cyan, if you added 10% using the Relative method, it would add 10% of the 70% (which would be 7%), for a total of 77%.
6. Select Absolute to adjust the colors in absolute values. For example, if you begin with a color that is 70% yellow and add 10%, you would end up with 80% yellow.
7. Click OK when finished.

## Task 60

### tip

- If you are in RGB or CMYK mode, you can make sure you are working on the composite layer by pressing (Windows OS) Ctrl+~ (Windows) or Command+~ (Mac).

### cross-reference

- Another way to adjust the colors in an image is to use the Curves command, discussed in Task 53.



**Task 61**

## Applying Gradient Mapping to Add a Stunning Color Effect to an Image

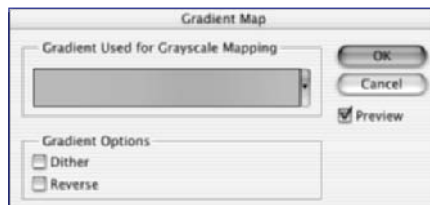
The Gradient Map command puts, or maps, a gradient onto an image using lights and darks of the gradient to create interesting effects. Initially, the left side of the gradient is mapped to the shadows of an image while the right side of the gradient is mapped to the highlight areas of an image.

1. Open an image you want to modify. (See Figure 61-1.)



**Figure 61-1:** An image that will be used to show the effects of Gradient mapping

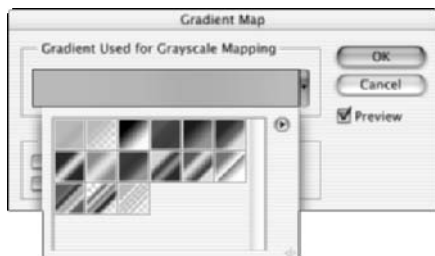
2. Select Image ⇨ Adjustments ⇨ Gradient Map to open the Gradient Map dialog box, shown in Figure 61-2.



**Figure 61-2:** The Gradient Map dialog box with the default gradient thumbnail image displayed.

3. Make sure the Preview checkbox is selected so you can see your changes in real time.
4. To edit the default gradient, click the gradient thumbnail.

5. To select another gradient, click the arrow button on the right-hand side of the gradient thumbnail. This opens a drop-down list with gradients as shown in Figure 61-3. Select the gradient you want to apply to the image.



**Figure 61-3:** The Gradient Map dialog box provides a list of gradients you can use.

6. To edit a new gradient from the gradient list, select the gradient you want to edit in the drop-down list.
7. To get rid of the drop-down list of gradients, click outside of the drop-down window area.
8. To reduce the effects of color banding, select Dither under Gradient Options.
9. To flip the gradient that will be mapped onto the image, select Reverse.
10. When you are finished adjusting the settings, click OK. Figure 61-4 shows the result using the settings in this task.



**Figure 61-4:** The result of using the Gradient Mapping command

## Task 61

### tips

- To come up with a two-color blend quickly when applying a gradient blend, first select the two colors you want to use as foreground and background colors. When you open the Gradient Map dialog box, your default gradient will be a gradient of those two colors.
- In the Layer palette, click the Create New Fill or Adjustment Layer button. Select Gradient Map to create what is called an Adjustment layer. When using the Gradient Map command in conjunction with an adjustment layer, you can easily re-edit the gradient map effect.

### cross-reference

- To learn more about creating gradients, see Task 135.

# Task 62

## Using the Photo Filter Command

Photographers often make use of color filters to adjust the mood or tone of an image. Instead of a bright, sun-drenched photo, you can use a color filter to turn the mood into a relaxed environment drenched in blue overtones. Photoshop, too, enables you to use filters to change the appearance of an image.

### note

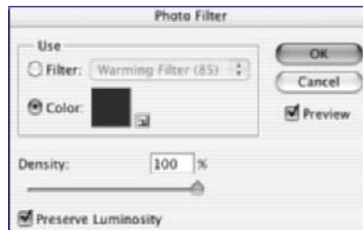
- In order to show you the effect of the Filter, we had to clear the Luminosity checkbox. However, you might find that most often you will want to select this option.

1. Open an image to which you want to apply the Photo Filter command (see Figure 62-1).



**Figure 62-1:** An image that will be modified with the Photo Filter command

2. Select Image ⇨ Adjustments ⇨ Photo Filter to open the Photo Filter dialog box, shown in Figure 62-2.



**Figure 62-2:** The Photo Filter dialog box

3. To apply a preset filter to the image, select the Filter option under Use and then select the filter you want, as shown in Figure 62-3.

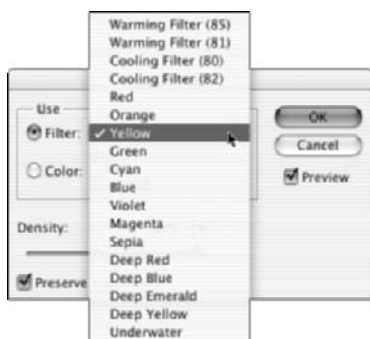


Figure 62-3: Picking a filter

4. To apply another color to the image that is not listed under the Filter presets, select the Color option and then click the color swatch to the right. This opens the Color Picker dialog box.
5. In the Color Picker dialog box, select the color you want to apply to your image and press OK.
6. To control the amount of the filter effect, enter a value in the Density text box or adjust the Density slider.
7. To preserve the quality of the colors, select the Luminosity checkbox.
8. When you have finished adjusting the Photo Filter settings, press OK. Figure 62-4 shows the result of applying a filter to Figure 61-1.



Figure 62-4: The results of the Photo Filter command

## Task 62

### tip

- The Photo Filter command provides a quick and easy way to apply a color tint effect to an image.

### cross-reference

- To learn more about the Color Picker command, see Task 39.

# Task 63

## Using the Shadow/Highlight Command

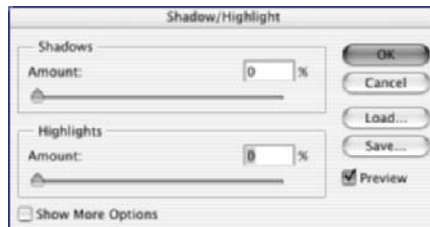
**W**hen you snap a photograph, it might not be on par with Ansel Adams's work. Sometimes the shadows are too much or the highlights are too bright. With the Shadow/Highlight Correction command you can easily adjust those mishaps.

1. Open an image you want to modify (see Figure 63-1).



**Figure 63-1:** This image will be modified with the Shadow/Highlight command.

2. Select Image ⇨ Adjustments ⇨ Shadow/Highlight to open the Shadow/Highlight dialog box, shown in Figure 63-2.



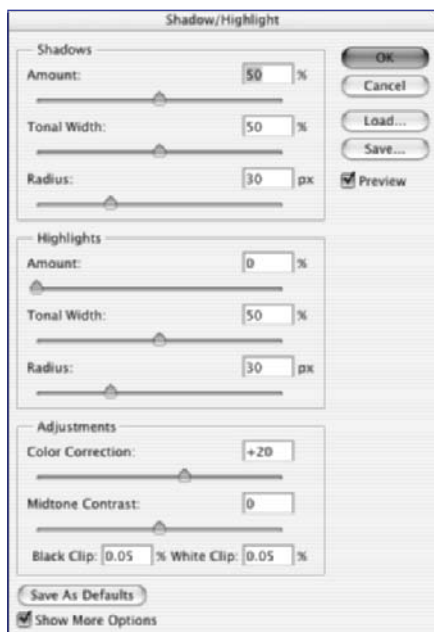
**Figure 63-2:** The Shadow/Highlight dialog box

3. Be sure to select the Preview checkbox to view the shadow and highlights corrections in real time in your image.
4. To apply shadow correction to the image, enter a percentage value in the Amount text box under Shadows, or adjust the slider.
5. To correct the highlight in an image, enter a value in the Amount text box under Highlights or drag the slider.
6. To view more advanced settings, select the Show More Options checkbox. This expands the Shadow/Highlight text box as shown in

### note

- You can save and load Shadow/Highlight settings using the Save and Load button.

Figure 63-3 so you can edit the tonal width and the radius of the correction or make adjustments to the Color Correction, Midtone Contrast, and Black Clip and White Clip settings.



**Figure 63-3:** The advanced options for Shadow/Highlight command

7. When you are finished, click OK. Figure 63-4 shows the results of using the Shadow/Highlight command on Figure 63-1.



**Figure 63-4:** The results of the Shadow/Highlight command

## Task 63

### tip

- In addition to saving your Shadow/Highlight settings, you can also use your settings as the new default setting by selecting the Save As Defaults button at the bottom of the expanded Shadow/Highlight dialog box.

### cross-reference

- For more information on making auto corrections to images see Task 49.

**Task 64****note**

- You might use this command to create a positive black-and-white image out of a negative. Or it could be used to create that alternative universe where the sky is red and redheads are “blueheads.”

## Using the Invert Color Command to Inverse Color Values in an Image

Essentially, the Invert command flips colors in an image to their opposite value. For example, if you apply this command to a pixel with a value of 15 in a 256 color-values scale, the result would be a pixel with a value of 240. While you might not use this command on photos, it does provide a quick way to reverse black when you meant to fill an area in an image with white and vice versa.

1. Open an image to which you want to apply the Invert Command (see Figure 64-1).



**Figure 64-1:** This image will shortly reveal the effects of the Invert command.

2. Select Image ⇨ Adjustments ⇨ Invert. The results of the process are seen in Figure 64-2.



**Figure 64-2:** The result of executing the Invert command

3. To add an inverted effect to an image through an adjustment layer, select Layer ⇨ New Adjustment Layer ⇨ Invert. This ensures that you can edit the photo in the future.
4. To invert a portion of an image, select the Marquee tool.
5. Draw a selection rectangle over the image.
6. Select Image ⇨ Adjustments ⇨ Invert to invert the selection as shown in Figure 64-3.



**Figure 64-3:** Half of the model's face has been inverted.

## Task 64

### *tip*

- Use your imagination with the Invert command. Try this: Open a single-layered image. Duplicate the layer, and set the blend mode to Color Dodge. Invert the duplicate layer, and add a Gaussian Blur filter for a colored pencil look. Grayscale the image for a pencil sketch effect.

### *cross-reference*

- For more information on other easy ways to modify your images check out Task 49.



# Task 65

## note

- If the Equalize command does not yield the results you are looking for, try adjusting the image using the Levels and Curves commands.

## Equalizing Levels of Brightness and Dark with the Equalize Command

Sometimes you might end up with an image that needs to be updated. For example, you might be dealing with a scanned image that is a little too dark or a photograph that is a little too light. The Equalize command might actually be the quick fix you are looking for. By remapping the darkest colors to 100% black and the lightest colors to 100% white and evenly redistributing the range of pixels in the image itself, your image ends looking more balanced, or as they say, equalized.

1. Open an image you want to equalize (see Figure 65-1).



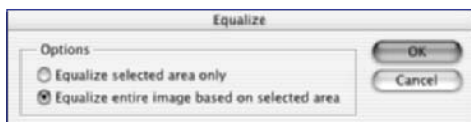
**Figure 65-1:** This image is a good candidate for the Equalize command.

2. Select Image ⇨ Adjustments ⇨ Equalize. Figure 65-2 shows the results of the process.



**Figure 65-2:** The image after using the Equalize command

3. To equalize a portion of an image, select the Marquee tool.
4. Draw a selection over the image.
5. Select Image ⇨ Adjustments ⇨ Equalize. This opens the Equalize dialog box shown in Figure 65-3.



**Figure 65-3:** When trying to equalize a selection, Photoshop opens the Equalize Options dialog box.

6. To equalize only the selected part of the image, select the Equalize Selected Area Only option.
7. To use the area you have selected as the basis to equalize the rest of the image, select the Equalize Entire Image Based on Selected Area option.
8. Click OK to perform the Equalize command.

## Task 65

### *tip*

- Don't try to equalize an image if you are intending to go for darker or lighter effects in your image.

### *cross-reference*

- You can adjust the colors in an image using the Levels commands. See Task 51 for details.

# Task 66

## note

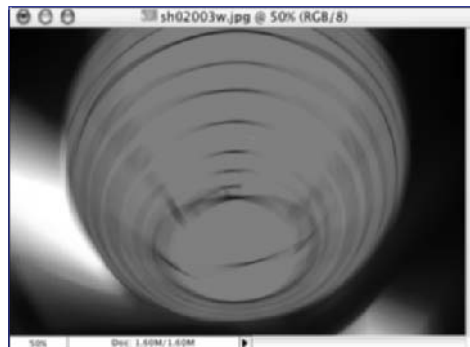
- The histogram in the Threshold dialog box reflects the amount of brightness and darkness in the pixels in either the image or the selected portion of an image.

## Adjusting the Threshold to Get a High-Contrast, Black-and-White Image

The world is full of colors, but sometimes you want everything to show in black-and-white. Thanks to the Threshold command, you can take your photographs of the world (or any image for that matter) and turn them into simple black-and-white, high-contrast images.

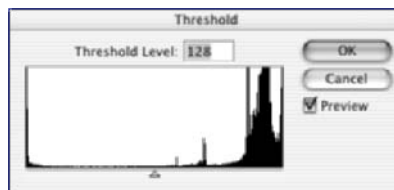
The Threshold command instructs Photoshop to determine the level of intensity in an image and then to turn all pixels that are darker than that level to black and all pixels that are lighter than that level to white. No excuses.

1. Open an image to which you want to apply the Threshold command (see Figure 66-1).



**Figure 66-1:** This image will be converted to a high-contrast black-and-white image.

2. Select Image ⇨ Adjustments ⇨ Threshold to open the Threshold dialog box, shown in Figure 66-2.



**Figure 66-2:** The Threshold dialog box with a histogram of the image

3. Select the Preview checkbox so you can view your changes in real time.
4. To adjust the threshold, drag the slider at the bottom of the histogram or enter a numerical value in the Threshold Level text box.
5. When you are satisfied with your setting, click OK. See Figure 66-3 for an example of the possible results you might have with this command.



**Figure 66-3:** An example of using the Threshold command

6. To determine the threshold for a portion of an image, select the Marquee tool.
7. Draw a selection over the image.
8. Select Image ⇨ Adjustments ⇨ Threshold to open the Threshold dialog box (see Figure 66-2).
9. Drag the slider at the bottom of the histogram or enter a numerical value in the text box to change the threshold level.
10. When you are finished, click OK to apply the setting.

## Task 66

### tip

- An easy way to make a wood cut image is to take a photographic image that's on a layer and copy it so it's resting on top of the original layer. Apply the Threshold command to create a high-contrast black-and-white image. When you have a setting you prefer, set the blending mode for the top layer to Multiply.

### cross-reference

- To learn more about working with histograms see Task 48.

# Task 67

## note

- When you are working on an image in RGB mode and you enter two for the number levels, you are telling Photoshop that you want two colors for each channel of color, for a grand total of six (two per channel). When in Grayscale mode, two levels will be shown.

## Posterizing an Image to a Specified Number of Tonal Levels

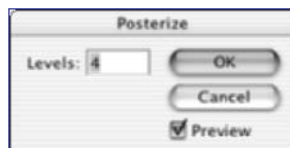
By their makeup, photographs display a wide range of colors. If you have a picture of a friend outside on a sunny day in a green shirt and blue jeans, there are more colors than just one green or one blue in that photograph. There are different shades of blue and green in that photo. The Posterize command enables you to restrict the levels of colors used in the photograph.

1. Open an image to which you want to apply the Posterize command (see Figure 67-1).



**Figure 67-1:** An image that will be posterized

2. Select Image ⇨ Adjustments ⇨ Posterize to open the Posterize dialog box, shown in Figure 67-2.



**Figure 67-2:** The Posterize dialog box

3. Select the Preview checkbox to view your setting in real time.
4. Enter a value for the the number of color levels you want to appear in your image; you can choose a number from 2 to 255.
5. When you like what you see, click OK. Your image should have bands of color like the image shown in Figure 67-3.



**Figure 67-3:** The effects of using the Posterize command on an image

6. To posterize a portion of an image, select the Marquee tool.
7. Draw a selection over the image.
8. Select Image ⇨ Adjustments ⇨ Posterize to open the Posterize dialog box (see Figure 67-2).
9. Specify the levels of color you want to show in your selection area.
10. When finished, click OK.

## Task 67

### *tip*

- By posterizing a grayscale duplicate of your color image, you can get an exact number of levels in your posterization. Then you can select colors from your original color image and use them to replace the shades of gray in your posterized image.

### *cross-reference*

- To work on adjusting the tonal range of an image, try using the Levels command. See Task 54 for more information.

# Task 68

## Using the Variations Command to Adjust Values with the Help of Thumbnail Views

### notes

- The slider moves in increments shown by tick marks in the slide area. Each increment doubles the amount of adjustment
- The Variations command does not work on Indexed color images such as GIFs.

The Variations command enables you to modify the amount of color, brightness, and balance in an image. The Variations dialog box provides thumbnails that let you see how adding a certain color will look faster than you could click the Hue/Saturation keyboard shortcut. This look-before-you-leap method enables you to experiment with various choices. And when you click a thumbnail to modify your image, the thumbnails are redrawn again showing you new possibilities for adding color.

1. Open an image to which you want to apply the Variations command.
2. Select Image ⇨ Adjustments ⇨ Variations to open the Variations dialog box, shown in Figure 68-1.



**Figure 68-1:** The Variations dialog box

3. Select which elements of an image you want to edit. Your options are Shadows, Midtones, and Highlights.
4. To adjust the saturation levels of an image, select Saturation.
5. To specify the level of adjustment per variation, use the Fine/Coarse slider. Fine lessens the amount of adjustment; Coarse increases it.

**Task** 68

6. To gauge your variations, look in the upper left corner of the Variations dialog box. The original image is shown on the left; on the right you can see what the image will look like with the new settings.
7. To modify the image by adding a color, click the appropriate thumbnail. For example, if you want to add blue, click the More Blue thumbnail (see Figure 68-2).



**Figure 68-2:** Selecting the More Blue thumbnail

8. To make the image lighter or darker click the appropriate image thumbnail on the right-hand side of the dialog box.
9. If you want to return to the original image at any point during your Variations adjustments, simply click the Original thumbnail in the upper right-hand corner of the dialog box.
10. When you like what you see, click OK to accept the changes and close the Variations dialog box.

***cross-reference***

- You can also alter the color in an image by using the Hue/Saturation command. See Task 56 for more details.





## Part 5: Selections

- Task 69: Forming Basic Selections Using the Rectangular Marquee Tool
- Task 70: Using the Lasso and Polygonal Lasso Tools to Make a Freeform Selection
- Task 71: Outlining a High-Contrast Object with the Magnetic Lasso Tool
- Task 72: Select by Color with the Magic Wand Tool
- Task 73: Making a Selection by Color Range
- Task 74: Moving the Selection Marquee or Selection Contents
- Task 75: Adding to or Subtracting from Selection Areas
- Task 76: Intersecting Selections to Create Unique Selection Shapes
- Task 77: Stroking a Selection to Make an Instant Frame for an Image
- Task 78: Using Inverse to Select a Complex Object with a Plain Background
- Task 79: Creating a Soft-edged Vignette Effect with Feathering
- Task 80: Creating a Border Selection
- Task 81: Modifying a Selection by Smoothing, Expanding, or Contracting
- Task 82: Resizing or Reshaping a Selection with the Transform Selection Command
- Task 83: Cropping an Image to a Selected Area
- Task 84: Deselecting, Reselecting, and Deleting Selections
- Task 85: Copying and Pasting a Selected Area into Another Image
- Task 86: Saving and Loading Selections for Later Use

# Task 69

## Forming Basic Selections Using the Rectangular Marquee Tool

**S**elections allow you to highlight and edit specific areas of your Photoshop documents. While a number of means of selection are possible, the most commonly used selection device is the Rectangular Marquee tool. Using a rectangular shape, you can select content that is well suited for cropping, copying, or compositing. For an equally precise selection, the Elliptical Marquee tool allows you to create round boundaries.

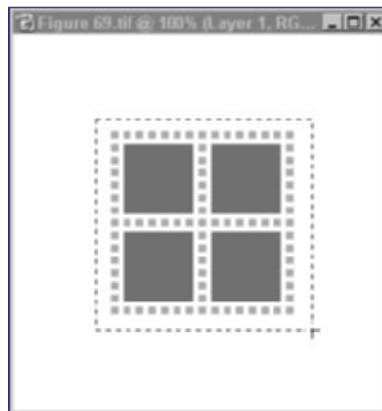
### notes

- A selection will contain all content within and under the “marching ants.”
- Unlike most applications that contain a Select All command under the Edit menu, Photoshop places an All command in the Select menu.
- If you have specified a large Feather value but proceed to make a tiny selection, you may receive an alert message, such as “Warning: No pixels are more than 50% selected. The selection edges will not be visible.” You will still be able to modify this selection (such as filling its contents or moving it around), but no “marching ants” will appear on screen.

### caution

- The Rectangular and Elliptical Marquee tools can make selections only within your document's Canvas Size.

1. Select the Rectangular (or Elliptical) Marquee tool from the top-left corner of the Tools palette.
2. Within your content window, click your cursor on the desired starting point, and then drag to form your selection. Notice the “marching ants,” or moving dotted lines, that define your selection area as you drag. Pressing the Shift key while dragging constrains your selection to a square shape when using the Rectangular Marquee tool and to a perfect circle when using the Elliptical Marquee tool. See Figure 69-1.



**Figure 69-1:** Making a selection

3. With the Elliptical Marquee tool, Photoshop assumes by default that you wish to make an oval selection that has a smooth anti-aliased edge. You may, however, choose to create a sharp aliased-edged selection by unchecking the Anti-aliased checkbox next to the Feather form field in the Options bar.
4. The Rectangular Marquee tool makes a hard-edged selection by default, but you can soften the edges of future selections using feathering. This feature allows you to have a graduated edge around your entire selection, meaning that the outer edges of your selection will fade into complete transparency. To accomplish this, change the standard Feather setting of 0px to another number (between 1px and 250px) in the Rectangular Marquee tool's Options bar. With this change made, any subsequent selections will have feathered edges.
5. If you wish your selection to be constrained to a certain height-to-width ratio, you can specify it using the Style drop-down menu in the Options bar. Change the Normal style to Fixed Aspect Ratio and enter the desired numeric values (between 0.001 and 999.999) for the ratio.
6. If you know the exact size of your intended selection, change the Options bar's Style setting to Fixed Size. Once you've done this, enter your desired numerical values for the Width and Height fields (such as 2in and 18px), as shown in Figure 69-2. After you change these settings, a selection of your specified dimensions will have its top left corner defined by any future mouse click using this tool.



**Figure 69-2:** The Fixed Size settings in the Options bar

7. To return to the Marquee tool's default freeform selection abilities, simply return its Options bar's settings to their original state. The Style drop-down menu should be set to Normal, and the Feather field should specify 0px.
8. To deselect your content, simply move your mouse cursor outside of the border of your selection and click.
9. You can choose to select the largest rectangular selection possible in your document by choosing **Select ⇨ All**. This function will place the selection's edges at the outermost edges of your document.

## Task 69

### tips

- Press the M key while working in Photoshop and it will automatically switch to the most recently used Marquee tool.
- Pressing Command/Ctrl+A will select all the content within your document.
- If you hold the Option (Mac) or Alt (Windows) key while you drag your cursor to create your selection, your selection will expand from the center (where you initially clicked), rather than using the click point as the selection's corner.

### cross-reference

- You're not limited to making only one selection within a document. Task 75 details how to make multiple selections within the same document.

# Task 70

## Using the Lasso and Polygonal Lasso Tools to Make a Freeform Selection

### notes

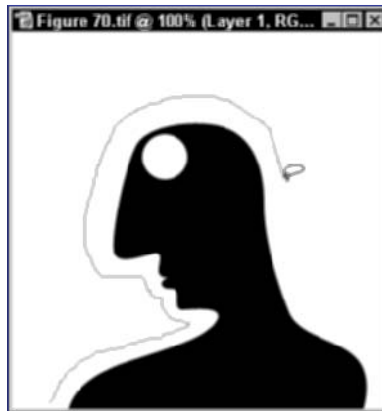
- A selection will contain all content within and under the “marching ants.”
- If you have specified a large Feather value but proceed to make a tiny selection, you may receive an alert message, such as “Warning: No pixels are more than 50% selected. The selection edges will not be visible.” You will still be able to modify this selection (such as filling its contents or moving it around), but no “marching ants” will appear on screen.

### cautions

- The lasso tools can make selections only within your document’s Canvas Size.
- To minimize the sharp hard edge that Photoshop will draw to complete your path, be sure to draw the last point of your selection as close as possible to the starting point.

Most objects in the natural world don’t have square corners or perfectly circular boundaries. Thus, Photoshop CS provides you with the ability to make asymmetrical, odd-shaped selections to mimic these shapes found in the physical world. Using the Lasso tool, you can do just that, creating freeform selection shapes. Rather than clicking and dragging to define your selection shape (as you would with the Rectangular and Elliptical Marquee tools), with the Lasso tool you draw your selection in a manner similar to that done with the Pencil tool. Alternatively, if you need to define a freeform selection but like the precision of straight edges, you can use the Polygonal Lasso tool to define a selection’s boundaries by drawing lines from the points you plot.

1. Select the Lasso or Polygonal Lasso tool from the second row and first column of the Tools palette.
2. To make a Lasso tool selection, click and drag your cursor along the edges of the object or area you wish to select. With the Polygonal Lasso tool, you will define the points along which straight selection lines will be drawn with every mouse click you make. As you define either selection, you’ll see a solid gray line appear (as shown in Figure 70-1), indicating the boundaries of the selection, which will be replaced by the marching ants upon completion of the selection.



**Figure 70-1:** Hold the mouse button down while dragging to define your selection’s boundaries.

3. To complete your Lasso tool selection, simply release the mouse button, but to complete your Polygonal Lasso tool selection, double-click the mouse button. If your cursor does not return to the point where you began drawing your selection, Photoshop will complete your selection by closing the path with a straight selection edge between the two points.
4. While the Lasso tools create a solid-edged selection by default, you can soften the edges of forthcoming selections using feathering. This feature allows you to have a graded edge around your entire selection, meaning that the outer edges of your selection will fade into complete transparency, similar to how you might envision the glow around the sun. To accomplish this, change the standard Feather setting of 0px to another number (between 1px and 250px) in the Lasso tools' Options bar. With this change made, any subsequent selections will have feathered edges.
5. By default, Photoshop assumes you wish to make your freeform selection with a smooth anti-aliased edge. You may, however, choose to create a sharp aliased-edged selection by unchecking the Anti-aliased checkbox next to the Feather form field.
6. To return either of the Lasso tools to their default freeform selection abilities, simply return the Options bar's settings to their original state. As shown in Figure 70-2, the Feather field should specify 0px, and the Anti-aliasing checkbox should be checked.



**Figure 70-2:** The default settings in the Options bar

7. To deselect your content, simply move your mouse cursor outside of the border of your selection and click.

## Task 70

### *tips*

- If you hold the Option (Mac) or Alt (Windows) key while you drag your cursor to create your selection, the Lasso tool will change into the Polygonal Lasso tool once you release the mouse button. Subsequent clicks will define points for the straight selection lines of this tool. To continue defining your selection path with the standard Lasso Tool, simply click your mouse button and hold while you begin drawing the selection edge again.
- Press the L key to automatically switch to the most recently used Lasso tool. A second press will switch the tool to the next Lasso tool.

### *cross-reference*

- You can also create a freeform selection using Illustrator-like Bezier tools. Task 89 shows you how to draw a freeform path, and Task 96 shows you how to convert a path into a selection.

# Task 71

## Outlining a High-Contrast Object with the Magnetic Lasso Tool

### notes

- A selection will contain all content within and under the “marching ants.”
- The speed with which you trace an object’s edge may affect the level of detail the tool captures, especially when the tool has low Edge Contrast and Frequency values.

### cautions

- Clicking outside of your selection while using the Magnetic Lasso tool will both deselect your original selection and begin a new selection. To save some hassle, be sure to press Command+D (Mac) or Ctrl+D (Windows) to deselect your work.

While the Lasso tool allows you to draw a freeform selection around an irregularly shaped object, you may find it difficult to control its edges as you draw with a mouse, especially when dealing with complex shapes. To address this problem, Photoshop includes the Magnetic Lasso tool, which automatically conforms its selection along the edges of a high-contrast object (such as a dark green logo on a yellow background) as you loosely trace around its boundaries. The Magnetic Lasso tool’s selections may not be perfect, but they often provide an adequate selection much faster than one obtained by drawing the entire boundaries of the selection with the Lasso tool.

1. Select the Magnetic Lasso tool from the second row and first column of the Tools palette (see Figure 71-1). (Click and hold on the Lasso tool’s icon until a small menu appears, move your cursor onto the Magnetic Lasso tool icon, and release the mouse button.)



**Figure 71-1:** The Magnetic Lasso tool in the Tools palette

2. Within your content window, move your mouse cursor to any point along the edge of the object you wish to select. Click and release the mouse button there.
3. Pass your cursor carefully along the edges of the object you are selecting. As you do so, the cursor will draw a selection line that adjusts itself to the corners and curves of the object.

For every mouse click you make with this tool, you will be defining specific points (visualized as little boxes, known as “fastening points,”

along your selection path) from which the tool will continue to interpret the object's edge. You will see a solid gray line in place of the selection path you have already drawn.

4. To complete your selection, click the mouse button when your cursor is very near the selection's origin point. (When your cursor nears this point, the Magnetic Lasso tool icon changes to include a little circle at its lower right, signifying that a mouse click will close the selection.) You can also double-click your mouse button to close the selection path.
5. You can soften the edges of selections using feathering. This feature allows you to have a graduated edge around your entire selection — that is, the outer edges of your selection will fade into complete transparency. To see feathered edges in selections, change the standard Feather setting of 0px to another number between 1px and 250px in the Options bar (see Figure 71-2).



**Figure 71-2:** The Magnetic Marquee tool's Options bar

6. By default, Photoshop gives straight-lined selections a smooth anti-aliased edge. You may, however, choose to create a sharp aliased-edged selection by unchecking the Anti-aliased checkbox next to the Feather field.
7. You can adjust how close your cursor must be to an object to detect it by changing the Width field value in the tool's Options bar. If the object is close to another object, specify a low Width value, such as 2px. (If you use a pressure-sensitive stylus and the Pen Pressure option is checked, the Width value will decrease temporarily according to the amount of pressure you apply with your stylus.)
8. To select an edge without sharp contrast, adjust the Edge Contrast field's value to a lower percentage. The value ordinarily is set to 10%, but you can modify this setting from 1% (to catch subtle, low-contrast edges) to 100% (to tightly follow a high-contrast edge).
9. The Magnetic Lasso tool also automatically places fastening points along the object as it draws, depending on the value specified in the Frequency field. Accepting values ranging from 1 to 100, Frequency determines how many fastening points will be defined as the selection is being drawn; the higher the Frequency value, the more points will be put in place.
10. To return to the Magnetic Lasso tool's default edge selection state, simply return its Options bar's settings to their original condition. The Feather field should specify 0px, the Width field should specify 10px, the Edge Contrast field should specify 10%, the Frequency field should specify the number 57, and the Anti-aliasing and Pen Pressure checkboxes should be checked.

## Task 71

### tip

- Press Shift+L to switch your currently selected tool to the most recently selected lasso Tool. Pressing this key combination again will cycle between the Lasso tool, the Polygonal Lasso tool, and the Magnetic Lasso tool.

### cross-reference

- Task 81 shows you how to expand or contract your entire selection by a user-determined number of pixels.



# Task 72

## Select by Color with the Magic Wand Tool

### note

- A selection will contain all content within and under the “marching ants.”

Not all selections are based on the edges of an object. In some cases, you’ll need to select a specific part of an image based upon its color. For instance, if you were retouching a photo of a leg with a bruise on it, you might need to select the purplish-colored area to adjust its color values to better blend in with the surrounding skin. To achieve this kind of selection, use the Magic Wand tool, which makes its selections based on the color of the pixel below the tool’s cursor.

1. Select the Magic Wand tool from the second row and second column of the Tools palette.
2. Within your content window, move your mouse cursor directly above the color you wish to select. Click and release your mouse button there to create your selection.
3. The Magic Wand tool will select not only the color below your cursor, but also neighboring colors similar to your selection. The smaller the number provided in the tool’s Options bar’s Tolerance field, the fewer neighboring colors will be chosen. By default, the tool selects colors within a range of 32 possibilities (as shown in Figure 72-1).



**Figure 72-1:** The Magic Wand tool’s Options bar

4. You can soften the edges of selections using feathering. This feature allows you to have a graduated edge around your entire selection — that is, the outer edges of your selection will fade into complete transparency. To see feathered edges in selections, change the standard Feather setting of 0px to another number between 1px and 250px in the Options bar.

### cautions

- If you have specified a large Feather value but proceed to make a tiny selection, you may receive an alert message, such as “Warning: No pixels are more than 50% selected. The selection edges will not be visible.” You will still be able to modify this selection (such as filling its contents or moving it around), but no “marching ants” will appear on screen.

5. To select every pixel of the color you are selecting with the Magic Wand tool, uncheck the Contiguous setting in the Options bar. With this setting unchecked, every like-colored pixel in your document will be selected simultaneously when you select a specific color.
6. As with all the selection tools, by default the Magic Wand tool selects colors on only the layer selected in the Layers palette. However, you can allow the Magic Wand tool to make a selection based on the colors of all the layers in your document. To make this change, check the Use All Layers setting in the tool's Options bar (see Figure 72-2).



**Figure 72-2:** The Use All Layers setting

7. To return to the Magic Wand tool's default selection state, choose Reset Tool from the Tool Presets palette (as shown in Figure 72-3).



**Figure 72-3:** The Reset Tool option in the Tool Presets palette

## Task 72

### tips

- The Magic Wand tool can be incredibly handy for finding stray pixels of a certain color. Set the Tolerance option to 0 and uncheck the Contiguous option in the Options bar, and then click on one of the unwanted pixel colors. You will then be able to delete this selection or fill it with the color of your choice.
- Press the W key to switch your currently selected tool to the Magic Wand tool.
- Clicking outside of your selection while using the Magic Wand tool will both deselect your original selection and begin a new selection. To save some hassle, be sure to press Command+D (Mac) or Ctrl+D (Windows) to deselect your work.

### cross-reference

- Once you've defined a selection, you can distort the selection area (before distorting its contents) with the Transform Selection command. See Task 82.

# Task 73

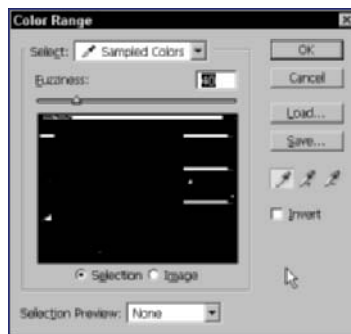
## Making a Selection by Color Range

Not all selections require the use of a tool from the Tools palette. The Color Range command, invoked from the Select menu, works similar to the Magic Wand tool. From the command's dialog box, you can either choose a specific color with the command's color picker or select a general range of colors (such as all reds). The Color Range command provides you with several different visualizations of your selection, allowing you to see more subtle selections than the Magic Wand tool provides.

### notes

- To remove a color from your selection while still inside the Color Range command's dialog box, choose the Subtract from Selection color picker. Proceed by clicking on colors you wish to remove.
- Selecting the Invert checkbox in the Color Range command's dialog box will select everything but the colors you have chosen with your color picker.
- A selection will contain all content within and under the "marching ants."

1. Choose Select ⇨ Color Range to open the command's dialog box (see Figure 73-1).



**Figure 73-1:** The Color Range command's dialog box

2. With your cursor, choose a color from your document (visible behind the command's dialog box) by clicking on the color you wish to select.
3. Select the Add to Sample eyedropper, shown in Figure 73-2, to choose an additional color to add to your selection.

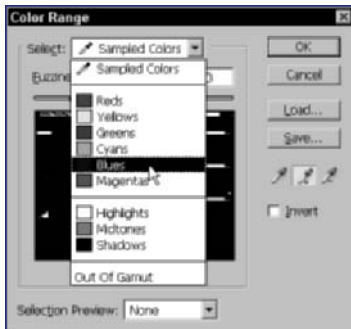


**Figure 73-2:** The Add to Sample eyedropper

### caution

- If you have chosen a color range from the Select menu, you may receive an message, such as "Warning: No pixels were selected." You may not have any colors in your document that fall within that color range.

4. With the Add to Sample eyedropper chosen, pick additional colors you wish to select. You will notice a black-and-white preview of your image in the center of the dialog box. As you add colors to your selection, the selected color's content will appear white within this preview area, giving you a quick view of your upcoming selection.
5. Change the Selection Preview drop-down menu from None to Black Matte. Photoshop will alter the appearance of your artwork behind the dialog box, according to your selection preview choice, to provide you with a more accurate view of your intended selection.
6. Choose Select ⇨ Blues (or any other color listing) to select an entire range of colors within your document (see Figure 73-3).



**Figure 73-3:** The Color Range command's Select menu

7. Adjust the Fuzziness slider to determine how many colors similar to your selected color will be added to the final selection. By default, the command will assume a value of 40.
8. Press the OK button, and your selection will be applied to your artwork.

## Task 73

### tips

- The Color Range command will make its selections from a subset of your document if you have already made a selection (i.e., before invoking the command).
- If you've changed the Selection Preview to display your intended selection in the full-sized document behind your dialog box, consider selecting Image instead of Selection in the radio buttons below the dialog's image preview to provide a thumbnail of the original artwork.

### cross-reference

- Task 79 demonstrates how to apply the feathering effect to your selection.

## Task

## 74

## Moving the Selection Marquee or Selection Contents

Once you have made a selection, you are often presented with the challenge of moving that selection. When moving a selection, you have two options: You can move the Selection Marquee itself (but not the content), or you can move the Selection Marquee *and* its content at the same time.

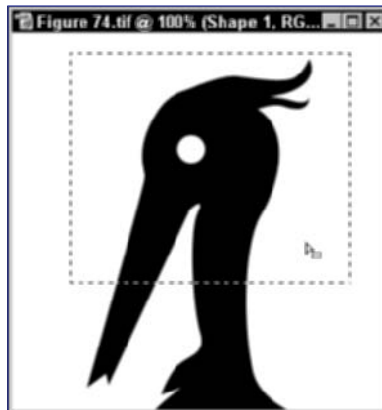
### notes

- If your selection is larger than its content, the selection will reduce itself automatically to the edges of your content when moving both the selection and the content.
- When moving a selection's content, you will be able to move only the content of the layer currently highlighted in the Layers palette.
- Once you have moved a selection and its contents, subsequent moves (with the same selection intact) will move both the selection and its contents whether you hold the Command/Ctrl key or not.

### caution

- If you move a selection and its content outside of your Canvas Size and deselect, the contents of the selection will be lost unless you follow up this action with an Undo.

1. Select one of the selection tools (such as the Rectangular Marquee tool).
2. Make a selection in your document.
3. Move your cursor over your selection. Instead of appearing as the tool you selected, your cursor will change its appearance to a miniature white arrow with a small selection box to its lower right. (See Figure 74-1.)



**Figure 74-1:** The cursor over a selection

4. Click and hold the mouse button on the selection to move the selection marquee only.

5. While continuing to hold your mouse button, drag the selection. (The cursor changes to a miniature black arrow.)
6. Once the selection marquee is in your desired new location, release the mouse button.
7. To move the selection's contents, hold down the Command (Mac) or Ctrl (Windows) key while the cursor is over the selection. Instead of appearing as the selection tool, your cursor will change its appearance to a miniature black arrow with a small scissors icon to its lower right, as shown in Figure 74-2. (Alternatively, you could switch to the Move tool, located in the first row and second column of the Tools palette.)



**Figure 74-2:** The Move Selection Contents icon

8. Click and hold the mouse button on the selection to move the selection and its contents.
9. While continuing to hold your mouse button, drag the selection. (The cursor changes to a miniature black arrow.)
10. Once the selection and its contents are in your desired new location, release the mouse button.

## Task 74

### tips

- You can use the keyboard to move a selection, too. Once a selection is made, simply press one of the directional arrow keys to move your selection in increments of one pixel. Holding the Shift key while pressing a directional arrow key will move the selection in increments of ten pixels.
- You can also use the keyboard to move a selection's contents. Once a selection is made, hold the Command/Ctrl key while pressing one of the directional arrow keys to move the selection's content in increments of one pixel. Holding the Shift key while pressing a directional arrow key will move the contents in increments of ten pixels.

### cross-reference

- You can also move a selection and its contents using the Free Transform command discussed in Task 110.

# Task 75

## Adding to or Subtracting from Selection Areas

### notes

- You can mix hard- and soft-edged selections by modifying your selection tool's Feather settings between multiple selections.
- Don't forget to set the selection tool back to its default state after using the selection modification buttons. To save yourself some time, consider using the Reset Tool command available via the Tool Preset Picker in the Options bar.

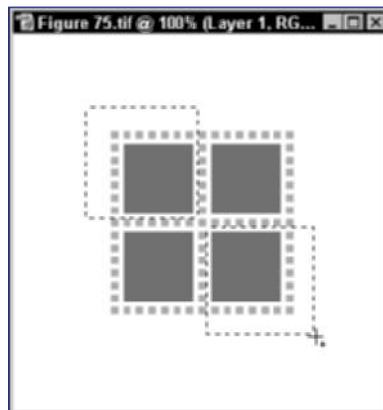
In many cases, your first attempt at making a selection may miss the mark. For instance, you may need to select multiple parts of your document at the same time to reduce the number of operations needed. Or, you may have to remove several pixels from the width of your existing selection. For either of these issues, Photoshop provides a number of ways to add to or subtract from your selection areas.

1. Select one of the selection tools (such as the Rectangular Marquee tool).
2. Make a selection in your document.
3. Press the Add To Selection button in the selection tool's Options bar, as shown in Figure 75-1, to add additional selections to your existing selection. (Your cursor will change to include a small plus sign in its lower right corner.)



**Figure 75-1:** The Options bar's Add To Selection button

4. Make a second selection in your document with the same selection tool (see Figure 75-2). You'll note that the original selection does not disappear but remains active after the second selection is made.



**Figure 75-2:** Adding to a selection

### caution

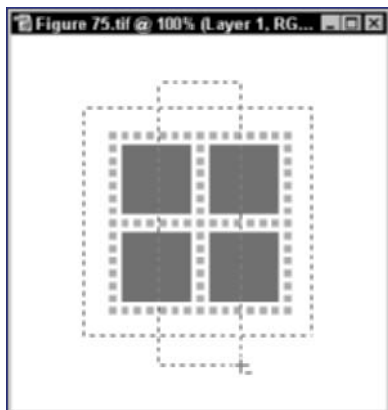
- As with single-selection considerations, you can make a selection only within your Canvas Size.

5. Press the Subtract From Selection button in the selection tool's Options bar, shown in Figure 75-3, to have subsequent selections remove portions of the existing selections. (Your cursor will change to include a small minus sign in its lower right corner.)



**Figure 75-3:** The Options bar's Subtract From Selection button

6. Make another selection that intersects with one of the existing selections in your document (see Figure 75-4).



**Figure 75-4:** Removing part of a selection

7. Return the selection tool to its default state by pressing the first of the selection buttons, New Selection, in the Options bar.

## Task 75

### tips

- You can bypass using the Add To Selection button in the Options bar by holding down the Shift key when making a subsequent selection with any selection tool.
- You can bypass the Subtract From Selection button in the Options bar by holding the Option/Alt key when making a subsequent selection with any selection tool.

### cross-reference

- Task 212 details how to fill your selection with a custom-made pattern.



# Task 76

## Intersecting Selections to Create Unique Selection Shapes

Using the Subtract From Selection button, you can pare your existing selections down to your desired intentions. In some cases, however, that may mean making several subtractive selections from an object to reach the appropriate dimensions. To expedite this process, you can use the Intersect With Selection button to create a selection from the intersecting regions of two or more selections; selection regions that fall outside of the intersecting region will be discarded.

### note

- You can create unique selection shapes by using the Intersect With Selection setting in conjunction with multiple selection tools.

1. Select one of the selection tools (such as the Rectangular Marquee tool).
2. Make a selection in your document.
3. Press the Intersect With Selection button in the selection tool's Options bar, as shown in Figure 76-1, to discard any selection regions that don't overlap with your upcoming selections. (Your cursor will change to include a small X in its lower right corner.)

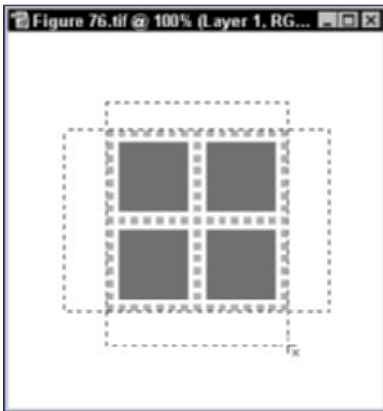


**Figure 76-1:** The Options bar's Intersect With Selection button

### caution

- If you make a second selection that does not intersect with the first selection, you will receive an error message like the following: "Warning: No pixels were selected." After pressing the OK button, your original selection will be discarded.

4. Draw a second selection that intersects with your first selection (see Figure 76-2). Only the regions shared by both selections will be retained.



**Figure 76-2:** Drawing an intersecting selection

5. Draw another selection intersecting with the selection resulting from the previous step. Repeat this process until the selection is whittled down to your desired size.
6. Return the selection tool to its default state by pressing the New Selection button in the Options bar, as shown in Figure 76-3.



**Figure 76-3:** The Options bar's New Selection button

## Task 76

### tips

- You can bypass using the Intersect With Selection button in the Options bar by holding down the Option/Alt key and Shift key simultaneously when making a subsequent selection with any selection tool.
- You can temporarily switch to Remove From Selection mode by simply holding down the Option/Alt key when making a subsequent selection with any selection tool.
- You can temporarily switch to Add To Selection mode by simply holding down the Shift key when making a subsequent selection with any selection tool.

### cross-reference

- Task 86 shows how to save unique selections for loading at a later time.

# Task 77

## notes

- If your stroked selection resides on a layer by itself, you may choose to leave the Blending options at their default settings. You can instead modify the stroke's appearance by changing the Blending mode and opacity of the layer in the layer's palette.
- You can create complex "picture frames" by stroking a selection multiple times. Simply create the largest background stroke first and continue to stroke the selection using progressively smaller (and different-colored) strokes.

## caution

- To prevent your stroked picture frame from becoming a permanent part of your photo or artwork, create and stroke your selection on a new blank layer.

## Stroking a Selection to Make an Instant Frame for an Image

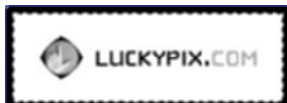
**B**eyond moving contents from one area of your document to another, selections can be used to create original artwork. A selection's edges can be used to determine the boundaries of a stroke, thus generating an instant "frame" for content on lower-lying layers. Using the Stroke command's numerous settings, you can determine the appearance of such a stroke. Repeated uses of the Stroke command on the same selection can create intriguing results.

1. Make a selection in your document with any of the selection tools, such as the Elliptical Marquee tool.
2. Choose Edit ⇨ Stroke to invoke the Stroke command's dialog box (shown in Figure 77-1).



**Figure 77-1:** The Stroke command's dialog box

3. Set a numerical value and unit measurement (such as 5px or 2in) in the Width field.
4. Click the Color swatch to invoke the pop-up Photoshop Color Picker and choose the color of your intended stroke.
5. Pick a Location setting (whether Inside, Center, or Outside) for your stroke to determine how Photoshop will generate your stroke in relation to your selection's edges. Figure 77-2 shows a 6-pixel stroke applied to the Outside of the selection's border.



**Figure 77-2:** A stroke applied outside of the selection's edge

6. Choose a Blending mode, such as Multiply, to determine the stroke's appearance in relationship to other content.
7. Set an opacity value (in percentages — e.g., 50%) of the resulting stroke in the Opacity field.
8. Check the Preserve Transparency checkbox if you want your stroke to appear only within the existing non-transparent content on the selected layer. In transparent areas of the layer, the Stroke command will be ignored.
9. Click OK to see the results of the Stroke command.

## Task 77

### *tips*

- For faster access to the Stroke command, choose Stroke from the contextual menu available upon a Ctrl+click/right-click within a selection.
- You can also create a stroke in conjunction with a selection by using the Pen or Paintbrush tool. After creating a selection, draw lines with the Painting tool while holding the Shift key (for 90° constraintment) along the edges of the selection. The resulting drawing will appear only within the selection's boundaries.
- To further change the opacity of your stroke or modify the Blending mode without undoing your existing work, choose Fade Stroke from the contextual menu available upon a Ctrl+click/right-click within a selection. The resulting dialog box will give you access to those two stroke settings, allowing for quick modifications.

### *cross-reference*

- Task 39 explains how to use the Color Picker, invoked in Step 4.

## Task 78

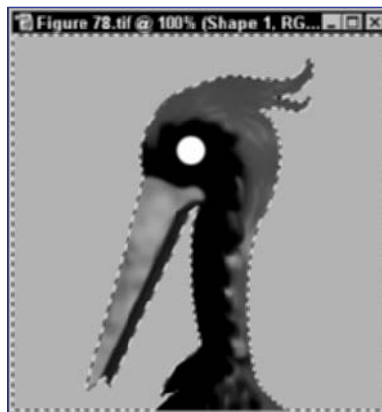
### note

- An inverted selection will still retain feathered and other irregular edges that were chosen before.

## Using Inverse to Select a Complex Object with a Plain Background

**D**rawing a geometric selection, such as a rectangle or ellipse, is quite easy, but drawing a selection around a multicolor, irregularly shaped object can pose a challenge. Sometimes, though, creative problem solving can save you considerable amounts of time. For instance, if your multicolor, irregularly shaped object is lying above a solid-colored background, you can select the background first and then invert the selection.

1. Select the Magic Wand tool.
2. Adjust the tool's Options settings, such as anti-aliasing, tolerance, and contiguosness, to best select the entirety of the solid-colored background.
3. Click the solid-colored background to make a selection of everything but the object you wish to eventually select (see Figure 78-1).



**Figure 78-1:** Selecting everything but your intended object

### cautions

- If your irregular object sits atop several different-colored backgrounds, you may need to make several additive Magic Wand selections before inverting your selection.
- Be sure to check your inverted selection before you modify its contents; small chunks of color (different from that chosen in Step 3) might have avoided detection and selection.

4. Choose Select ⇨ Inverse to invert your selection, as shown in Figure 78-2.



Figure 78-2: The Inverse command in the Select menu

5. Modify your selection using the addition or subtraction methods covered in Task 75 to refine its boundaries if necessary.
6. Move the selection's contents to ensure that your selection is accurate. If the selection is correct, undo this action. If it is not, choose Edit ⇨ Step Backward twice to return to Step 5.

## Task 78

### tips

- You can quickly invert your selection by pressing the Command+I (Mac) or Shift+Ctrl+I (Windows).
- Reduce the number of steps needed to invert your selection by choosing Select Inverse from the contextual menu available upon a right-click (Windows) or Ctrl-click (Mac) within a selection.

### cross-reference

- After converting your selection to a path, you can export the path to Adobe Illustrator. See Task 98.

# Task 79

## Creating a Soft-edged Vignette Effect with Feathering

In Tasks 69 through 72, you learned how to allow future selections to have softer, graduated edges. In this task you will learn how to apply a feathered edge to a selection after it's been made. By providing a means for secondary manipulation of the selection's edge, Photoshop allows designers to try different means of arriving at the same solution.

### notes

- Use the feathering ability with a grain of restraint when possible, as a selection with Photoshop's default feathered edges looks perfect and uniform all around the object. Instead, work to create a more irregular appearance by roughly painting the edges of the to-be-modified imagery inside a Quick Mask (as discussed in Part 10).
- You can feather an already feathered selection area to achieve some very soft-edged results.

1. Open a layered document containing a photograph or image.
2. Choose a selection tool (such as the Lasso tool).
3. After selecting the layer with the artwork, make a freeform selection loosely around some of the objects in the photograph.
4. Choose **Select ⇨ Feather** to launch the Feather command dialog box, as shown in Figure 79-1.



**Figure 79-1:** The Feather Command dialog box

### caution

- If you have specified a large Feather value but proceed to make a tiny selection, you may receive an alert message, such as "Warning: No pixels are more than 50% selected. The selection edges will not be visible." You will still be able to modify this selection (such as filling its contents or moving it around), but no "marching ants" will appear on screen.

5. Enter a numerical value and unit of measurement (such as 1in or 15cm) to determine how many units away from both sides of the selection's edge a gradation will occur.
6. Press the OK button to see the resulting selection.
7. Choose Select ⇨ Inverse to invert your selection.
8. Press the Delete key, or select Edit ⇨ Clear, to delete anything within the inverted selection to produce a vignetted image of your original selection, as shown in Figure 79-2. If the feathered vignette does not appear as you wish, choose Edit ⇨ Step Backward three times to return to Step 4.



**Figure 79-2:** A vignetted photograph

## Task 79

### *tips*

- You can speed up the feathering process by pressing Command+Option+D (Mac) or Alt+Ctrl+D (Windows). This key combination invokes the Feathering command dialog box.
- You can quickly invert your selection by pressing Shift+Command+I (Mac) or Shift+Ctrl+I (Windows).

### *cross-reference*

- Task 126 shows how to repair a selection's content with the Patch tool using minimal effort.



# Task 80

## Creating a Border Selection

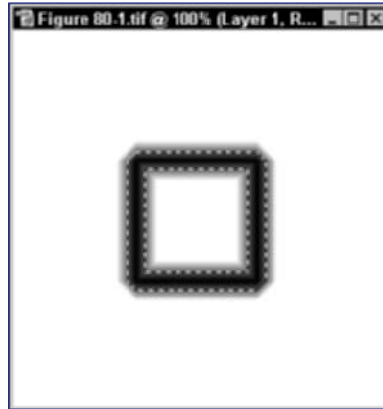
**T**ask 77 showed you how to make a quick frame for an image by stroking a selection. You can also create another quick frame-like device by converting a regular selection into a gradated border. With the use of Photoshop's Border Selection command, your original selection will fade out in each direction to complete transparency in a user-specified number of steps. Figure 80-1 shows the results of a square 15-pixel border selection filled with black.

### notes

- The Border Selection's results have a very precise appearance because of their equidistant gradation from the selection's original boundaries. Consider feathering the resulting selection to soften the harsh gradation of the Border Selection.
- The maximum value you can specify for a Border Selection is 200 pixels.
- Even if a portion of your selection has been moved outside of the canvas area before you apply the Border Selection command, Photoshop will apply the command to the entirety of the selection. To see the entire selection, move the selection completely back into the document's canvas when the command has been completed.

### caution

- The Border Selection command angles the outside corners of a 90° angle in its resulting selection.



**Figure 80-1:** A Border Selection filled with black

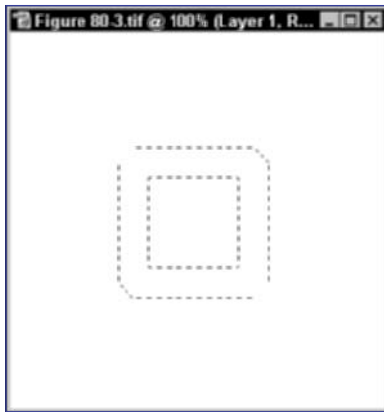
1. Choose a selection tool (such as the Rectangular Marquee tool).
2. Make a selection in your document.

3. Choose Select ⇨ Modify ⇨ Border to launch the Border Selection Command dialog box, as shown in Figure 80-2.



**Figure 80-2:** The Border Selection command's dialog box

4. Specify a numerical pixel value (such as 25) to determine the pixel width in each direction from the selection's edge that a gradation will occur.
5. Press the OK button to see the resulting selection (see Figure 80-3).



**Figure 80-3:** The Border Selection command's result

6. Move or fill the contents of the new selection to ensure that the selection is as you desired. If the selection is correct, undo this action. If it is not, choose Edit ⇨ Step Backward twice to return to Step 4.

## Task 80

### tip

- To create interesting frame appearances, layer a number of Border Selection results with a series of strokes applied to a similar selection.

### cross-reference

- Task 218 shows you how to create unique textures you can use to fill your Border Selections, thus creating distinctive frames for your imagery.

# Task 81

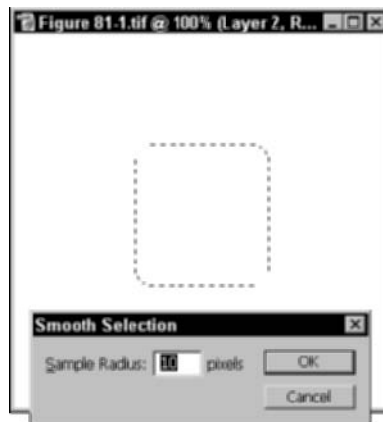
## Modifying a Selection by Smoothing, Expanding, or Contracting

Several of the more handy selection modification commands are also stored in the Select menu's Modify submenu: Smooth, Contract, and Expand. The Smooth command is used to round the corners of a selection according to a designated radius, while the Expand and Contract commands enlarge and reduce a selection's edges equidistant from their original location according to a designated pixel value.

### notes

- If your original selection is feathered, the Contract and Expand Selection commands will move the edge from which the feathering begins, thus preserving your original feathering settings.
- The maximum radius possible for the Smooth command is 100 pixels.
- The minimum number of pixels you can expand or contract your selection by is 1, while the maximum is 100.

1. Choose a selection tool (such as the Rectangular Marquee tool).
2. Make a selection in your document.
3. Choose Select ⇨ Modify ⇨ Smooth to launch the Smooth Selection command's dialog box.
4. Specify a numerical pixel value (such as 10) to determine the radius used to soften the selection's corner angles, and press the OK button to see the resulting selection (see Figure 81-1).



**Figure 81-1:** The Smooth Selection command's dialog box and result

### caution

- If you provide a Contract Selection value that is greater than the width of your selection, you will see a message stating, "Warning: No pixels selected."

5. Choose Select ⇨ Modify ⇨ Expand to launch the Expand Selection command's dialog box (see Figure 81-2).



**Figure 81-2:** The Expand Selection command's dialog box

6. Specify a numerical pixel value (such as 5) to determine the new selection's outward offset (in pixels) from the edge of the existing selection, and press the OK button to see the resulting selection.
7. Choose Select ⇨ Modify ⇨ Contract to launch the Contract Selection command's dialog box.
8. Specify a numerical pixel value (such as 7) to determine the new selection's inward offset (in pixels) from the edge of the existing selection, and press the OK button to see the resulting selection.

## Task 81

### tips

- You can use the Contract Selection command after using the Magic Wand tool to select an odd-shaped, soft-edged object. The contracted selection often tightens up the selection to better conform to the shape of the object without capturing some of the "ghosted" anti-aliased edges.
- Use the Smooth command to create a rectangular selection with rounded corners, similar to objects available in most drawing programs. Alternatively, use ImageReady's Rounded Rectangle Marquee tool to specify an exact corner radius.

### cross-reference

- You can use your selection to apply color adjustments, such as Color Balance (explained in Task 52), to a specific area of your imagery.

# Task 82

## Resizing or Reshaping a Selection with the Transform Selection Command

### notes

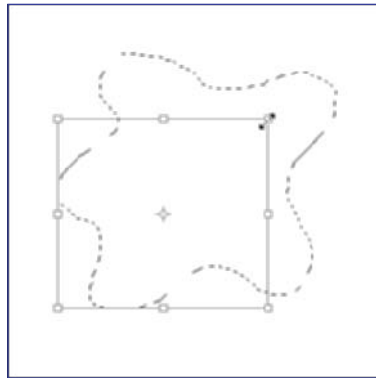
- If you have a feathered selection, the bounding box handles may appear to be offset from your selection. Keep in mind that the handles will appear at the very edge of your selection, which may extend past the “marching ants” visualization because of heavy feathering.
- The center point of the Transform Selection can be moved to allow for off-kilter rotation. Simply click, hold, and drag the center point (visible after the Transform Selection command has been activated) and release the mouse button when the center point is in your desired location.

### caution

- The quality of a selection's edges may diminish after a number of individual Transform Selection commands. To reduce this loss of quality, try to handle all transformations within one command session.

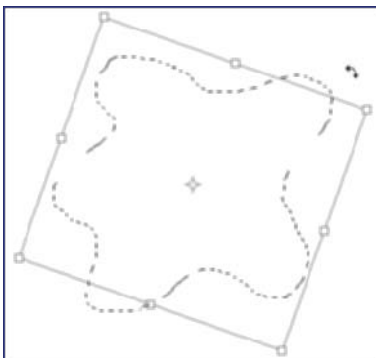
Sometimes you will need to distort the shape of your selection by stretching, scaling, rotating, or skewing its edges without making those transformations to the selection's contents. To do this, you will need to take advantage of the Transform Selection command, available under the Select menu. By activating this command, you can use Photoshop's common transformation handles to determine the selection's alterations.

1. Choose a selection tool (such as the Lasso tool).
2. Make a selection in your document.
3. Choose Select ⇨ Transform Selection to activate the bounding box handles along the edges of your selection.
4. Click and hold one of the four corner points to scale the selection (shown in Figure 82-1), releasing the handle when the selection is scaled to your intent. (When your cursor is placed on one of the handles, it will change to a line with an arrow at each end, signifying that a click and drag will initiate a stretch or scale command.)



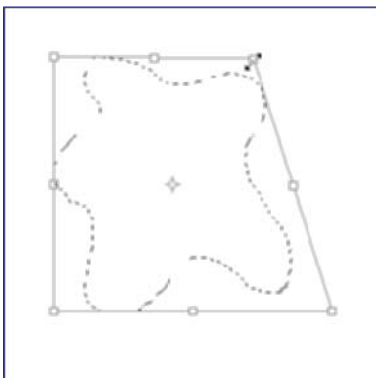
**Figure 82-1:** Scaling a selection using the Transform Selection command

5. Move your cursor roughly 10–20 pixels away from one of the handles. Your cursor will change to a curved line with an arrow at each end, signifying that a click and drag will initiate a rotation.
6. Click, hold, and move your cursor to rotate your selection from its center point (visible via the circular crosshair in the center, as seen in Figure 82-2).



**Figure 82-2:** Rotating a selection using the Transform Selection command

7. Move your cursor back over one of the corner handles, and hold the Command (Mac) or Ctrl (Windows) key. Your cursor will change to a miniature grayscale arrow, signifying that a click and drag will initiate a distort/skew command.
8. With the Command (Mac) or Ctrl (Windows) key held down, click, hold, and move your cursor to distort the corner of the selection (as shown in Figure 82-3).



**Figure 82-3:** Distorting a selection using the Transform Selection command

9. With the Command (Mac) or Ctrl (Windows) key still held down, click one of the middle handles, hold, and move your cursor to skew the selection if necessary.
10. Press the Return/Enter key, double-click on the selection, or click the Commit button in the Options bar to finish your selection transformation. Once you've done so, the handles will disappear.

## Task 82

### tips

- For faster access to the Transform Selection command, choose Transform Selection from the contextual menu available upon a right-click (Windows) or Ctrl-click (Mac) within a selection.
- Hold the Shift key when attempting any of these commands to constrain the transformation's angles.
- Hold the Option (Mac) or Alt (Windows) key when dragging a bounding box handle to reflect the transformation off the center point.

### cross-reference

- To transform the contents of your selection in a similar manner, see Task 105, which explains the Scale tool.

# Task 83

## Cropping an Image to a Selected Area

While the Crop tool is fantastic for setting precise document cropping based upon a rectangular shape, you may wish to crop your document according to a selection shape. In earlier versions of Photoshop, you were limited to cropping only rectangular shapes, whether via the Crop tool or based upon a selection area; however, Photoshop now allows you to crop a document according to an irregularly shaped selection. This feature means that upon selecting an object, you can quickly crop your entire document to match the object's greatest width and height.

### notes

- You can crop more than just exact layer selections. The Crop command will work with any selection, no matter how it is made.
- If you have a feathered selection, the final crop may appear to be offset from your selection. Keep in mind that the crop will occur at the very edge of your selection, which may extend past the “marching ants” visualization because of heavy feathering.

1. Open a multilayered document with artwork that does not fill the entire Canvas Size.
2. Select an artwork layer containing imagery.
3. Hold the Command (Mac) or Ctrl (Windows) key while placing your cursor above the layer name in the Layers palette. (You will notice that the cursor changes from a pointer hand to a pointer hand with a selection marquee in its lower right corner to designate its selection function, as shown in Figure 83-1.)



**Figure 83-1:** Selecting a layer's contents via the Layers palette

### caution

- A Crop command will discard all information outside of the visible Canvas Area.

4. While holding the Command (Mac) or Ctrl (Windows) key, click the layer in the Layers palette to closely select the edges of all the layer's contents. You can also make a selection using any of the available selection tools.
5. Choose Image ⇨ Crop to trim your document's Canvas Size to match the width and height dimensions of your selection (see Figure 83-2).



**Figure 83-2:** Cropping a document to a selection's edges

6. To deselect your content, move your mouse cursor outside of the boundaries of your selection and click, or press Command+D (Mac) or Ctrl+D (Windows).

## Task 83

### tips

- You can add to, subtract from, and intersect with your existing selections through the Layers palette while holding the Command/Ctrl key. For addition, also hold the Shift key. For subtraction, also hold the Option/Alt key. And for intersection, hold both the Option/Alt key and Shift key.
- If you want a little air between your selection and your intended crop, consider using the Expand Selection command (discussed in Task 81) before choosing the Crop command.

### cross-reference

- Task 103 shows how to use the Crop Tool to make a variety of customizable croppings.



# Task 84

## Deselecting, Reselecting, and Deleting Selections

As you work more and more with selections, you will find yourself needing the quick ability to both deselect an area and bring back the most recently deselected selection. You will also need to clear the contents of a selection to clean up an image (or make room for new content). Through the Select and Edit menus, respectively, you can accomplish all three of these feats.

### notes

- To quickly reselect a selection, you can press Command/Ctrl+Shift+D or choose Reselect from the contextual menu available upon a right-click (Windows) or Ctrl-click (Mac) within the document.
- To quickly deselect a selection, you can press Command/Ctrl+D or choose Deselect from the contextual menu available upon a Right-click (Windows) or Ctrl-click (Mac) within a selection.

1. Choose one of the selection tools (such as the Rectangular Marquee tool) and make a selection in your document.
2. Choose Select ⇨ Deselect, as shown in Figure 84-1, to discard your existing selection's boundaries. (Your selection's content will not be affected.)



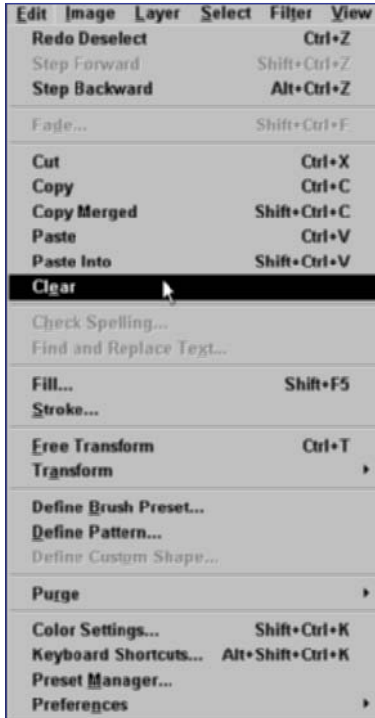
Figure 84-1: The Select menu

3. Apply a fill to the document or make any other edits to your file *other than making a new selection*.

### caution

- The Reselect command will resuscitate only the most recent selection since the document was opened. If you close the document, the Reselect command will not remember the last selection made before the document was closed.

4. Choose Select ⇨ Reselect to restore your most recent selection. The “marching ants” of your previous selection will reappear.
5. Choose Edit ⇨ Clear, as shown in Figure 84-2, to delete the contents within your selection area.



**Figure 84-2:** The Edit menu's Clear command

6. Deselect the now-vacant selection area.

## Task 84

### tips

- You aren't required to go to the Clear command in the Edit menu to delete the contents of a selection. Simply press the Delete key, and the contents will disappear.
- Rather than deleting sections of your artwork, consider creating a Layer Mask of the inverse of your selection. This will achieve the same effect while retaining the artwork information should you need to adjust the edges of the deleted areas later.

### cross-reference

- If you have created a complex selection, you will sleep much more peacefully at night if you save your selections (as shown in Task 86), rather than trust the Reselect command.

# Task 85

## Copying and Pasting a Selected Area into Another Image

### notes

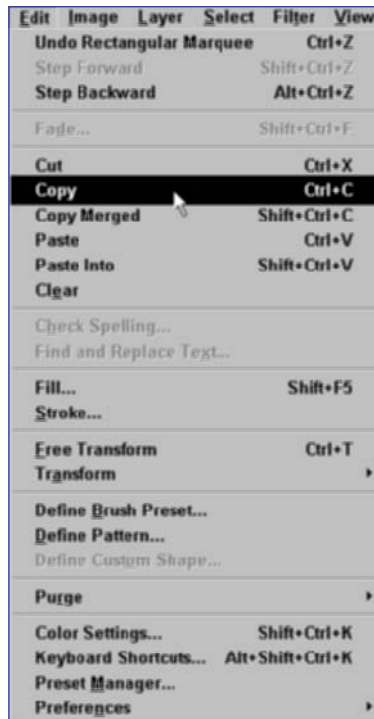
- If you want to remove the contents of the Clipboard without copying another selection (to free up some of your computer's memory), choose Edit ⇨ Purge ⇨ Clipboard.
- The Clipboard will remember its contents within only one computer session. If you turn off or restart your computer — or if it crashes — the contents of the Clipboard will be discarded.

### caution

- The Clipboard can hold only one item at a time. If you copy a second item before pasting the first, the contents of the first copy will be discarded from memory.

Computers' copy, cut, and paste functions are now taken for granted, but these three functions have revolutionized the way people work. In addition to allowing you to copy, cut, and paste selected areas between your documents, Photoshop lets you paste content into a selection. The benefit of such a feature is that the results are automatically masked, thus saving you a step or two. Using the Paste Into command, you can quickly mask copied imagery in different ways.

1. Choose a selection tool (such as the Lasso tool).
2. Make a selection in your document.
3. Choose Edit ⇨ Copy (shown in Figure 85-1) to put your selection's contents on the Clipboard.



**Figure 85-1:** The Edit menu's Copy command

4. Deselect the selection by pressing the Command/Ctrl key and the D key simultaneously.
5. Make a new selection elsewhere in your document.
6. Choose Edit ⇨ Paste Into to place a copy of the original selection's contents within a layer mask (defined by your new selection) on a new layer, as shown in Figure 85-2.



**Figure 85-2:** The Paste Into command's masked results

7. Choose the Move tool from the first row and second column of the Tools palette.
8. Click and drag within the new layer to move the pasted contents within their layer mask, as shown in Figure 85-3.



**Figure 85-3:** Moving imagery within a layer mask

## Task 85

### *tips*

- Press Command/Ctrl+ C to copy an object to the Clipboard without accessing the Edit menu.
- Press Command/Ctrl+Shift+V to paste an object inside a selection without accessing the Edit menu.

### *cross-reference*

- You can duplicate content in other ways, too. By using the Clone Stamp tool, discussed in Task 127, you can use the cursor to “paint” information from another part of the document.

# Task 86

## Saving and Loading Selections for Later Use

### notes

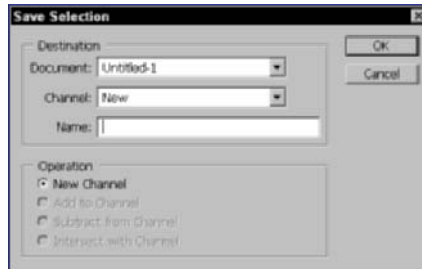
- To quickly load a selection, choose “Load Selection” from the contextual menu available upon a right-click (Windows) or Ctrl-click (Mac) within the document.
- You can see selections that you’ve saved in your document by viewing the Channels palette. Likewise, you can load a selection quickly from the palette, too, by holding down the Command (Mac) or Ctrl (Windows) key and clicking the selection channel.

### caution

- If you have created a complex selection, you will rest more easily if you save your selections, rather than trust the Reselect command. An accidental selection can discard a considerable amount of work.

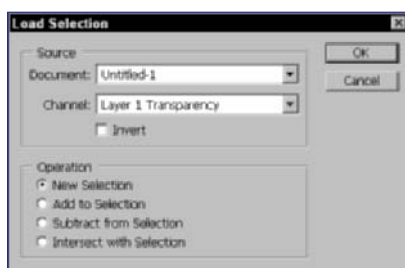
**A**fter drawing a complicated, precise selection around the image of a shaggy dog or a city skyline, you may wish to avoid having to draw the same selection again in the future. If you were to accidentally make another selection, you might lose all your efforts in a flash. Luckily, you can save a selection for later use, and, even better, load a selection saved into any file open in Photoshop (not just the file you are working on).

1. Choose a selection tool (such as the Lasso tool).
2. Make a selection in your document.
3. Choose Select ⇨ Save Selection to store this selection for good, revealing the Save Selection dialog box (shown in Figure 86-1).



**Figure 86-1:** The Save Selection dialog box

4. Modify the Destination information according to your needs, specifying the document to save the file within (with your current file listed as the default), which channel to save the selection into (by default, a new channel is created), and the name by which the selection can be referenced. (Task 143 describes channels in more detail if you are unaware of how channels work in Photoshop.)
5. Specify the Operation information if necessary (set to New Channel by default) and press OK.
6. With the selection saved, choose Select ⇨ Deselect.
7. Choose Select ⇨ Load Selection to invoke the Load Selection dialog box (shown in Figure 86-2), allowing you to choose which selection to restore.



**Figure 86-2:** The Load Selection dialog box

8. Specify the Source and Operation information if necessary (such as whether to look in another document, what channel to load the selection into, whether to invert the selection, and how the selection should interact with an existing selection) and press OK.

## Task 86

### *tips*

- If you work in an environment where you need to share your Photoshop files with others, consider saving a selection only within the files it is created in. Then, when the file moves off-site, the next person working on the file will have access to the saved selections.
- If you want to reduce the size of your image files, consider saving your selections into a document that contains only selections (rather than the image file itself). You'll need to keep this second file open to save to and load from, but your image files will be smaller.

### *cross-reference*

- The Operation options in the Save Selection and Load Selection dialog boxes work in the same manner as the operations in Tasks 75 and 76.



## Part 6: Path Essentials

- Task 87: Creating a Simple Work Path Using the Pen Tool
- Task 88: Drawing Curves with the Pen Tool
- Task 89: Creating a Freeform Path
- Task 90: Using the Magnetic Pen Tool to Trace a Path around an Object
- Task 91: Selecting Path Components with the Path and Direct Selection Tools
- Task 92: Adding and Deleting Anchor Points to Reshape a Path
- Task 93: Using the Convert Point Tool to Change to Smooth or Corner Points
- Task 94: Aligning and Distributing Path Components
- Task 95: Filling and Stroking Paths
- Task 96: Converting a Path to a Selection and Vice Versa
- Task 97: Duplicating, Saving, and Deleting Paths
- Task 98: Exporting a Path to Adobe Illustrator



**Task 87****note**

- To draw paths with angles in multiples of 45 degrees, press Shift while creating anchor points.

## Creating a Simple Work Path Using the Pen Tool

Photoshop may be known for its ability to manipulate raster or bitmap images, but it's also handy for creating vector-based lines called paths. Using the Pen tool, you can create paths to be used in the making of vector masks (similar to layer masks), selections, or strokes. The following steps outline how to create a simple, straight-line work path. The other tasks in this path build upon this lesson to help you learn the basics of vector-based paths.

1. In order to create a path using the pen tool, create a new image or open an existing one.
2. Select the Pen tool from the toolbox (see Figure 87-1).



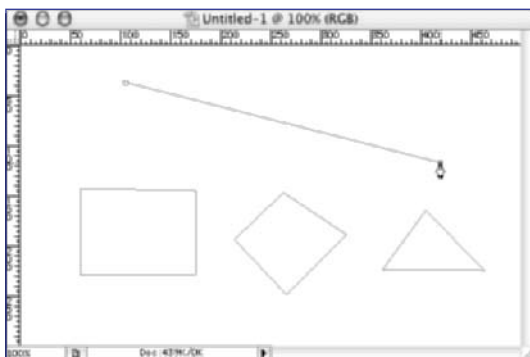
**Figure 87-1:** Selecting the Pen tool from the toolbox

3. Click the Paths button on the options bar (see Figure 87-2).



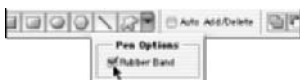
**Figure 87-2:** The Paths button on the options bar

4. Click in your document window, then move your mouse pointer to a different area in your document and click again to create a straight line connected by two anchor points (see Figure 87-3).



**Figure 87-3:** Creating a straight-line path

5. To extend a path, keep on clicking in the document window. As you draw the work path, the path you are on will highlight the anchor points as boxes with the most recent anchor set as a filled-in box.
6. To close a work path, move your cursor to the anchor point at the beginning of the work path. The mouse pointer changes shape, showing a small circle to the right of the pen symbol.
7. Click and the work path will become complete.
8. If you want to preview where the path segments will be drawn as you move the cursor, click the Geometry button and select the Rubber Band check box from the drop-down menu (see Figure 87-4). When you start to form a work path, a line will be drawn from the last anchor point to your cursor location in the image window. Move the cursor and the line will move accordingly.



**Figure 87-4:** Selecting the Rubber Band option.

## Task 87

### tip

- Press P to switch from your current tool to the Pen tool you used last; press Shift+P to cycle through the available Pen tools.

### cross-reference

- To learn how to save a work path for later use, see Task 97.

# Task 88

## Drawing Curves with the Pen Tool

In math class, you learned that with two points you could draw a straight line. But did you know that, with a little bit more information supplied at the anchor points, you could define a curved line?

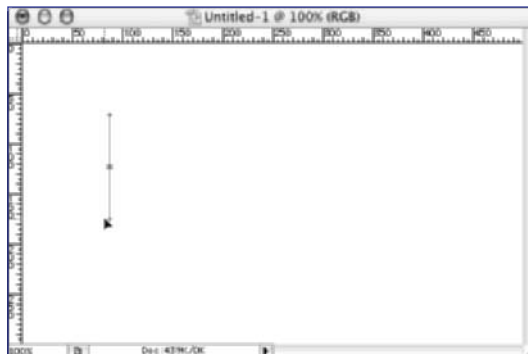
A set of equations devised by Pierre Bézier in the 1970s for CAD/CAM (Computer-Aided Design/Computer-Aid Manufacturing) operations allowed for a curve to be created using four endpoints. Two endpoints are the anchors that are to show the start and end of a line (as shown in Task 87), and then there are two control points controlling the curve.

In the following task, you will learn how to create your own Bézier curve. Creating such curves is often tricky and thus discouraging for new users (it's math after all), so don't give up. Once you've mastered Bézier curves, you will be able to apply that knowledge to other digital imaging applications, not just Photoshop.

### note

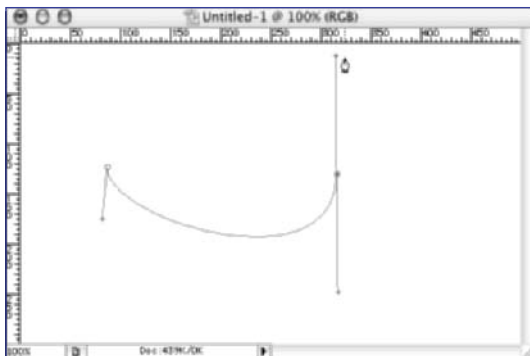
- While dragging to create your curve, make sure you are moving your mouse in the direction that you want your curve to go.

1. Create a new document or open an existing one.
2. Select the Pen tool from the toolbox.
3. Click and drag in your document window. As you drag, you will see control points emerge from the anchor point (see Figure 88-1). These control points allow Photoshop to determine half of the curve's arc.



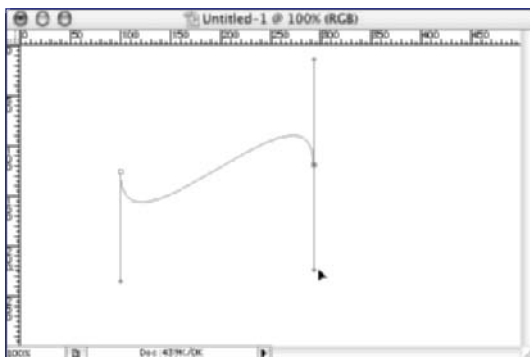
**Figure 88-1:** Control points emerge from the first anchor point.

4. Move your cursor to where you want your second endpoint of the curve to be located.
5. Click and drag to create another line. As you drag, a set of control points emerges from the second anchor point. (See Figure 88-2.)



**Figure 88-2:** A simple curve created with the pen tool

6. Drag at the second endpoint to create a path that looks like the letter S (see Figure 88-3).



**Figure 88-3:** An S-shaped path

## Task 88

### tips

- Press P to switch from your current tool to the Pen tool you used last; press Shift+P to cycle through the available Pen tools.
- Try to keep the number of anchor points to a minimum. It will help create a smoother printing job as well as reduce file size.

### cross-reference

- To learn how to create a path without the need for all that math nonsense, check out Task 89.

# Task 89

## Creating a Freeform Path

Who wants to spend all day playing connect the dots and dropping anchor points to create curved lines? Drawing a line freely over a page is human nature. It's what you do when you pick up a crayon and apply it to construction paper or doodle on a notepad by the phone when you are on hold. The Freeform pen tool allows you the freedom to do just that.

### note

- In order to specify how sensitive Photoshop makes the anchor point distribution, click the Geometry button on the options bar. On the drop-down menu, specify a new Curve Fit value (from .05 to 10.0 pixels). The higher the value, the lower the number of anchor points used in the creation of the work path.

1. Create a new document or open an existing one.
2. Select the Freeform Pen tool from the toolbox. If you don't see this tool, click the Pen tool icon to open a submenu and then select the Freeform Pen tool (see Figure 89-1).



Figure 89-1: Selecting the Freeform pen tool

3. Click and drag the mouse in the document window to create a path — without the need to draw anchor points yourself (see Figure 89-2). Anchor points are placed automatically, but will not be visible until the path is selected with the Path Selection tool.



**Figure 89-2:** Creating a Freeform work path

4. To stop drawing a freeform path, lift your finger off the mouse button.
5. To increase the length of a freeform path, place the Freeform Pen tool near or over the endpoint of the path, and then click and drag.
6. To create a closed freeform path, simply click the initial anchor point of the path.

## Task 89

### *tips*

- Press P to switch from your current tool to the Pen tool you used last; press Shift+P to cycle through the available Pen tools.
- With great power comes great responsibility. While the Freeform Pen tool is easy to use, don't overdo the production lines or you might be buried in anchor points. Sometimes it's best to use the Pen tool, even if it's not the user-friendliest tool.

### *cross-reference*

- Task 91 explains how to select parts of a path.

**Task 90**

## Using the Magnetic Pen Tool to Trace a Path around an Object

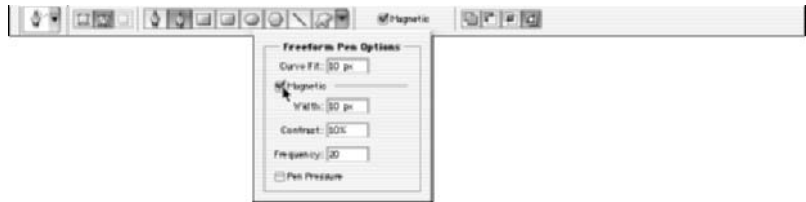
There was a time when Photoshop users had to place anchor points manually around an image in order to get a path around an object. Since the introduction of the Magnetic Pen tool, however, this is no longer necessary.

### note

- To ensure a path along a certain edge, click at various points where you want the magnetic tool to snap to the edge. If you accidentally add an anchor point or want to remove the last anchor point, press Delete.

The Magnetic Pen tool looks for differences in the colors of an image and forms a path around or on it. The Magnetic Pen tool makes creating a path very easy to do.

1. Create a new document or open an existing one.
2. Choose the Freeform Pen tool from the toolbox.
3. Select the Magnetic check box on the options bar. Alternately, you can also click the Geometry button and select the Magnetic check box as well as specify the tool's Width, Contrast, and Frequency settings under Freeform Pen Options (see Figure 90-1).



**Figure 90-1:** The options menu for the Magnetic Pen tool.

4. In the Width text box, you can enter a value from 1 to 256. This value represents the number of pixels from the pointer where Photoshop will look for dramatic changes in colors when creating the work path.

5. In the Contrast text box, you can enter a percentage value from 1 to 100. This value controls how much Photoshop will determine a color change to be an edge when creating a path.
6. In the Frequency text box, you can enter a value from 0 to 100. This value controls the number of anchor points the Magnetic Pen tool will place on a path. The lower the value the fewer the number of anchor points.
7. If you are using a stylus tablet, select the Pen Pressure check box. This ensures that the width of your work path decreases when you press on the stylus on the tablet.
8. To create your path with the Magnetic Pen tool, click inside the document window near the object you want to trace (see Figure 90-2).



**Figure 90-2:** Drawing a path with the Magnetic Pen tool

9. Draw your path around the object and press Enter or Return when you are done or click your starting point to close the path.

## Task 90

### *tip*

- If you aren't completely satisfied with the result, press ESC to delete the work path.

### *cross-reference*

- Task 92 explains how to edit your path. See Task 92 for more information.



# Task 91

## note

- When you have a selected a portion of a path with the Direct Selection tool, Alt-click (Windows OS) or Option-click (Mac) in the middle of the path to select the entire path.

## Selecting Path Components with the Path and Direct Selection Tools

The fine-tuning of a work path is essential. People making mistakes and placing dots in the wrong place on a computer screen is a pretty common occurrence. In order to clean up your paths, you need to be able to pick and choose one or more anchor points along a work path. When editing a curved path, you will also see the control points as well.

1. Select the Path Selection tool, as shown in Figure 91-1.



Figure 91-1: Selecting the Path Selection tool

2. Select a point on the path and click (see Figure 91-2). If there are several paths in the area, only the path directly under the cursor will be picked.

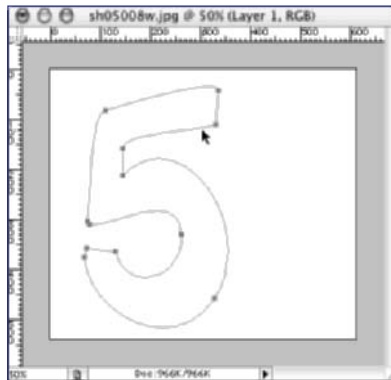
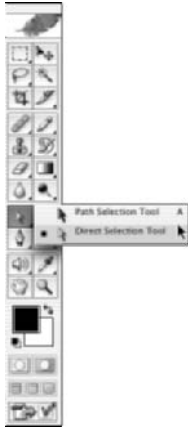


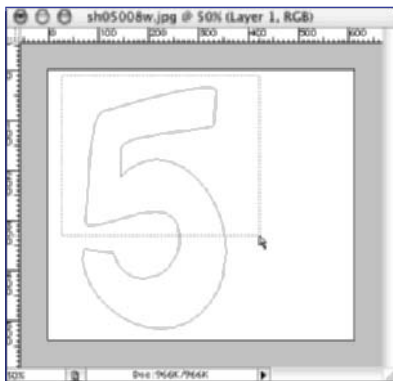
Figure 91-2: Selecting an entire path.

3. If you want to see the bounding box of a work path, select the Show Bounding Box check box on the Options Bar.
4. To select a portion of a path, choose the Direct Selection tool (see Figure 91-3).



**Figure 91-3:** Grabbing the Direct Selection tool

5. Click and drag a marquee over the portion of the path you want to select (see Figure 91-4). After you have made your selection, the anchor points you have selected are displayed as black squares.



**Figure 91-4:** Selecting only parts of a path

6. To add more points to the selected portion of a path, use the Direct Selection tool and Shift-click the border boxes. When they turn into black squares, they have been added to your path selection.

## Task 91

### *tip*

- To access the Direct Selection tool while working with another tool, place the cursor over an anchor point and press Ctrl (Windows) or Command (Mac).

### *cross-reference*

- For information on how to import a path into Illustrator, see Task 97.

# Task 92

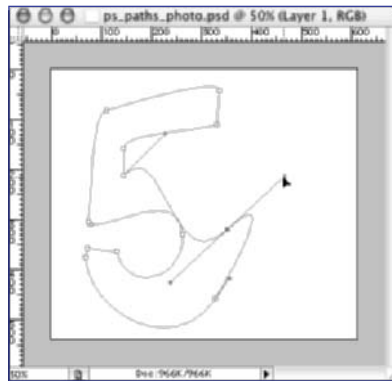
## Adding and Deleting Anchor Points to Reshape a Path

**A**fter you have created a path, you might want to reshape it. You can do this by adding or deleting anchor points in the path itself using the aptly named Add Anchor Point and Delete Anchor Point tools.

### note

- After initially creating a path, you almost always need to refine it. Getting familiar with adding and deleting anchor points is a necessity.

1. To add an anchor point, choose the Add Anchor Point tool from the toolbox. If you don't see this tool, click the Pen tool icon to open a submenu and then select the Add Anchor Point tool.
2. Pause your mouse pointer over a path.
3. To add an anchor point and not change the shape of the path, click the path.
4. To change the shape of the path, click and drag a point in the path. As you drag, control points form, enabling you to manipulate the shape of the path (see Figure 92-1).



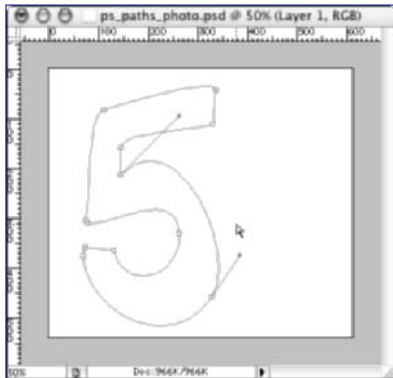
**Figure 92-1:** Changing the shape of the path

5. To delete an anchor point, select the Delete Anchor Point tool from the toolbox.
6. Pause your mouse pointer over an anchor point on a path (see Figure 92-2).



**Figure 92-2:** Positioning the mouse pointer to delete an anchor point

7. Click an anchor point to remove it (see Figure 92-3).



**Figure 92-3:** The anchor point has been terminated

8. To delete an anchor point and shape the path segment, click and drag to remove the anchor point; at the same time, Photoshop adds Control points to the two adjacent points, and you will be able to shape the curve of the line as well.

## Task 92

### tip

- To make it easier for you to add and delete anchor points while creating paths, select the Auto Add/Delete check box on the options bar. While moving your mouse pointer over a path using the Pen tool, the pointer changes shape into the Add Anchor Point tool. Click to add an anchor point. When you move your mouse pointer over a pre-existing anchor point, the pointer changes shape into the Delete Anchor Point tool, enabling you to click or click and drag to delete the anchor point.

### cross-reference

- Task 91 explains how to select parts of a path instead of the whole path.

# Task 93

## note

- Remember to brush up on your path essentials. The more you know about manipulating paths, the better you will be at other digital imaging programs, not just Photoshop.

## Using the Convert Point Tool to Change to Smooth or Corner Points

When drawing a path with the Pen tool, sometimes you might forget to drag the mouse to indicate a curve resulting in a straight line when you wanted a curve. Instead of deleting the path that you have created, you can use the ominous sounding Convert Point tool. This tool transforms corner points into control points for curves or makes corner points out of curve control points, making your life way easy.

1. Create a new document and a path or open an existing document with paths.
2. Select the Convert Point Tool from the toolbox (see Figure 93-1).



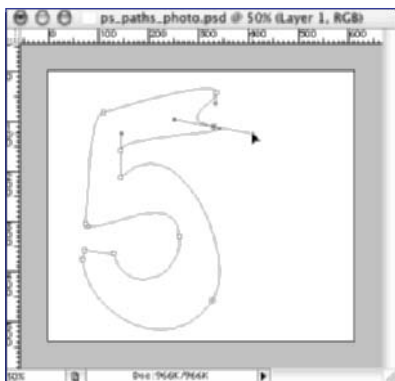
Figure 93-1: Selecting the Convert Point tool

3. Move your mouse pointer over an anchor point (see Figure 93-2), and click it.



Figure 93-2: Moving the tool over an anchor point

4. If the anchor point was used to create a curve, it will be transformed into a corner point and the path will snap at the segment into a straight line.
5. To transform a corner point to a curve point, click the anchor point and then drag to show the control points.
6. To manipulate the curve, click the control points of a smooth point and drag them (see Figure 93-3).



**Figure 93-3:** After transforming the point, you can manipulate the curve with the Convert Point tool.

7. When you have finished, click inside the document window area away from paths to deselect any paths you have been working on.

## Task 93

### tip

- If you are using the Direct Selection tool, press Ctrl+Alt (Windows) or Command+Option (Mac) to switch from the Direct Selection tool to the Convert Point tool.

### cross-reference

- To learn more about creating curves, see Task 88. For straight lines, see Task 87.

# Task 94

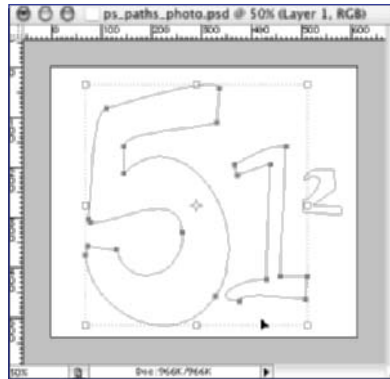
## Aligning and Distributing Path Components

### note

- You can use the alignment options with only two paths selected; to use the distribution options, you must select at least three paths.

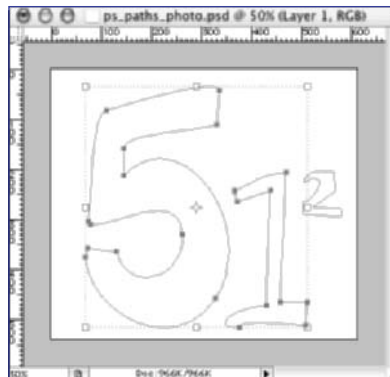
Similar to moving furniture with your significant other, getting things to be just right can be an exercise in futility (and patience in the extreme). Aligning and distributing path components allows for precision centering and placement of path elements. Instead of eyeballing two elements side by side (and they never will be perfectly matched that way) to be level you can use the Align and Distribute commands.

1. Open a document with paths or create a new document with paths.
2. To align components, start with the Path Selection tool from the toolbox, which enables you to select the first component, then Shift-click with the Path Selection tool to add the rest (see Figure 94-1).



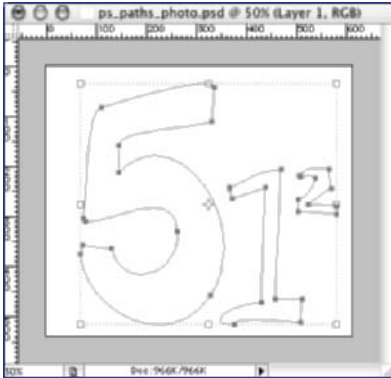
**Figure 94-1:** Selecting the to-be-aligned components

3. To align components to the top, vertical center, bottom, left, horizontal center, or right, click the appropriate button on the options bar. Figure 94-2 shows an example of paths aligned at the bottom of the selection.



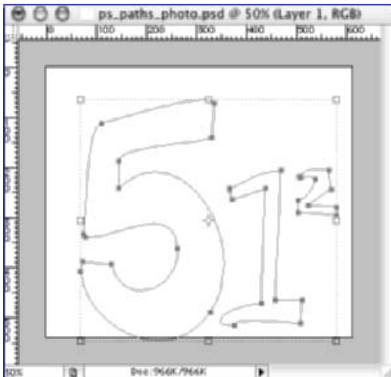
**Figure 94-2:** Aligning the components at the bottom

4. To distribute the components of a path, select the paths you want to distribute (see Figure 94-3).



**Figure 94-3:** Selecting paths before distributing them

5. To distribute the paths to the top, vertical center, bottom, left, horizontal center or right (see Figure 94-4), click the appropriate button on the options bar.



**Figure 94-4:** After distributing the paths to the horizontal center

## Task 94

### tip

- If you have paths on separate layers, don't bring them all onto one layer. Instead use the Path Selection tool to move the paths to their new locations.

### cross-reference

- Being able to edit paths is just as important as being able to position paths. See Task 92 for information on adding and deleting points on a path.



# Task 95

## Filling and Stroking Paths

In Photoshop you can easily fill and stroke selections. The same goes for the paths that you create. Follow these steps to learn how to fill and stroke the paths you create.

### notes

- You can also Alt-drag or Option-drag a path and drop it on the Fill Path button in the Paths palette to open the Fill Path dialog box.
- Every time you stroke a path, the stroke will be placed over the previous stroke sometimes resulting in a thicker line.
- You can also Alt-drag or Option-drag a path and drop it on the Stroke Path button in the Paths palette to open the Stroke Path dialog box.

1. In order to fill a path, select the path you want to work with in the Paths palette.
2. Press the Fill Path icon at the bottom of the Paths palette (see Figure 95-1).

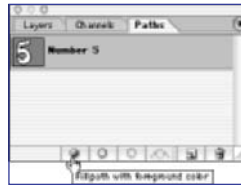


Figure 95-1: Filling a path

3. To modify the settings of the Fill Path tool, Alt-click (Windows) or Option-click (Mac) the Fill Path icon at the bottom of the Paths palette to open the Fill Path dialog box (see Figure 95-2).

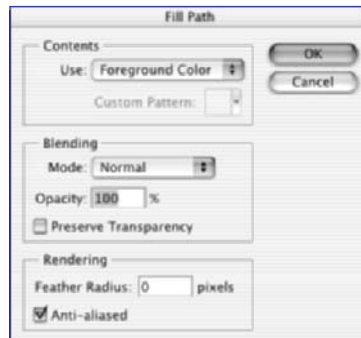
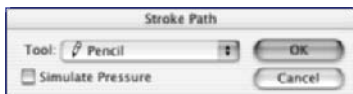


Figure 95-2: The Fill Path dialog box

**Task** 95

4. Under Contents, select the fill color from the Use drop-down list. Under Blending, select a setting from the Mode dropdown list; enter a value in the Opacity text box; and select Preserve Transparency to restrict the fill to only those parts that have pixels. Under Rendering, enter a pixel value in the Feather Radius dialog box. This value controls how far the fill go outside of the selection. A value of zero will mean that the fill will only go to the edge of the selection and no further.
5. When you have finished, click OK.
6. To stroke a path, select the path you want in the Paths palette.
7. Click the Stroke Path button at the bottom of the Paths palette.
8. To modify the settings of the Stroke tool, Alt-click (Windows) or Option-click (Mac) the Stroke Path button to open the Stroke Path dialog box, (see Figure 95-3).



**Figure 95-3:** The Stroke Path dialog box

9. Select the tool you want to use from the Tool drop-down list.
10. When you have finished, click OK.

***cross-reference***

- To learn how to create a selection from a path, see Task 96.

# Task 96

## Converting a Path to a Selection and Vice Versa

### note

- To quickly make a complex path out of an image from a photograph, first go to Task 209 to learn how to extract an object from a background. Then Ctrl-click (Windows) or Command-click (Mac) the layer name in the Layer palette. This will bring up a selection for just that object. Then follow the steps in this task to create it into a path.

While we worked through the basics of working with paths, there may be times when you want a complex path. And while the tasks covered so far have given you the fundamentals for developing complicated, detailed paths, actually creating them can become a convoluted and time-consuming process.

On the other hand, with the tools like Marquee and Quick Mask, we can create easily complex selections. So, wouldn't it make sense that Photoshop have a tool that allows users to create a path out of a selection and vice versa? It sure does and, yes, there is such a conversion command. (Otherwise, this introduction would have been a major letdown.) Follow the steps below to find out how this conversion can take place.

1. To transform a path to a selection, select a path in the Paths palette.
2. Click the Load Path As A Selection button at the bottom of the Paths palette (see Figure 96-1). Alternatively, you can also Ctrl-click (Windows OS) or Command-click (Mac) the path name in the Path palette.

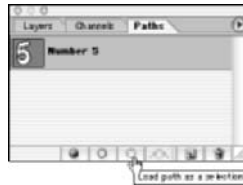
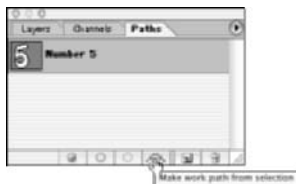


Figure 96-1: Selecting the Load Path As Selection button

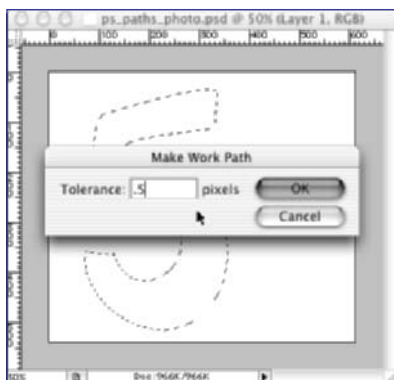
3. To transform a selection into a path, make your selection on a layer.

- At the bottom of the Paths palette, Alt-click (Windows) or Option-click (Mac) the Make Work Path From Selection button (see Figure 96-2) to open the Make Work Path dialog box. You can also select Make Work Path From Selection from the Paths palette's options menu (which you can access by clicking the small arrow icon in the upper right corner of the Paths palette).



**Figure 96-2:** Clicking the Make Work Path From Selection button

- Enter a value in the Tolerance text box of the Make Work Path dialog box (see Figure 96-3). This value can range from 0.5 to 10 pixels and controls how rigidly the selection will follow the curves in your path. The lower the value, the better the resulting selection resembles your selection.



**Figure 96-3:** The Make Work Path dialog box

## Task 96

### tip

- To add a path to an active selection, Ctrl+Shift-Click (Windows OS) or Command+Shift-Click (Mac) the path name.

### cross-reference

- For the lowdown on selections, see Part 5.

**Task 97**

## Duplicating, Saving, and Deleting Paths

**W**hen you first create a path, Photoshop assigns it as a work path. This is a temporary designation and you will lose your path if you don't save it. Given that you spent so much time creating a path, the very least you can do is save it in case you need to work on it later. The following steps explain how to save a work path, duplicate an existing path, or delete a path you no longer need.

**note**

- If you want to hide a path from your view, Shift-click the path you want to hide in the Paths palette. Shift-click the path again to have it pop back into view.

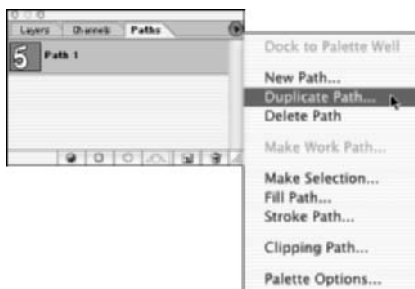
1. To save a work path, click-drag it and drop it on the New Path button at the bottom of the Paths palette (see Figure 97-1). Alternatively, you can also select Save Path from the Paths palette's options menu (which you can access by clicking the small arrow icon in the upper right corner of the Paths palette), or double-click the work path.



**Figure 97-1:** Saving a path for later use

2. Enter a descriptive name for the path when prompted and click OK.
3. To duplicate a path, select the path you want in the Paths palette.

5. Click-drag the path and drop it on the New Path icon at the bottom of the Paths palette to create a copy of the path in the Paths palette. Alternatively, you can also select Duplicate Path from the Paths palette's options menu (see Figure 97-2).
6. Enter a descriptive name for the duplicate path when prompted and click OK.



**Figure 97-2:** Selecting the Duplicate Path command from the Paths palette's options menu.

7. To delete a path, select the path you want in the Paths palette.
8. Click-drag the path and drop it on the Trash icon at the bottom of the Paths palette. You can also select the path in the Paths palette and then click the Trash icon, or select Delete Path from the Paths palette's options menu.
9. Click Yes when prompted whether you want to delete the path.

## Task 97

### *tip*

- Don't keep mystery names for your paths. Keep the names of your paths useful so you can identify them easily just by looking at the name — not just now, but maybe months down the road when you open the Photoshop file and need to know one path from another.

### *cross-reference*

- After you have saved your paths, you might want to use them in Adobe Illustrator. See Task 98 for details on how to export your paths to Adobe's vector-based imaging program.

## Task 98

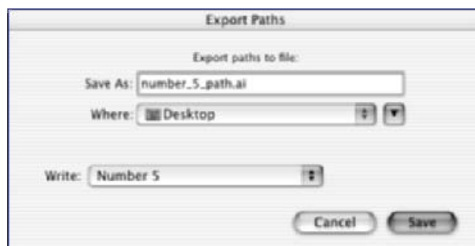
### note

- When you open a path in Illustrator, the crop marks that you see outline the Photoshop image dimensions. If you want to be able to bring the path back into Photoshop in its original location do not move the path or manipulate the crop marks.

## Exporting a Path to Adobe Illustrator

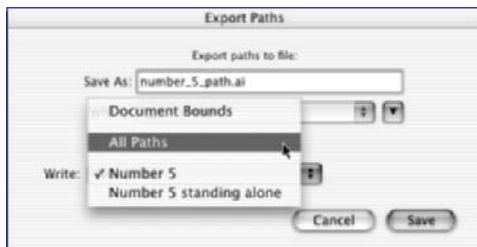
After you have created your paths, you might want to take them into Adobe Illustrator. Why? Illustrator has a robust digital imaging environment for working with vectors; and Photoshop, while it has been improved over the last versions, still doesn't hold a candle to Illustrator. And Illustrator's raster imaging, likewise, has been improved, but it's still no Photoshop. So, exporting paths from Photoshop and Illustrator and vice versa enables you to get the best of both worlds. The following steps tell you all you need to know to export a path to Illustrator.

1. To export a path to Illustrator, create and save a path or convert a selection to a path.
2. Select File ⇨ Export ⇨ Paths to Illustrator to open the Export Paths dialog box (see Figure 98-1).



**Figure 98-1:** The Export Paths dialog box

3. If you want to rename the path file rather than use the default file name provided by Photoshop, enter a new name in the File Name (Windows OS) text box or Save As (Mac OS) text box.
4. Select a location on your hard drive where you want to store the path file.
5. If you want to export all your paths, select All Paths from the Paths (Windows OS) or Write (Mac OS) drop-down list (see Figure 98-2).



**Figure 98-2:** Selecting All Paths in the Export Paths dialog box

6. To export a specific path, select the path you want from the Paths (Windows OS) or Write (Mac OS) drop-down list.
7. When you are done, click OK.
8. Launch Adobe Illustrator.
9. Select Choose ⇨ Open to display the Open dialog box.
10. Locate and select the path file you exported and click OK to import your Photoshop into Illustrator's digital imaging environment.

## Task 98

### tip

- When you first open your path in Illustrator, you won't be able to view it unless you select View ⇨ Outline, which enables you to see the paths in your document that don't have a stroke.

### cross-reference

- Don't forget the basics of working with paths. Task 91 explains how to select portions of a path.





## Part 7: Transformations

Task 99: Resizing and Resampling an Image Using the Image Size Command

Task 100: Increasing or Decreasing an Image's Canvas Area

Task 101: Flipping an Image Vertically or Horizontally

Task 102: Rotating an Image

Task 103: Eliminating an Unnecessary Image Area by Cropping

Task 104: Using the Trim Command to Crop Away Specified Outer Image Areas

Task 105: Scaling an Image or Image Area

Task 106: Skewing and Distorting an Image or Image Area One Corner at a Time

Task 107: Applying One-Point Perspective to an Image

Task 108: Working with Video Format Pixel Aspect Ratios

# Task 99

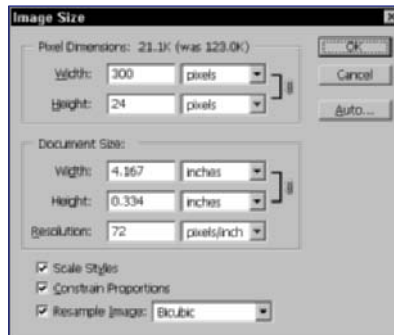
## Resizing and Resampling an Image Using the Image Size Command

### notes

- Pay close attention to the Pixel Dimensions text at the top of the dialog box. This line shows you what your file size will be after you apply the Image Size command, and it will provide a reference to the original size.
- While the standard for resolution is known as dpi, or “dots per inch,” Photoshop uses the computer-based standard “pixels per inch.” You can also choose to specify “pixels per centimeter” in the Image Size command’s Document Size settings.

To prepare your documents for various outputs, you need the ability to adjust the resolution and size of your image. However, a digital image is made up of a fixed number of pixels; the image has no additional pixel information to provide should you wish to increase its resolution and size. As such, Photoshop uses a process called “resampling” to take a best guess at what pixels to create upon scaling the image. As resampling can change the appearance of your file’s pixels, you can also choose to simply resize an image without resampling. To execute either of these methods, you can use the Image Size command.

- Open the document you wish to resample or resize.
- Choose Image ⇨ Image Size to reveal the Image Size command’s dialog box (as shown in Figure 99-1).



**Figure 99-1:** The Image Size command’s dialog box

- If you will be resampling, make sure the Constrain Proportions option is checked at the bottom of the dialog box to ensure that any changes to the width or height of the image are applied proportionally to the other axis.

### caution

- Remember, even though Photoshop allows you to specify resolution and dimensions larger than your original file, your file does not have the information it needs to provide a sharp, crisp picture at larger settings. Most often, you will need to rescan your original imagery into Photoshop at a higher resolution.

4. If you wish to resize *without* resampling, make sure the Resample Image option is *not checked* at the bottom of the dialog box to ensure that any changes you make will adjust the other values accordingly. If you *will* be resampling, choose a resampling setting. By default, Photoshop is set to Bicubic, which provides the best interpolation of pixels but is not as fast as other methods.
5. In the Document Size section, provide a new numerical value for the document's width. You can choose the unit of measurement you prefer from the field's associated drop-down menu.
6. Specify a new resolution, such as 72 pixels per inch for a Web-ready graphic.
7. If you have a particular line screen setting for which you need to adjust your file, press the Auto button to launch a wizardlike Auto Resolution tool (as shown in Figure 99-2). Otherwise, skip to Step 9.



Figure 99-2: The Auto Resolution dialog box

8. Specify a numerical value for your line screen in the Screen form field, choose a Quality setting, and press the OK button.
9. Press the OK button, and your document will either resize or resample according to your settings.

## Task 99

### tips

- You can use the Image Size dialog box to quickly convert between units of measurement. Simply enter a value in a width or height field, and then change the unit of measurement via the field's associated drop-down menu. Your original value will change accordingly.
- Hold the Option (Mac) or Alt (Windows) key while clicking the Cancel button to reset the values of the dialog box to their original state.

### cross-reference

- The Scale Styles checkbox, located in the Image Size dialog box, allows you to scale layer effects (such as Task 182's Satin effect) according to the resampling settings.

# Task 100

## Increasing or Decreasing an Image's Canvas Area

In many cases, you will need to quickly add to or subtract from the height and/or width of your document. Using the Canvas Size command, you can adjust the document's dimensions without affecting the image's resolution. Additionally, you can choose on which side of your document the additional area will be placed.

### notes

- The New Size area in the dialog box displays what your file size will be if you apply the Canvas Size command using the New Size dimensions you enter. As a reference, the original size appears at the top of the dialog box.
- If your document has a transparent background, the Canvas Size command won't let you choose a background color. Rather, the areas new to your document will continue to be transparent.

1. Open the document you wish to adjust.
2. Choose Image ⇨ Canvas Size to reveal the Canvas Size command's dialog box (as shown in Figure 100-1).



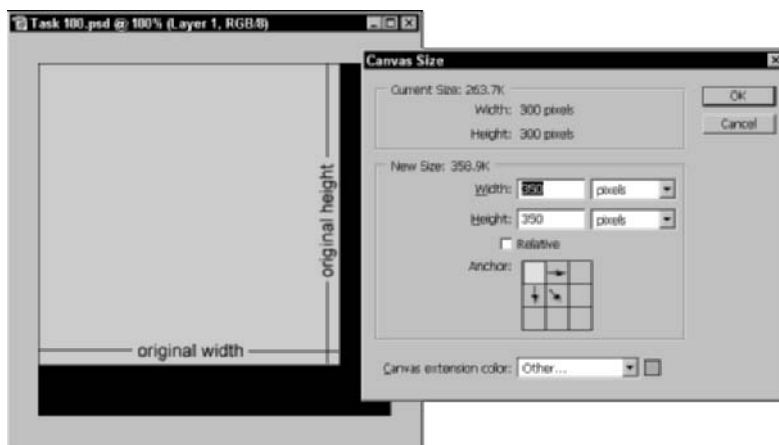
**Figure 100-1:** The Canvas Size command's dialog box

3. In the New Size section, provide a new numerical value for the document's width and/or height. You can choose what unit of measurement you prefer from each field's associated drop-down menu.
4. Specify the image's anchor point using the three-by-three button grid at the bottom to determine in which direction your image will grow or shrink. The darkened square indicates the location of your existing image, and the directional arrows around it signify whether the image will be cropped (inward-pointing arrows) or have space added outside its current dimensions (outward-pointing arrows).

### caution

- The Canvas Size command is similar to the Crop command. Reducing your Canvas Size will discard any information that is not within the document's view. As a courtesy, Photoshop will warn you (via a dialog box) that it will clip your image before it completes the command, allowing you to abort the process should you not mean to crop your document.

5. Check the Relative checkbox, directly above the anchor point grid, if you prefer to specify a number to add to or subtract from the width or height. Positive numbers will add to the dimensions, and negative numbers will subtract.
6. If you are increasing the size of your canvas and have a Background layer, choose Other from the Canvas Extension Color drop-down menu to launch a color picker (or simply choose one of the preset colors in the menu's list).
7. Choose from the resulting color picker a color that you wish to flood the newly added area of the Background layer, and press the color picker's OK button.
8. Press the Canvas Size command's OK button, and the new settings will take effect. Figure 100-2 shows an example of how the Canvas Size settings affect a document.



**Figure 100-2:** The Canvas Size command and its effects

## Task 100

### tips

- Hold the Option (Mac) or Alt (Windows) key down while clicking the Cancel button to reset the Canvas Size's settings to their original state upon opening the palette.
- In the Width and Height fields, press the up arrow to increase the value in increments of one. Likewise, press the down arrow to decrease the value in increments of one. Holding the Shift key while pressing either arrow will adjust the values in increments of ten.

### cross-reference

- Task 103 shows you how to crop your image in a more precise, specific fashion.

# Task 101

## notes

- The flip commands reflect artwork across their center points. If you flip an entire layer, the layer is flipped according to the layer's center point.
- To turn an object instead of flipping it, choose Edit ⇨ Transform and choose from any of the several rotation commands available.

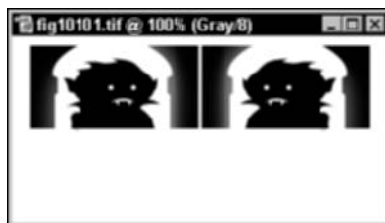
## caution

- Be careful not to inadvertently flip a layer with text on it, or your type will appear inverted.

## Flipping an Image Vertically or Horizontally

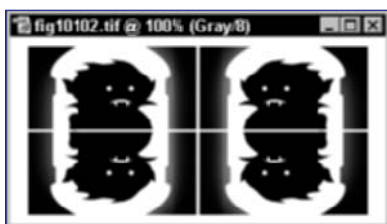
Flipping an image across a vertical or horizontal axis is one of the most basic image manipulation functions, and it is available in nearly every program that works with graphics. With the flip commands, you can quickly create the appearance of a reflection or a mirrored set, such as how a scrapbook's photograph corner brackets that hold a picture in place on the page all reflect each other across a center axis. The process for flipping an image is quite simple, and the task is quite handy for achieving such effects without a lot of extra work.

1. Open a layered document that you wish to adjust.
2. In the Layers palette, pick the layer with the content you wish to flip, and then select the specific content to be flipped within the document canvas.
3. Copy and paste this selection to create a duplicate image layer directly above the original artwork layer.
4. Choose Edit ⇨ Transform ⇨ Flip Horizontal to reflect your artwork across the vertical axis (as shown in Figure 101-1).



**Figure 101-1:** Artwork before and after using the Flip Horizontal command

5. Select the Move tool from the Tools palette and move the flipped artwork layer directly to the right of the original artwork layer, creating a mirrored image.
6. Using the Rectangular Marquee Selection tool, select across both pieces of artwork and choose Edit ⇨ Copy Merged to copy the contents of all layers within the selection, and then paste the results by choosing Edit ⇨ Paste.
7. Choose Edit ⇨ Transform ⇨ Flip Vertical to reflect your new artwork across the horizontal axis.
8. Again, select the Move tool from the Tools palette and move the flipped artwork layer directly below the other artwork layers, creating what appears to be a reflection (as shown in Figure 101-2).



**Figure 101-2:** The results of using the Flip Vertical command and the Move tool

## Task 101

### tips

- You don't have to duplicate the content you wish to flip. For instance, you can flip a photograph so that the subject is staring in the opposite direction.
- Choose Image ⇨ Rotate Canvas ⇨ Flip Canvas Horizontal to flip your entire document (and all its layers).

### cross-reference

- You can flip and mirror text, too. Task 208 explains how to perform a similar flip and mirror operation using the transform commands.



# Task 102

## Rotating an Image

**R**otation allows you turn an object according to a specific degree. Photoshop allows you to rotate an object by providing a specific degree and with the use of a transformation tool. By entering specific values, however, you can control the rotation in a much more precise manner.

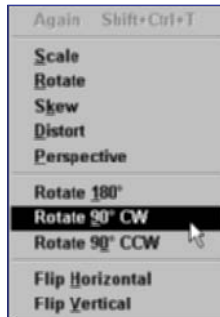
### notes

- Holding the Shift key while doing a manual rotation will constrain the transformation to 15-degree angles.
- To quickly rotate a selection, choose Free Transform from the contextual menu available upon a right-click (Windows) or Ctrl-click (Mac) within the document when a selection tool is active or by pressing Command+T (Mac) or Ctrl+T (Windows).

### caution

- Rotating an object several times separately can result in a loss of image quality. Try to rotate an object only once so that your images remain sharp and crisp.

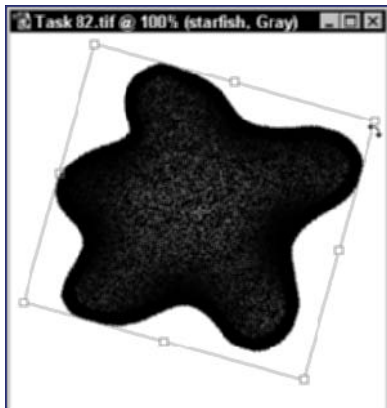
1. Open the document you wish to adjust.
2. Pick the layer with the content you wish to affect, or select the specific content to be modified.
3. Choose Edit ⇨ Transform ⇨ Rotate 90° CW (as shown in Figure 102-1) to rotate your selection 90° in a clockwise fashion. (CW is short for “clockwise,” and CCW is short for “counterclockwise.”)



**Figure 102-1:** The Rotate command options in the Edit menu

4. Choose Edit ⇨ Transform ⇨ Rotate to rotate your imagery by hand or through a numerical value. Not only will your cursor change to a curved line with an arrow at each end (signifying that a click and drag will initiate a rotate command), but your selection will be constrained by a transformation bounding box.

- Click one of the transformation bounding box's corner handles and drag in the direction of your desired rotation (as shown in Figure 102-2).



**Figure 102-2:** Clicking and dragging any of the bounding box handles initiates manual rotation.

- Enter a numerical value in the Options palette's Rotate field (seen in Figure 102-3) to further specify the rotation.



**Figure 102-3:** The Rotate field (circled) allows for precision angle entry.

- Click the Commit button on the Options bar or double-click on your artwork to confirm and execute the rotation.

## Task 102

### tips

- Choose Image ⇨ Rotate Canvas ⇨ Arbitrary to designate an angle to rotate your entire document (and all its layers). The Canvas Size of your document will be enlarged to accommodate all the content at a new angle.
- Click various points of the nine-point diagram in the Options bar to quickly set the artwork's transformation center point, allowing for rotations around a point other than the center of the artwork.

### cross-reference

- Create an action to automatically rotate any content on the active layer using skills explained in Task 231.

**Task 103**

## Eliminating an Unnecessary Image Area by Cropping

Great images often owe their strength to intelligent cropping. Rather than show the entire picture, a good editor will often focus an image by discarding parts that distract from the picture's essence. To give you the means of accomplishing this, Photoshop provides the Crop tool. As straightforward as this tool seems, its usefulness lies in its subtle features.

1. Open the document you wish to adjust.
2. Select the Crop tool from the third row and first column of the Tools palette (see Figure 103-1).



**Figure 103-1:** The Crop tool in the Tools palette

3. Move your mouse cursor to the point where you would like your crop to begin. Click and hold your mouse button there.

### notes

- Press the Front Image button in the tool's Options bar to populate the Width, Height, and Resolution settings with the values of the active document.
- Specify the width, height, and resolution in the tool's Options bar to have the results of the crop conform to a specific standard.

### caution

- If the Crop tool's Options bar is set to Delete (as opposed to Hide), any content outside of the crop will be discarded. Be sure to save a copy of your original file before executing the final crop.

4. While continuing to hold the mouse button down, drag your cursor to the opposite corner of your intended crop.
5. Release the mouse when your crop selection is complete. Upon doing so, everything outside of your crop will be tinted with a dark gray to show what content will be discarded (as shown in Figure 103-2) as long as the Shield setting is checked in the Options bar.



**Figure 103-2:** Using the Crop tool

6. Move your mouse over one of the corners of the crop marquee. When your cursor is placed over one of the handles, the icon will change to a straight line with an arrow at each end, indicating that a click and drag will scale the marquee.
7. Move your cursor roughly 10–20 pixels to the outside of the crop marquee. Your cursor will change to a curved line with an arrow at each end, indicating that a click and drag will rotate the marquee.
8. After applying any necessary transformation, click the Options bar's Commit button (seen as the checkmark button at the right of the bar, as shown in Figure 103-3) or double-click on your artwork to confirm and execute the crop.



**Figure 103-3:** The Crop tool's Options bar

## Task 103

### tips

- If you are looking to make a quick crop based on the corners, edges, or center of your document, you could use the Canvas Size command instead.
- Check the Option bar's Perspective setting to individually distort each corner of the Crop tool's marquee.

### cross-reference

- Task 83 shows how to make a crop from an irregular selection.

**Task 104**

## Using the Trim Command to Crop Away Specified Outer Image Areas

### notes

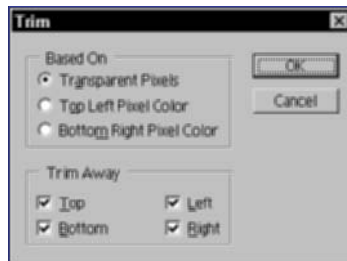
- As the Trim command is based on the computer's ability to detect pixel color or transparency, you may wish to turn off layer visibility of any content irrelevant to your document before running the command. Otherwise, the software may include tiny, immaterial content in its crop.
- You can have as few as one directional item selected in the Trim Away section. Unchecking all items will result in a command that produces no results.

### caution

- If your document is already closely cropped to the artwork, you may not notice any difference between the original and the revised file.

The Crop tool allows you to select manually the area to crop and choose specifically what area of the document to keep for the final result. The Trim command, on the other hand, is used to automatically shave off areas from the top, bottom, left, and/or right of your document based upon one of three possible criteria: the color of the top left pixel, the color of the bottom right pixel, or transparency. For example, if you had a document with a vase sitting on a solid red field, choosing Top Left Pixel Color from the Trim command would result in a document tightly cropped to the non-red artwork (i.e., the vase). This process produces a cropped image very quickly and eliminates the need to select the cropping area manually.

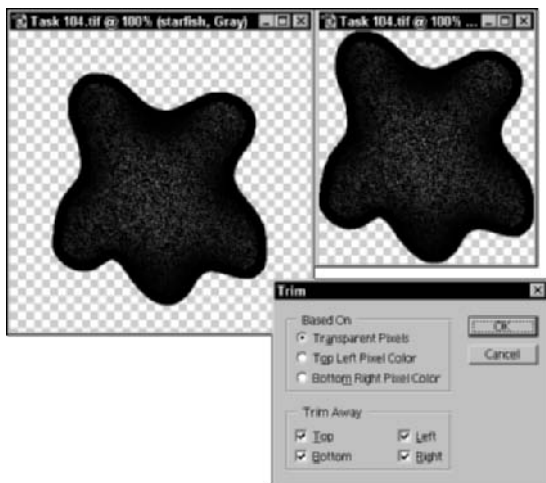
1. Open the document you wish to adjust.
2. Choose Image ⇄ Trim to launch the Trim command's dialog box (shown in Figure 104-1).



**Figure 104-1:** The Trim command's dialog box

3. Select which criterion (Top Left Pixel Color, Bottom Right Pixel Color, or Transparency) will be used to determine what parts of your document to trim away. Make this selection based upon the color or transparency of a contiguous area (i.e. a solid color field) that you wish to discard.

4. Using the checkboxes in the Trim Away section, check which sides of your document you wish to trim. Any item left unchecked will not be cropped during the operation.
5. Press the OK button to see the results. (Figure 104-2 shows the original file, the settings, and the resulting file.)



**Figure 104-2:** Using the Trim tool

6. Review the final trim to ensure that your document was cropped as you intended. If not, choose **Edit** ⇨ **Undo** to restore the document to its pre-Trim state and try different Trim command settings to ensure your expected Trim. Keep in mind that Photoshop will trim away a solid color or transparency according to one of the three criteria only; if your document contains a variety of colors across its background (instead of a solid color/transparency), the Trim command will shave away only the solid areas at the outmost edges of the document from its chosen directions.

## Task 104

### tips

- If you are looking to make a quick crop based on the corners, edges, or center of your document, you could use the Canvas Size command instead.
- Assign the Trim command to a keystroke combination for quicker access. Use the Keyboard Shortcuts command (**Edit** ⇨ **Keyboard Shortcuts**).

### cross-reference

- Task 69 shows how to create and use rectangular marquee selections that can be used to crop a specific area.

# Task 105

## Scaling an Image or Image Area

**T**hrough scaling, you can enlarge, decrease, and/or distort your image. The Scale command allows you to scale your entire image (or just a portion of it) by providing specific percentages or by using a transformation tool. Whereas specific percentages allow for a precise transformation, the Transformation command's manipulation handles provide for flexible distortion.

### notes

- To quickly scale a selection, choose Free Transform from the contextual menu available upon a Ctrl+click/right-click within the document when a selection tool is active or by pressing Command+T (Mac) or Ctrl+T (Windows).
- You can hold the Option (Mac) or Alt (Windows) key while scaling an item to scale in all directions from the center, rather than from a corner or side.

1. Pick the layer with the content you wish to affect, or select the specific content to be modified.
2. Choose Edit ⇨ Transform ⇨ Scale to activate the bounding box along the edges of the content (as shown in Figure 105-1).

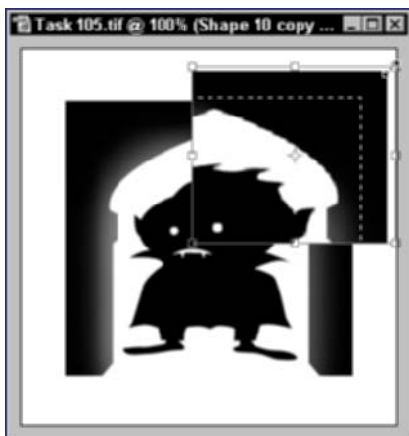


**Figure 105-1:** The Scale command's bounding box

3. Place your cursor over one of the bounding box corner handles. Your cursor will change to a line with a small arrow at each end, indicating that a click and drag will manipulate the bounding box.
4. Click and move your cursor as you wish. As you move the cursor outward from the object, the object is scaled larger (as shown in Figure 105-2).
5. Place your cursor over one of the bounding box handles in the middle of one of the sides.

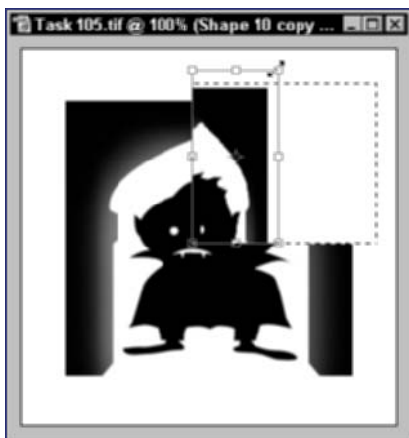
### caution

- When you reduce your images and confirm the transformation, you will no longer be able to return your images to their original sizes without losing image quality once the file has been saved and closed.



**Figure 105-2:** Scaling content with the Scale command

6. Click and pull your cursor inward from the object's original edge. As you move the cursor, the object will appear to be squeezed (as shown in Figure 105-3).



**Figure 105-3:** Squeezing content with the Scale command

7. Click the Commit button in the Options bar, press the Return key, or double-click within the bounding box to finish your transformation. Once you have finished, the bounding box will disappear and your selection will appear according its new dimensions.

## Task 105

### *tips*

- Pressing the arrow keys while the bounding box is active will move the content in increments of one pixel in the chosen direction. Holding the Shift key while pressing an arrow key will move the content in increments of ten pixels.
- Hold the Shift key to maintain your object's width and height ratio as you apply the Scale command.
- Use the Options bar when working with the Scale command to apply specific transformation values, such as scaling only the width and not the height.

### *cross-reference*

- Task 98 shows you how to scale your entire document to a new size and resolution.



# Task 106

## Skewing and Distorting an Image or Image Area One Corner at a Time

### notes

- To quickly distort or skew a selection, choose Free Transform from the contextual menu available upon a Right-click (Windows) or Ctrl-click (Mac) within the document or by pressing Command+T (Mac) or Ctrl+T (Windows). Follow this by holding the Command/Ctrl key while dragging one of the bounding box's corner points.
- Press the Commit button, shown as a checkmark icon, in the Options bar to confirm and finish a transformation.

### caution

- Distorting an object so that elements of the artwork are stretched outward will produce a pixilated result because of the lack of pixel information available in any file to scale upward.

As you will rarely encounter in the physical world objects that are perfect, your toolset needs to allow for minute distortions that can disrupt otherwise precise edges and shapes. Using the Skew and Distort commands, you can alter the edges and angles of your objects by adjusting the Transformation tool's bounding box handles on each corner. By adjusting each corner individually, you can produce results that do not have the perfect symmetry that a Scale or Rotate command would generate.

1. Pick the layer with the content you wish to affect or select the specific content to be modified.
2. Choose Edit ⇨ Transform ⇨ Distort to activate the transformation bounding box along the edges of the content (as shown in Figure 106-1).



**Figure 106-1:** The Distort command's bounding box

3. Place your cursor over one of the transformation bounding box corners. Your cursor will change to a miniature grayscale arrow, indicating that a click and drag will initiate a distort transformation.
4. Click and drag your cursor according to the amount of distortion you wish to apply. As you move the cursor, the two adjoining sides of the object are pulled to meet at the point of your cursor (as shown in Figure 106-2).
5. Choose Edit ⇨ Transform ⇨ Skew to activate the Skew command.
6. Place your cursor over one of the bounding box handles in the middle of one of the sides. Your cursor will change to a miniature line with a little arrow at each end, indicating that a click and drag will initiate a skew transformation.



**Figure 106-2:** Pulling content with the Distort command

7. Click and drag your cursor according to the amount of skew you wish to apply. As you move the cursor, the two sides of the object originally perpendicular to the side you are moving are stretched to stay connected to your moving line (as shown in Figure 106-3).



**Figure 106-3:** Slanting content with the Skew command

8. Click the Commit button in the Options bar, press the Return key, or double-click within the bounding box to finish your transformation. Once you have finished, the bounding box will disappear and your selection will appear according to its new dimensions.

## Task 106

### *tips*

- Hold the Option (Mac) or Alt (Windows) key while dragging a bounding box handle to reflect the movement across the object's center axis.
- Use the Options bar to further specify your transformation modifications.

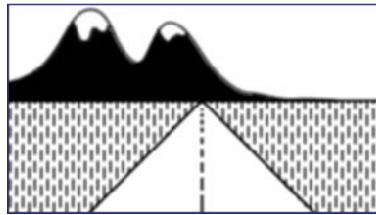
### *cross-reference*

- You can also distort your images using bizarre filter effects such as the Liquify command described in Task 212.

# Task 107

## Applying One-Point Perspective to an Image

One of the first tricks drawing students learn is how to work with one-point perspective to handle how an object's edges, such as the highway shown in Figure 107-1, taper together as they recede in the distance.



**Figure 107-1:** An example of one-point perspective

Photoshop allows you to replicate this perception by using the Perspective command. By bringing two corner points close together via the Transformation tool's manipulation handles, you can distort your image so that it diminishes toward a vanishing point.

1. Pick the layer with the content you wish to affect or select the specific content to be modified.
2. Choose **Edit ⇨ Transform ⇨ Perspective** to activate the transformation bounding box along the edges of the content (as shown in Figure 107-2).
3. Place your cursor over one of the bounding box handles. Your cursor will change to a miniature grayscale arrow, indicating that a click and drag will initiate a perspective transformation.
4. Click and drag your cursor toward one of the other corners along the same edge.
5. As you move the cursor, you will create a one-point perspective in the direction of the side you are manipulating (as shown in Figure 107-3). Release the mouse once you have dragged one of the bounding box's corners close to another.

### notes

- To quickly apply perspective to a selection, choose **Free Transform** from the contextual menu available upon a right-click (Windows) or **Ctrl-click** (Mac) within the document or by pressing **Command+T** (Mac) or **Ctrl+T** (Windows). Continue holding **Command+Option+Shift** (Mac) or **Ctrl+Alt+Shift** (Windows) while dragging a bounding box corner point.
- Clicking your artwork while the bounding box is active and dragging it allows you to quickly move the artwork without first executing the perspective.

### caution

- Applying a perspective transformation will only taper your artwork toward a single point. It will not apply environmental effects to give your artwork the illusion of distance and space.



**Figure 107-2:** The Perspective command's bounding box



**Figure 107-3:** Creating perspective with the Perspective command

6. Click the Commit button in the Options bar, press the Return key, or double-click within the bounding box to finish your transformation. Once you have finished, the bounding box will disappear and your selection will now appear according to its new perspective.

## Task 107

### *tips*

- Drag one of the middle points on the bounding box to skew your artwork in the direction of the mouse movement.
- Use the Options bar to further specify your transformation modifications.

### *cross-reference*

- Task 27 shows you how to use precise grids from which one-, two-, and three-point perspectives can quickly be developed.

# Task 108

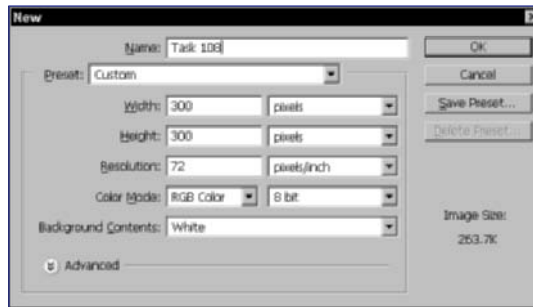
## Working with Video Format Pixel Aspect Ratios

### notes

- You can create your own Pixel Aspect Ratio. Choose Image ⇨ Pixel Aspect Ratio ⇨ Custom Pixel Aspect Ratio. Provide a name for the new setting and enter a numerical value for the pixel width ratio. Once you press the OK button, your new entry will always be available in the Pixel Aspect Ratio menu.
- North American video screens use the NTSC video format, whereas those in Europe use the PAL format.

Interactive designers have recently added a new medium to their capabilities beyond Web site design: television and video screens. Because of the relatively low cost of DVD burners and the proliferation of DVD players, interactive designers are finding new outlets for their design skills. However, video screens and computer monitors display pixels in very different fashions. For instance, a video screen's pixels are wider than a computer monitor's square pixels. Thus, to help you see how your imagery will appear on a video screen, Photoshop CS provides you with a means to change your document's display to match your desired output via the Pixel Aspect Ratio menu.

1. Choose File ⇨ New to create a new 3" × 3", 72-dpi, RGB document, as shown in Figure 108-1.



**Figure 108-1:** Using the New command to create a square document

2. Select the Rectangle tool from the ninth row and second column of the Tools palette and specify Fill Pixels from the tool's Options bar.
3. While holding the Shift key to constrain the width and height to equal distances, draw a square.

### caution

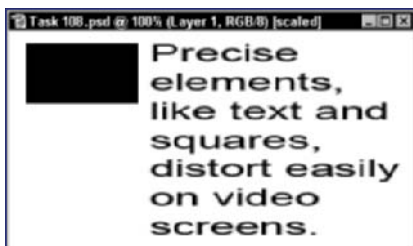
- Adjusting the Pixel Aspect Ratio of a square-pixel document affects only its onscreen display; printing the document will produce its original square-pixel ratio appearance.

4. Select the Text tool from the eighth row and second column of the Tools palette.
5. Enter several lines of large, 48-point, anti-aliased text in your document, resulting in a document appearing similar to Figure 108-2.



**Figure 108-2:** A sample document before Pixel Aspect Ratio distortion

6. Choose Image ⇨ Pixel Aspect Ratio ⇨ D1/DV NTSC Widescreen (1.2) (or any other ratio you need to test) to distort your document as it would appear in widescreen format within North America (which uses the NTSC video standard). You will immediately note that the document appears to be stretched wider, as shown in Figure 108-3.



**Figure 108-3:** A sample document stretched by Pixel Aspect Ratio distortion

7. To return your document's display to its original settings, choose Image ⇨ Pixel Aspect Ratio ⇨ Square.

## Task 108

### *tips*

- When creating a new document, you can choose one of the video formats with stretched pixels from the Presets drop-down menu. Your new document will conform to the size and aspect ratio of the selected medium.
- When designing for television screen display, be sure to use relatively large type — nothing below 14-point — as these screens often use 36-dpi screens (effectively halving the resolution of your 72-dpi computer screen). This lower resolution makes reading small text virtually impossible.

### *cross-reference*

- Task 10 helps you understand what information you will need to create a new document.



## Part 8: Painting Essentials

- Task 109: Using the Brush Preset Picker to Choose and Load Brush Tips
- Task 110: Painting and Drawing with the Brush and Pencil Tools
- Task 111: Using the Color Replacement Tool
- Task 112: Using a Brush Blend Mode to Repair Red-Eye
- Task 113: Erasing a Portion of an Image or Layer with the Eraser Tool
- Task 114: Controlling Boundaries While Erasing with the Background Eraser Tool
- Task 115: Using the Magic Eraser Tool to Erase an Area Based on a Range of Colors
- Task 116: Filling Areas with Solid Colors or Patterns Using the Paint Bucket Tool
- Task 117: Adding Softness to a Chosen Image Area with the Blur Tool
- Task 118: Increasing the Clarity of an Area with the Sharpen Tool
- Task 119: Simulating a Fingerpainted Look Using the Smudge Tool
- Task 120: Highlighting an Image Area with the Dodge Tool
- Task 121: Applying the Burn Tool to Create Shading Effects in an Image
- Task 122: Changing Color Saturation with the Sponge Tool Options
- Task 123: Performing Digital Plastic Surgery with the Healing Brush
- Task 124: Using the Healing Brush Pattern Option
- Task 125: Repairing a Selected Area with the Patch Tool
- Task 126: Transferring Part of an Image to Another Image with the Clone Stamp Tool
- Task 127: Painting with a Pattern by Means of the Pattern Stamp Tool



# Task 109

## Using the Brush Preset Picker to Choose and Load Brush Tips

Photoshop comes chock full of paintbrush possibilities. Whether you are looking for a smooth, tubelike appearance; a chalky, speckled texture; or a star-patterned effect, the application's factory-standard brushes can help you quickly apply the effect you are trying to achieve. The provided brushes in the preset picker come at set sizes (such as 24px), but you can adjust the size of a particular brush with considerable ease after selecting it.

### notes

- Additional brushes are available for download. Check this book's Web site ([www.wiley.com/comp-books/10simplestepsorless](http://www.wiley.com/comp-books/10simplestepsorless)) to find links to many popular brush add-ons.
- Inside Photoshop's Brushes folder is an Adobe Photoshop Only folder, which contains brush sets that will be available within Photoshop only, not ImageReady.

1. Choose the Brush tool from the fourth row and second column of the Tools palette.
2. Click the Brush Preset picker button within the Options bar.
3. Scroll through the listing of brushes available for you to use, as shown in Figure 109-1.



**Figure 109-1:** The Brush selection menu

4. Click on one of the brushes in the list to select it. The brush you choose will now appear in the brush size indicator in the Options bar along with its default size.

### caution

- Adjust size settings after you choose a brush, as custom size settings are overruled upon brush selection.

5. Adjust the diameter of your brush size using the Master Diameter sliding scale or by entering a pixel value (such as 12px). As you change the brush's diameter, the brush size indicator will update to show the new size.
6. Choose Load Brushes from the fly-out menu to add additional brush shapes to your selection options (shown in Figure 109-2).



**Figure 109-2:** Loading additional brushes into your palette

7. Navigate to your Photoshop Brushes folder (Adobe Photoshop CS/Presets/Brushes/), select the .abr (Photoshop's brush file format) file of your choosing, and press the Load button.
8. Scroll down the brush listing to find your new brushes, click on the brush of your choice, and adjust the brush's size to your liking.
9. Click on the Brush Preset picker to close the selection menu, and proceed to use your new brush settings within your document.

## Task 109

### tips

- Press the Use Sample Size button to return the selected brush's size to its default setting.
- You can save your custom brush settings by pressing the small note icon in the Brush presets palette.

### cross-reference

- Task 141 shows you how to create a custom brush from a sample of your artwork.

**Task 110**

## Painting and Drawing with the Brush and Pencil Tools

**R**ather than beginning on a canvas or the paper pad, many artists now start their creations in a Photoshop document. Because of the versatility of its painting tools, Photoshop has become a trusted tool in a large number of artists' creative arsenals. Using nothing but the brush tool, you can create rich, complex paintings exclusively in Photoshop.

### notes

- You may find that your process goes faster if you scan a sketch of your desired artwork to use as a guide before you begin painting in Photoshop.
- Use Photoshop's Natural Brushes (stored in Adobe Photoshop CS/Presets/Brushes) to achieve more natural effects.

1. Create a new Photoshop document.
2. To paint, choose the Brush tool from the fourth row and second column of the Tools palette (shown in Figure 110-1). To draw, choose the Pencil tool from the fourth row and second column of the Tools palette. (Click and hold the Brush tool's icon until a small menu is displayed, move your cursor onto the Pencil tool icon, and release your mouse button.)



**Figure 110-1:** The Brush tool

### caution

- If your brush stroke exceeds the Canvas Size, the stroke information falling outside of the document will not be recorded.

3. Select the brush tip and size from the Brush Preset picker (covered in Task 109). Please keep in mind: Brush edges will be anti-aliased, whereas Pencil edges will be sharp and aliased.
4. Pick a foreground color to specify which color your brush will apply.
5. Adjust the Flow setting (as shown in Figure 110-2), using a percentage such as 84%, to determine how much paint comes out with each stroke.



**Figure 110-2:** Adjusting the Flow setting

6. If you are using the Brush tool and you wish to achieve softer edges, select the Airbrush setting in the Options bar.
7. Click and hold the mouse to begin a paint stroke.
8. Drag the mouse to define the stroke's direction.
9. Release the mouse button when your stroke is complete. (The result of a continuous 25-pixel-diameter thick pencil stroke is shown in Figure 110-3.)



**Figure 110-3:** Drawing with the Pencil tool

10. Repeat these steps, adjusting your brush shape, size, color, and flow until you achieve your desired artwork.

## Task 110

### tips

- Adjust the opacity of your brush in the Options bar to create a soft, transparent effect.
- Press the B key to switch from your current tool to the most recently used Brush tool.
- Paint each type of stroke on a different layer to keep your artwork editable.

### cross-reference

- Use another document as a base layer for your painting. Task 15 shows you how to import a PDF document.

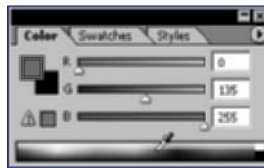
# Task 111

## Using the Color Replacement Tool

**H**ow many times have you been faced with having to change the color of an object in your photographs or imagery? If you work commercially, the reality is probably a staggering amount. Rather than adjusting your Brush or Pencil tool's Painting Mode setting and painting very, very carefully, you can use Photoshop CS's new Color Replacement tool to simplify the process of applying a new color wash across your existing artwork. By changing the color of the pixels directly under the brush while providing several options to determine which colors are affected, the tool expedites the color replacement process.

You can replace a color (or series of colors) in your document as follows:

1. Open an existing document with a color photograph or image.
2. Choose the Color Replacement tool from the fourth row and first column of the Tools palette. (Click and hold the Brush tool's icon until a small menu is displayed, move your cursor onto the Color Replacement tool icon, and release your mouse button.)
3. Select the foreground color to be used by the tool when replacing other colors by picking a color value from the Color palette, as shown in Figure 111-1.



**Figure 111-1:** Picking a foreground color

4. Using the Brush Preset picker in the Options bar, set the brush size and hardness so that the brush will have a soft edge to smooth the intersections between the tool's work and the document's original colors.
5. Adjust the Tolerance setting in the Options bar, using a percentage such as 50 percent, to determine what colors similar to those directly under the tool's mouse cursor will be altered.

### notes

- Right-clicking (Windows) or Ctrl-clicking (Mac) within your document will pop up a Brush Preset picker menu, allowing you to quickly set the dimensions, softness, spacing, angle, and more attributes of the brush to use when painting with this tool.
- If you are using this tool to precisely alter pixel colors with no effect on surrounding pixels, you'll want to be sure to uncheck the Anti-aliased setting.

### caution

- As you paint over an area with the Color Replacement tool several times, the tool will deplete the original diversity of pixel colors as it tries to replace all the pixels with the Foreground Color. Because of this, the image can begin to look flat, depending on how much you paint and the amount of color diversity originally there.

6. Choose how the tool will determine which colors to alter by selecting a setting, such as Once, from the tool's Options bar's Sampling drop-down menu. The Continuous setting will affect any color that is under the cursor's cross-hair, Once will affect only those colors similar to the color under the cursor when you click and hold, and Background Swatch will affect those colors similar to the Background Color.
7. Determine the boundaries of the tool's effect by choosing a setting, such as Find Edges, from the Limits drop-down menu, also in the Options bar. The Contiguous setting will affect all neighboring pixels with colors similar to the sample color, Discontiguous will affect all pixels with colors similar to the sample color, and Find Edges will affect all pixels with colors similar to the sample color while not affecting colors that are in contrast to the sample.
8. Make sure the Options bar's Anti-aliased setting is checked to ensure smooth, anti-aliased edges wherever you paint with this tool.
9. Click and drag within your document to replace the color of the pixels beneath the cursor, resulting in a document similar to Figure 111-2.



**Figure 111-2:** The Color Replacement tool's results (the dark area on the right side of the image)

## Task 111

### *tips*

- Press Shift+J to cycle between the Color Replacement tool, the Healing Brush tool, and the Patch tool. Press the J key to switch from another tool to the most recently used of these tools.
- You can quickly set the Foreground Color with the Color Replacement tool selected by holding the Option (Mac) or Alt (Windows) key and clicking within your document on the color of your choice.
- Use a very low tolerance setting if your document has large expanses of very subtle color changes and you wish to affect only a small portion of the colors.

### *cross-reference*

- Task 112 details how to change the Brush Blend Mode to achieve somewhat similar effects, with less control, with the Brush and Pencil tools.

# Task 112

## Using a Brush Blend Mode to Repair Red-Eye

**B**efore there was Photoshop, disgruntled casual photographers would gripe about the awful red-eye effect plaguing their otherwise perfect snapshots. Often appearing over the retina of a photo's subject, the effect makes the person's (or animal's) eyes look blood-filled and subsequently somewhat evil. With some clever brushwork and blending options, however, you can make short work of this common affliction.

### notes

- To change the Painting Mode while within the Canvas area using a contextual menu, right-click (Windows) or Ctrl-click (Mac).
- Visit this book's Web site ([www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless)) to find links to third-party products that can adjust red-eye automatically.

1. Open a photograph or image needing red-eye adjustment.
2. Choose the Brush tool from the fourth row and second column of the Tools palette.
3. Select Overlay from the Painting Mode drop-down menu in the Brush's Options bar (shown in Figure 112-1).

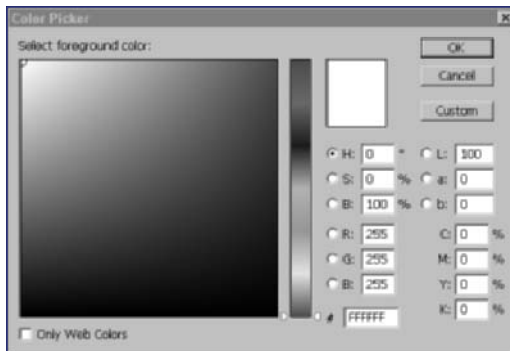


**Figure 112-1:** The Painting Mode menu

4. Using the Brush Preset picker, choose a brush with a precise, sharp edge, and adjust the brush's size to be equal to or smaller than the subject's eye.
5. Using the Foreground Color Picker (as shown in Figure 112-2) or Eyedropper tool, change the foreground color to match the original color of the subject's eyes. Keep in mind that you can apply a different eye color altogether if you'd like by choosing a different foreground color.

### caution

- Be careful to use a small, sharp brush when applying this technique so that the color does not adversely affect surrounding areas.



**Figure 112-2:** The Foreground Color Picker

6. With the Brush tool still selected, click the subject's eye in the image to apply a dab of paint, using your Overlay settings, to the retina.
7. Check the results of the paint application to ensure that the eye color appears natural. (If it doesn't, go back to Step 4.)
8. Adjust your brush settings, such as opacity, size, and Painting Mode, to achieve a more realistic effect. Figure 112-3 shows the results of a touchup on one eye but not the other.



**Figure 112-3:** Red-eye cleanup on the left eye

9. Repeat these steps to alter the appearance of the other eye(s) in the photograph, thus creating a more realistic image.

## Task 112

### *tips*

- Paint your red-eye adjustment on a new layer and set the Overlay Mode in the Layers palette (instead of within your Brush) to allow easy editing at a later time.
- Zoom in on your subject before you begin painting to ensure a detailed view of what you will be adjusting.

### *cross-reference*

- Use the Selective Color command, explained in Task 60, to adjust all instances of a particular color.



**Task 113**

## Erasing a Portion of an Image or Layer with the Eraser Tool

Beyond the comforts of the Undo command and the History palette, Photoshop allows you to use the Eraser tool to eliminate selective parts of your document. With different modes available, the Eraser can “undraw” areas of your content in a fashion similar to both the Paintbrush and Pencil tools.

### notes

- To produce an Eraser Mode contextual menu, right-click (Windows) or Ctrl-click (Mac) within your image window.
- Holding Option (Mac) or Alt (Windows) while erasing will change the Eraser tool to the Erase To History tool.

1. Choose the Eraser tool from the sixth row and first column of the Tools palette (as shown in Figure 113-1).



**Figure 113-1:** The Eraser tool

### caution

- Erasing parts of your document will remove information permanently. If you are unsure as to whether you may need a part of your document at a later time, consider using a Layer Mask instead of erasing the content.

2. Click the Brush Preset picker button within the Options bar.
3. Scroll through the listing of available brushes.
4. Click one of the brushes in the list to select it. The brush you choose will now appear in the Brush Preset picker button at its default size.
5. Adjust the diameter of your brush size using the Master Diameter sliding scale or by entering a pixel value (such as 10px). As you change the brush's diameter, the Brush selector button will update to show the new size.
6. Click on the Brush Preset picker button to close the selection menu and apply the new brush settings to your Eraser tool.
7. Choose the type of Eraser mode you wish to use via the Erasing Mode drop-down menu in the tool's Options bar. (The different results are shown in Figure 113-2).



**Figure 113-2:** The Erasing Mode menu's results

8. Click and hold the mouse button over the artwork you wish to erase.
9. Drag the mouse to continue the Eraser stroke. Using the Eraser tool on the Background layer will result in erasing to the background color chosen in the Tools palette, while erasing on any higher layer will erase to transparency.
10. Release the mouse button when your stroke is complete.

## Task 113

### tips

- Press the E key to switch from any other tool to the Eraser tool.
- Check the Erase to History setting in the Options bar to erase any changes to your document made after a specified point in your History palette.

### cross-reference

- To get more options in painting history, see Task 131, which shows how to use the History brush.

# Task 114

## Controlling Boundaries While Erasing with the Background Eraser Tool

### notes

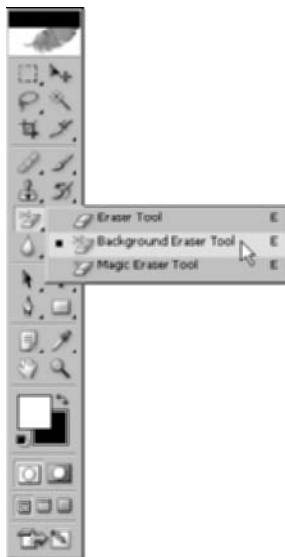
- Right-clicking (Windows) or Ctrl-clicking (Mac) in your artwork area will produce a pop-up Brush Preset picker menu.
- The lower the Tolerance setting, the fewer the colors to be removed during an erasure.

### caution

- This tool provides its best results when used slowly and methodically. Quick mouse movements while using this tool will result in continuous sampling, thus resulting in continuous erasure.

The Background Eraser tool is helpful when you need to remove particular areas of your artwork without destroying the edges of it. Using the tool, you can select what colors it deletes. By deleting the color at the direct center of the brush (and its subsequent companion pixels), the tool is able to combine the functions of several tools simultaneously. With careful mouse strokes, you can delete an object on the same layer as its surroundings without destroying its original adjoining boundaries.

1. Choose the Background Eraser tool from the sixth row and first column of the Tools palette. (Click and hold the Eraser tool's icon until a small menu is displayed — as shown in Figure 114-1 — move your cursor on the Background Eraser tool icon, and release your mouse button.)



**Figure 114-1:** The Background Eraser tool

2. Click the Brush Preset picker button within the Options bar.

3. Adjust the settings to create a brush of the appropriate size and functionality for your artwork. (Make sure that the brush is not bigger than the area you wish to touch up.)
4. In the tool's Options bar, specify its Limits setting (shown in Figure 114-2): whether the Background Eraser erases all like colors within its brush area (Discontiguous), erases all like, connected colors (Contiguous), or erases all like, connected colors while retaining better edge information (Find Edges).



**Figure 114-2:** The Limits setting

5. Specify how rigidly the brush must adhere to the color at the center of the brush by modifying the Tolerance field in the Options bar.
6. In the tool's Options bar, specify its Sampling setting (shown in Figure 114-3): whether it deletes only the color specified upon the initial click of the mouse (Once), deletes the color specified at any given point during the tool's use (Continuous), or deletes only the color specified in the Background Color (Background Swatch).



**Figure 114-3:** The Sampling setting

7. Click the mouse button on the specific colored pixel you wish to erase.
8. Continue to repeat Step 7, occasionally dragging the cursor slowly before releasing the mouse click, to eliminate specific parts of your document without destroying the object's various internal and external edges.

## Task 114

### tips

- Press the E key to switch your currently selected tool to the most recently selected eraser tool (usually the standard Eraser tool). Pressing Shift+E again will cycle among the Eraser tool, the Background Eraser tool, and the Magic Eraser tool.
- Check the Protect Foreground Color setting in the Options bar to prevent the erasure of the foreground color at any time while using this tool.

### cross-reference

- Quick Masking, shown in Task 146, allows you to modify only a selected area of your document.

# Task 115

## Using the Magic Eraser Tool to Erase an Area Based on a Range of Colors

In many cases, you will find that you may need to erase every instance of a particular color in your document. The Magic Eraser tool works in a similar fashion to the Magic Wand tool. The tool allows you, by clicking on a color, to delete every instance of the color (or just those adjoining the pixel you selected). It may not use magic to accomplish its task, but the Magic Eraser tool can save you a considerable amount of time cleaning up your document.

### notes

- The Tolerance range can be anywhere between 0 and 255.
- Holding Option (Mac) or Alt (Windows) while using the Magic Eraser tool will switch to the Color Sampler tool.

1. Choose the Magic Eraser tool from the sixth row and first column of the Tools palette. (Click and hold the Eraser tool's icon until a small menu is displayed — as shown in Figure 115-1 — move your cursor on the Magic Eraser tool icon, and release your mouse button.)

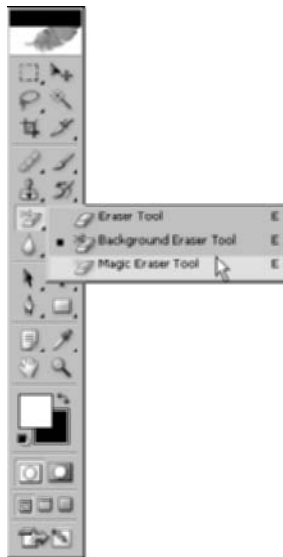


Figure 115-1: The Magic Eraser tool

### caution

- Even if you have the Use All Layers setting checked, only pixels of the specified color on the current layer will be deleted. This option refers to the selection of pixels, not the deletion.

2. Specify a number in the Options bar's Tolerance field to determine how many colors similar to a selected color will be deleted.
  3. Check the Anti-aliased setting in the same palette to smooth the edges of those pixels adjoining the ones to be deleted.
  4. Check the Contiguous setting to delete only those pixels of the same color connected to the selected pixel.
  5. Check the Use All Layers setting to be able to select a color from any visible layer.
  6. Adjust the Opacity setting to determine the level of transparency involved with any erasure.
  7. Click on a colored pixel of the object you wish to delete.
- Figure 115-2 shows the results of the Magic Eraser tool.



**Figure 115-2:** The Magic Eraser tool's results (right)

## Task 115

### tips

- Press Shift+E to switch your currently selected tool to the most recently selected eraser tool (most often the standard Eraser Tool). Pressing this key combination again will cycle among the Eraser Tool, the Background Eraser Tool, and the Magic Eraser Tool.
- Use the Magic Eraser tool instead of the Magic Wand tool and the Clear command to expedite the deletion of content.

### cross-reference

- Task 73 shows you how to select a range of colors to manipulate as you please.

**Task 116**

## Filling Areas with Solid Colors or Patterns Using the Paint Bucket Tool

**W**hen you were a child, knocking over a bottle of ink or a bucket of paint was probably frowned upon. Despite the method's sometimes catastrophic effects, no one can deny its expediency for coating a surface with a flat color. The makers of Photoshop must have realized this, too, as the Paint Bucket tool has existed almost as long as its Pencil tool brethren. Originally designed to dump a solid color into all contiguous areas of the document with the same color, the Paint Bucket tool has been improved. Now you also have the ability to dump a solid color into all areas of your document with a similar color to the one you click on.

### notes

- The Paint Bucket tool expedites the process of selecting an area and calling the Fill command.
- The Tolerance range can be anywhere between 0 and 255.

1. Choose the Paint Bucket tool from the sixth row and second column of the Tools palette. (Click and hold the Gradient tool's icon until a small menu is displayed — as shown in Figure 116-1 — move your cursor on the Paint Bucket tool icon, and release your mouse button.)
2. Change the Foreground Color to match that of the color you wish to use with this tool.
3. Specify the Fill Mode in the tool's Options bar. (These modes are identical to the Brush tool's Painting modes.)
4. Check the Anti-aliased setting in the Options bar to smooth the edges of those pixels adjoining the ones to be filled.
5. Check the Contiguous setting to fill only those pixels of the same color connected to the selected pixel.
6. Check the All Layers setting to ensure that like-colored pixels on every layer will be filled at the same time.

### caution

- Unlike the Magic Eraser tool's Use All Layers setting, the Paint Bucket tool's All Layers option applies to content on all layers.

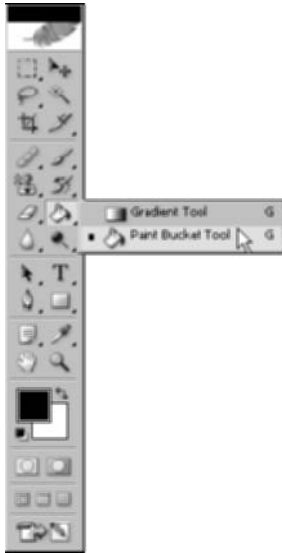


Figure 116-1: The Paint Bucket tool

## Task 116

### tips

- Press the G key to switch your currently selected tool to the most recently selected Fill tool (most often the standard Gradient Tool). Pressing Shift+G again will cycle between the Gradient tool and the Paint Bucket tool.
- Be sure to keep the Fill setting on Foreground, rather than on Pattern, so that all your fills are that of a consistent color tone.

7. Specify a number in the Options bar's Tolerance field (shown in Figure 116-2) to determine how many colors similar to a selected color will be filled.



Figure 116-2: The Paint Bucket tool's Options bar

8. Adjust the Opacity setting to determine the level of your fill's transparency.
9. Click within your document to apply the Foreground Color to the pixel you clicked, as well as to any other adjoining pixels of similar appearance.

### cross-reference

- Task 95 shows you how to fill the contents of a path.



**Task 117**

## Adding Softness to a Chosen Image Area with the Blur Tool

Sometimes the extreme clarity of an edge can destroy the integrity of a photo-realistic image. To alleviate issues such as this, the Blur tool provides a means of softening edges. The tool works its magic by increasing the number of color/value steps used along an edge. The more an edge is blurred, the greater the transitional steps between the two colors. A measure of restraint is always in order with this device, as the Blur tool can quickly obscure the definition of your artwork.

1. Choose the Blur tool from the seventh row and first column of the Tools palette (as shown in Figure 117-1).



**Figure 117-1:** The Blur tool

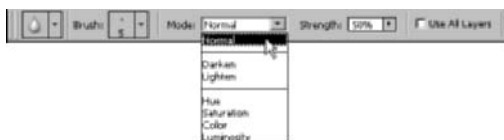
### notes

- Pressing Option (Mac) or Alt (Windows) before a new paint stroke will switch the Blur tool to the Sharpen tool, discussed in Task 118.
- Right-clicking (Windows) or Ctrl-clicking (Mac) within the document will pop up the Brush Preset picker in a contextual menu.

### caution

- By checking Use All Layers, you will stamp the background artwork into your foreground object. This can prevent this layer from compositing easily with different background artwork at a later time.

2. Click the Brush Preset picker button within the Options bar.
3. Scroll through the listing of available brushes.
4. Click one of the brushes in the list to select it. The brush you choose will appear in the Brush Preset picker button at its default size.
5. Adjust the diameter of your brush size using the Master Diameter sliding scale or by entering a pixel value (such as 5px). As you change the brush's diameter, the Brush Preset picker button will update to show the new size.
6. Click the Brush Preset picker button to close the selection menu and to apply the new brush settings to your Blur tool.
7. In the tool's Options bar (shown in Figure 117-2), specify its Effect Mode setting via the drop-down menu. (These settings are similar to the Brush tool's Painting Modes.)



**Figure 117-2:** The Blur tool's Options bar

8. Adjust the Strength value in the Options bar to determine how much of a blur is applied with each use of the tool.
9. Check the Use All Layers setting if you want the background artwork's color to be used as the color the foreground object blurs out toward.
10. Click the mouse button over the specific area you wish to blur, dragging the cursor while holding the mouse button to extend the blur.

## Task 117

### tips

- Press the R key to switch your currently selected tool to the Blur tool.
- To activate an Effect Mode contextual menu for quick modification, right-click (Windows) or Ctrl-click (Mac) within your image window.

### cross-reference

- You can learn in Task 216 how to create unique blurs on selected parts of your document.

**Task 118**

## Increasing the Clarity of an Area with the Sharpen Tool

**W**orking opposite of the Blur tool, the Sharpen tool clarifies edges in your image. By decreasing the number of steps used in both directions coming toward an edge, the Sharpen tool increases the edge's contrast, thus creating a crisper boundary. The tool provides a means of sharpening specific aspects of your document with the precision of a brush, allowing you to sharpen the edges of a face without affecting the face's inner details.

### notes

- Right-clicking (Windows) or Ctrl-clicking (Mac) within the document will pop up the Brush Preset picker in a contextual menu.
- Pressing Option (Mac) or Alt (Windows) before a new paint stroke will switch the Sharpen tool to the Blur tool, discussed in Task 117.

1. Choose the Sharpen tool from the seventh row and first column of the Tools palette. (Click and hold on the Blur tool's icon until a small menu is displayed — as shown in Figure 118-1 — move your cursor on the Sharpen tool icon, and release your mouse button.)

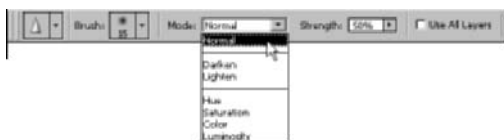


**Figure 118-1:** The Sharpen tool

### caution

- By checking Use All Layers, you will stamp the background artwork into your foreground object. This can prevent this layer from compositing easily with different background artwork at a later time.

2. Click on the Brush Preset picker button within the Options bar.
3. Scroll through the listing of brushes available for you to use.
4. Click on one of the brushes in the list to select a particular brush. The brush you choose will now appear in the Brush Preset picker button at its default size.
5. Adjust the diameter of your brush size using the Master Diameter sliding scale or by entering a pixel value (such as 15px). As you change the brush's diameter, the Brush Preset picker button will update to show the new size.
6. Click the Brush Preset picker button to close selection menu and apply the new brush settings to your Sharpen tool.
7. In the tool's Options bar (shown in Figure 118-2), specify its Effect Mode setting via the drop-down menu. (These settings are similar to the Brush tool's Painting Modes.)



**Figure 118-2:** The Sharpen tool's Options bar

8. Adjust the Strength value in the Options bar to determine how much of a sharpen effect is applied with each use of the tool.
9. Check the Use All Layers setting if you want the background artwork's color to be used as the color the foreground object's edge refines toward.
10. Click the mouse button over the specific area you wish to sharpen, dragging the cursor while holding the mouse button to extend the increased aliasing.

## Task 118

### tips

- Press the R key to switch your currently selected tool to the most recently selected Effect tool (most often the Blur Tool). Pressing Shift+R again will cycle among the Blur tool, the Sharpen tool, and the Smudge tool.
- To activate an Effect Mode contextual menu for quick modification, right-click (Windows) or Ctrl-click (Mac).

### cross-reference

- Task 33 details how the Tool Presets palette works, thus allowing you to quickly change your tool back to its original settings.

# Task 119

## Simulating a Fingerpainted Look Using the Smudge Tool

### notes

- Right-clicking (Windows) or Ctrl-clicking (Mac) within the document will pop up the Brush Preset picker in a contextual menu.
- The fingerpainting effect will fade out according to the Strength value you choose until the tool encounters a fresh swath of color to smudge.

### caution

- By checking Use All Layers, you will stamp the background artwork into your foreground object. This can prevent this layer from compositing easily with different background artwork at a later time.

**B**ack in elementary school, the teacher-sanctioned activity of finger painting allowed you to express your imagination while breaking the cardinal rule of keeping your hands clean. Aside from the joy such a memory evokes, there are many instances where you may wish to replicate the interesting visual results of paint dragged through other semi-wet paints. Photoshop's Smudge tool allows you just such an opportunity, whether you are dragging the colors of the existing artwork or the foreground color.

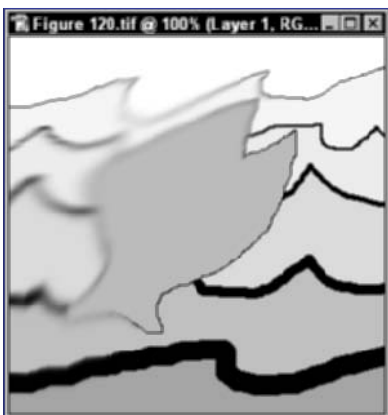
1. Choose the Smudge tool from the seventh row and first column of the Tools palette. (Click and hold on the Blur tool's icon until a small menu is displayed — as shown in Figure 119-1 — move your cursor on the Smudge tool icon, and release your mouse button.)



**Figure 119-1:** The Smudge tool

2. Click the Brush Preset picker button within the Options bar.

3. Select a brush shape and size according to what “finger” you would like to paint with.
4. Click on the Brush Preset picker button to close the selection menu and apply the new brush settings to your Smudge tool.
5. In the tool’s Options bar, specify its Effect Mode setting via the drop-down menu. (These settings are similar to the Brush tool’s Painting Modes.)
6. Adjust the Strength value in the Options bar to determine how intensely and long the color smudging effect is applied with each use of the tool.
7. Check the Use All Layers setting if you want the background artwork’s colors to be brought into your smudging as you drag your cursor across them (shown in Figure 119-2).



**Figure 119-2:** The Smudge tool with the Use All Layers setting checked (bottom)

8. Check the Finger Painting setting so that the Smudge tool acts as a paintbrush instead of an adjustment tool.
9. Click the mouse button where you wish to begin your paint stroke, dragging the cursor while holding the mouse button to extend the stroke as you wish.

## Task 119

### tips

- Press the R key to switch your currently selected tool to the most recently selected Effect tool (most often the Blur Tool). Pressing this key combination again will cycle among the Blur tool, the Sharpen tool, and the Smudge tool.
- To activate an Effect Mode contextual menu for quick modification, right-click (Windows) or Ctrl-click (Mac).

### cross-reference

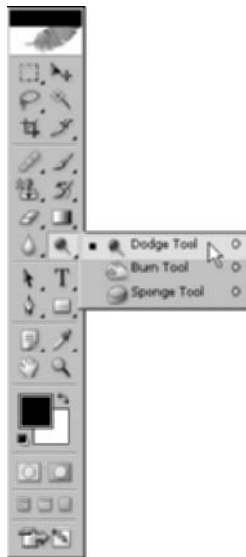
- If you really must just get your fingers dirty in the real world, see Task 14, which shows how to import a scanned image.

**Task** **120**

## Highlighting an Image Area with the Dodge Tool

**T**raditional photographers have long used the secret art of “dodging” to lighten the appearance of particular areas in a photograph. In Photoshop, this technique is mimicked via the Dodge tool. Using brush strokes, you can increase the brightness of highlights, midtones, or shadows. While the actual process of dodging can be both time-consuming and redundant, the Dodge tool makes quick work of the selective lightening technique.

1. Choose the Dodge tool from the seventh row and second column of the Tools palette (as shown in Figure 120-1).



**Figure 120-1:** The Dodge tool

### notes

- Right-clicking (Windows) or Ctrl-clicking (Mac) within the document will pop up the Brush Preset picker in a contextual menu.
- You can also lighten your entire document, or a selection therein, by using the Brightness/Contrast command.

### caution

- If parts of your artwork aren't lightening as you might expect, consider changing the Tonal Range to adjust a different aspect of your artwork.

2. Click the Brush Preset picker button within the Options bar.
3. Select a brush shape and size according to the amount of area you wish to lighten at one time.
4. Click the Brush Preset picker button to close the selection menu and apply the new brush settings to your Dodge tool.
5. In the tool's Options bar, specify its Tonal Range setting via the drop-down menu. (This setting determines which values the tool lightens.)
6. Adjust the Exposure value in the Options bar to determine how intensely the lightening effect is applied with each use of the tool.
7. Check the Airbrush setting if you want to further soften the edges of the tool's brush.
8. Click the mouse button on the part of your image you wish to lighten, dragging the cursor while holding the mouse button to increase the amount as you wish. (The results of the Dodge tool are shown in Figure 120-2.)



**Figure 120-2:** The Dodge tool's results (right)

## Task 120

### *tips*

- Press the O key to switch your currently selected tool to the most recently selected Toning tool (most often the Dodge tool). Pressing this key combination again will cycle among the Dodge tool, the Burn tool, and the Smudge tool.
- To activate an Effect Mode contextual menu for quick modification, right-click (Windows) or Ctrl-click (Mac).

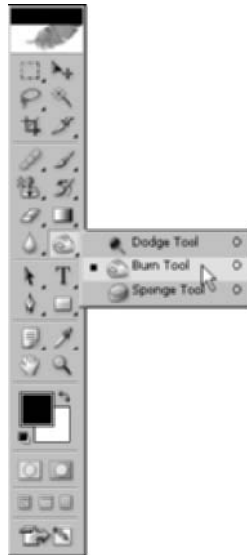


**Task 121**

## Applying the Burn Tool to Create Shading Effects in an Image

Just as the Dodge tool has origins in the darkroom, so too does the Burn tool. Used to darken specific areas of your document, the Dodge tool acts as if it is “printed” into your document. Rather than adjust the value of your entire document, the Burn tool allows you to selectively paint an increased value across highlights, midtones, and shadows.

1. Choose the Burn tool from the seventh row and second column of the Tools palette. (Click and hold on the Dodge tool’s icon until a small menu is displayed — as shown in Figure 121-1 — move your cursor on the Burn tool icon, and release your mouse button.)



**Figure 121-1:** The Burn tool

### notes

- You can also darken your entire document, or a selection therein, by using the Brightness/Contrast command.
- Right-clicking (Windows) or Ctrl-clicking (Mac) within the document will pop up the Brush Preset picker in a contextual menu.

### caution

- If parts of your artwork aren’t darkening as you might expect, consider changing the Tonal Range to adjust a different aspect of your artwork.

2. Click the Brush Preset picker button within the Options palette.
3. Select a brush shape and size according to the amount of area you wish to darken at one time.
4. Click on the Brush Preset picker button to close selection menu and apply the new brush settings to your Burn tool.
5. In the tool's Options bar, specify its Tonal Range setting via the drop-down menu. (This setting determines which values the tool darkens.)
6. Adjust the Exposure value in the Options bar to determine how intensely the darkening effect is applied with each use of the tool.
7. Check the Airbrush setting if you want to further soften the edges of the tool's brush.
8. Click the mouse button on the part of your image you wish to darken, dragging the cursor while holding the mouse button to increase the amount as you wish. (The results of the Burn tool are shown in Figure 121-2.)



**Figure 121-2:** The Burn tool's results (right)

## Task 121

### *tips*

- Press the O key to switch your currently selected tool to the most recently selected Toning tool (most often the Dodge Tool). Pressing Shift+O again will cycle among the Dodge tool, the Burn tool, and the Smudge tool.
- To activate an Effect Mode contextual menu for quick modification, Right-click (Windows) or Ctrl-click (Mac).

### *cross-reference*

- If you don't feel like using a brush to darken your image, see Task 52, which shows how you can use Levels to adjust a selection.

**Task 122**

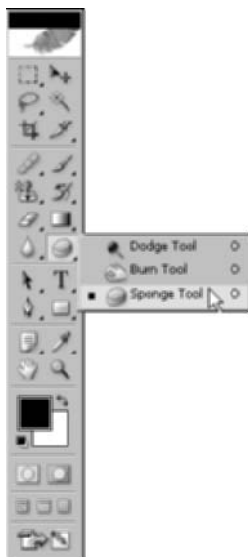
## Changing Color Saturation with the Sponge Tool Options

**W**hile you may want to keep the value, you can choose to suck some of the color pigment out of certain parts of your artwork. Using the Sponge tool, you can desaturate select parts of your document using a brush-like device. Working just like a sponge to watercolors, the tool can quickly absorb the pigmentation of whatever is below its brush, leaving a grayscale replica in its path if overdone. Conversely, however, you can use the sponge to increase the saturation on your artwork at a controlled rate, producing a vibrant, more colorful result.

### notes

- Right-clicking (Windows) or Ctrl-clicking (Mac) within the document will pop up the Brush Preset picker in a contextual menu.
- You can also adjust saturation via the Hue/Saturation command under the Image ⇨ Adjustments menu.

1. Choose the Sponge tool from the seventh row and second column of the Tools palette. (Click and hold on the Dodge tool's icon until a small menu is displayed — as shown in Figure 122-1 — move your cursor on the Sponge tool icon, and release your mouse button.)



**Figure 122-1:** The Sponge tool

### caution

- Readers with partial color blindness may not notice a dramatic change after using the tool; to determine if your image changed, keep an eye on the Info palette, where the color values of the pixel below your tool are always displayed.

2. Click the Brush Preset picker button within the Options bar.
3. Select a brush shape and size according to the amount of area you wish to dilute or intensify at one time.
4. Click on the Brush Preset picker button to close the selection menu and apply the new brush settings to your Sponge tool.
5. In the tool's Options bar (shown in Figure 122-2), specify whether you wish to Saturate or Desaturate your content by changing the Sponge Mode setting via the drop-down menu.



**Figure 122-2:** The Sponge tool's Options bar

6. Adjust the Flow value in the Options bar to determine how intensely the (de)saturation effect is applied with each use of the tool.
7. Check the Airbrush setting if you want to further soften the edges of the tool's brush.
8. Click the mouse button on the part of your image you wish to adjust, dragging the cursor while holding the mouse button to increase the amount of “absorption” or “application.”

## Task 122

### tips

- Press the O key to switch your currently selected tool to the most recently selected Toning tool (most often the Dodge tool). Pressing Shift+O again will cycle among the Dodge tool, the Burn tool, and the Smudge tool.
- To activate a Sponge Mode contextual menu for quick modification, right-click (Windows) or Ctrl-click (Mac).

### cross-references

- Task 56 shows you how to adjust the hue, saturation, and lightness of an image or selection at one time.
- If you don't feel like using a brush to darken your image, see Task 52, which shows you how to use Levels to adjust a selection.

# Task 123

## Performing Digital Plastic Surgery with the Healing Brush

### note

- Right-clicking (Windows) or Ctrl-clicking (Mac) within the document will pop up the Brush Preset picker in a contextual menu.

### caution

- Keep in mind that the artwork you see sampled as you draw with the Healing Brush is *pre-healing*; once you release the mouse button, the sampled areas will be modified to integrate with the original artwork.

Some of Photoshop's more recent additions to its Tools palette can be downright scary in terms of their abilities. The Healing Brush tool certainly falls within this category. The Healing Brush allows you to clone aspects of one part of your image onto another while honoring the value and texture of the latter's surrounding pixels. The benefits of this tool can be seen when repairing scratches and other artifacts brought in from a bad scan.

1. Choose the Healing Brush tool from the fourth row and first column of the Tools palette (as shown in Figure 123-1).



Figure 123-1: The Healing Brush tool

2. Click the Brush Preset picker button within the Options bar.
3. Adjust the settings to create a brush of the appropriate size and functionality for your artwork.

4. Click the Brush Preset picker button to close the selection menu and apply the new brush settings to your Healing Brush tool.
5. In the tool's Options bar, specify its Effect Mode setting via the drop-down menu. (These settings are similar to the Brush tool's Painting Modes.)
6. Choose Sample from the Source settings to use other artwork in your document to “heal” your targeted area.
7. Check the Aligned setting to maintain a consistent sampling point regardless of the number of individual applications of the tool.
8. Check the Use All Layers setting to sample all visible content, even that which is on a different layer from your currently selected layer.
9. While holding the Option (Mac) or Alt (Windows) key, click the mouse button to define the sampling area from which your artwork will be copied. (You will notice your cursor changing to a cross-hair during this process.)
10. Click the mouse button on the part of your image you wish to repair, dragging the cursor while holding the mouse button to increase the area to heal as you wish. (Note the small cross-hairs showing the sampling point offset from your brush cursor, as shown in Figure 123-2.)



**Figure 123-2:** The Healing Brush tool's two cursors

## Task 123

### tips

- Choose a soft, feather-edged brush to better blend the edges of your “healing” work.
- To activate an Effect Mode contextual menu for quick modification, right-click (Windows) or Ctrl-click (Mac).
- Press the J key to switch your currently selected tool to the most recently selected Healing tool (most often the Healing Brush tool). Pressing Shift+J again will cycle among the Healing Brush tool, the Patch tool, and the Color Replacement tool.

### cross-reference

- Task 126 shows you how to “heal” your artwork with a pattern instead of with sampled imagery.

## Task 124

### Using the Healing Brush Pattern Option

The Healing Brush tool has a second function beyond sampling another part of the document. It can also paint default and custom patterns onto your document while honoring the value and texture of the underlying artwork. This can allow you to create the appearance that your pattern is draped over a three-dimensional object or at least integrated into its surrounding environment.

#### note

- Right-clicking (Windows) or Ctrl-clicking (Mac) within the document will pop up the Brush Preset picker in a contextual menu.

1. Choose the Healing Brush tool from the fourth row and first column of the Tools palette (as shown in Figure 124-1).



Figure 124-1: The Healing Brush tool

2. Click the Brush Preset picker button within the Options bar.
3. Adjust the settings to create a brush of the appropriate size and functionality for your artwork.

#### caution

- Keep in mind that the patterns you see drawn with the Healing Brush are pre-healing; once you release the mouse button, the patterned areas will be modified to integrate with the original artwork.

4. Click on the Brush Preset picker button to close selection menu and apply the new brush settings to your Healing Brush tool.
5. In the tool's Options bar, specify its Effect Mode setting via the drop-down menu. (These settings are similar to the Brush tool's Painting Modes.)
6. Choose Pattern from the Source settings to use a pattern to "heal" your targeted area.
7. Click on the Pattern picker button that became active upon choosing the Pattern source.
8. Double click on a pattern from the Pattern picker list to choose it.
9. Check the Aligned setting to maintain a consistent sampling point regardless of the number of individual applications of the tool.
10. Click the mouse button on the part of your image you wish to repair, dragging the cursor while holding the mouse button to increase the area to heal as you wish. (Note the results of the pattern application, as shown in Figure 124-2.)



**Figure 124-2:** The Healing Brush tool's pattern results

## Task 124

### tips

- Choose a soft, feather-edged brush to better blend the edges of your "healing" work.
- To activate an Effect Mode contextual menu for quick modification, right-click (Windows) or Ctrl-click (Mac).
- Press the J key to switch your currently selected tool to the Healing tool most recently selected (most often the Healing Brush tool). Pressing Shift+J again will cycle between the Healing Brush tool, the Patch tool, and the Color Replacement tool.

### cross-reference

- Task 137 teaches you how to create your own custom pattern.



**Task 125**

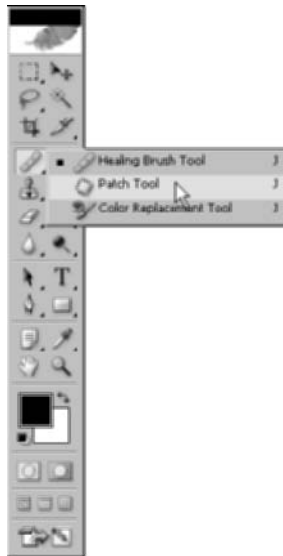
## Repairing a Selected Area with the Patch Tool

Second on the list of amazing recent Photoshop tools is the Patch tool. Unlike the Healing Brush tool, which operates similar to the Clone Stamp tool, the Patch tool achieves similar results with a selection method. Rather than using confines of a brushstroke, this tool uses feathered selections that allow for smooth blends between cloned content and its destination's edges. Because it only requires two steps to “heal” your image with this tool, the Patch tool can often outshine its palette mate.

### notes

- You can blend a pattern into the Patch selection using the Use Pattern button in the Options bar.
- Choosing the Destination Patch Mode applies the Patch selection area onto the target destination.

1. Choose the Patch tool from the fourth row and first column of the Tools palette. (Click and hold on the Healing Brush tool's icon until a small menu is displayed — as shown in Figure 125-1 — move your cursor on the Patch tool icon, and release your mouse button.)



**Figure 125-1:** The Patch tool

### caution

- If your cursor changes to a big circular NO sign, check to make sure you are on an active layer.

2. Click on the “Source” Patch Mode within the Options bar.
3. Click and hold the mouse button within the artwork area to begin drawing a Patch selection.
4. While continuing to hold the mouse button down, drag your cursor along the edges of the area you wish to select.
5. To complete your selection, simply release the mouse button. If your cursor has not returned to the point where you began drawing your selection, Photoshop will complete your selection by closing the path with a straight selection edge between the two points.
6. Click within and drag the selection area to move the selection to the area you wish to sample. (Note the small jumping arrow icon within your Patch cursor, as shown in Figure 125-2, showing the selection moving functionality.)



**Figure 125-2:** The Patch tool's Sample cursor

7. Release the mouse button once your selection is directly over the area you wish to sample. Upon release, Photoshop will merge the sampled content with the original selection area.

## Task 125

### tips

- Press the J key to switch your currently selected tool to the Healing tool most recently selected (most often the Healing Brush tool). Pressing Shift+J again will cycle between the Healing Brush tool, the Patch tool, and the Color Replacement tool.
- Work with small, precise selections to avoid unnecessary modification to your artwork.
- To activate a Patch Mode contextual menu for quick modification, right-click (Windows) or Ctrl-click (Mac).

### cross-reference

- In Task 128, you learn how to paint content from one area of your document onto another using the Rubber Stamp Tool.

**Task 126**

## Transferring Part of an Image to Another Image with the Clone Stamp Tool

**note**

- Right-clicking (Windows) or Ctrl-clicking (Mac) within the document will pop up the Brush Preset picker in a contextual menu.

When dealing with images of the human body, you may often use the Brush tool with the Airbrush option to smooth over blemishes and unwanted splotches on the skin. However, when dealing with undulating colors and textures, the Brush tool's smooth output may discount its use in repairing an unwanted aspect of the image. Fortunately, the Clone Stamp Tool will allow you to duplicate aspects of your image onto another specific area of your image. Using a brush-like control, you can duplicate chunks of artwork anywhere within your document.

1. Choose the Clone Stamp tool from the fifth row and first column of the Tools palette (as shown in Figure 126-1).



**Figure 126-1:** The Clone Stamp tool

**caution**

- Your artwork can look very repetitive and computer-generated if you leave the Aligned option checked while stamping over large areas. Consider using multiple, non-aligned stamps to create an irregular, non-repeating look.

2. Click on the Brush Preset picker button within the Options bar.
3. Adjust the settings to create a brush of the appropriate size and functionality for your artwork.
4. Click on the Brush Preset picker button to close selection menu and apply the new brush settings to your Clone Stamp tool.
5. In the tool's Options bar, specify its Effect Mode setting via the drop-down menu. (These settings are similar to the Brush tool's Painting Modes.)
6. Check the Aligned setting to maintain a consistent sampling point regardless of the number of individual applications of the tool.
7. Check the Use All Layers setting if you want artwork from non-active layers to be included in your sampling.
8. While holding the Option (Mac) or Alt (Windows) key, click the mouse button to define the sampling area from which your artwork will be copied. (You will notice your cursor changes to a cross-hair during this process.)
9. Click the mouse button on the part of your image you wish to paint, dragging the cursor while holding the mouse button to increase the area to clone as you wish. (Note the small cross-hairs showing the sampling point offset from your brush cursor, as shown in Figure 126-2, used to paint over the cement block in the left of the photo.)



**Figure 126-2:** The Clone Stamp tool's two cursors

## Task 126

### *tips*

- Press the S key to switch your currently selected tool to the Clone tool most recently selected. Pressing Shift+S again will cycle between the Clone Stamp tool and the Pattern Stamp tool.
- Choose a soft, feather-edged brush and press the Airbrush button to better blend the edges of your cloning work.
- To activate an Effect Mode contextual menu for quick modification, right-click (Windows) or Ctrl-click (Mac) within your image window.

### *cross-reference*

- You can select a swatch of an image to become the basis of a new brush shape. Task 139 shows you how.

**Task 127****note**

- Right-clicking (Windows) or Ctrl-clicking (Mac) within the document will pop up the Brush Preset picker in a contextual menu.

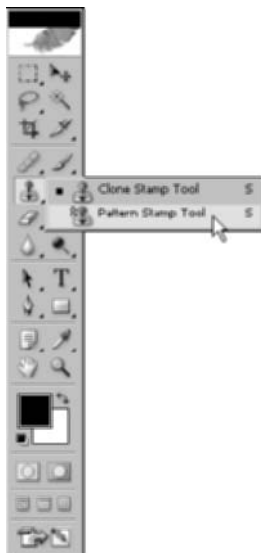
**caution**

- If you check the “Impressionist” option, your pattern stamping will not align with previous stamps.

## Painting with a Pattern by Means of the Pattern Stamp Tool

Not only does Photoshop come with a number of brushes available to use, it also comes standard with a number of dissimilar patterns. Using the Pattern Stamp tool, you can paint patterns into your document just as you would a brush stroke. Choosing one from dozens of different pattern styles, you can add a detailed texture to your artwork.

1. Choose the Pattern Stamp tool from the fifth row and first column of the Tools palette. (Click and hold on the Clone Stamp tool’s icon until a small menu is displayed — as shown in Figure 127-1 — move your cursor on the Pattern Stamp tool icon, and release your mouse button.)



**Figure 127-1:** The Pattern Stamp tool

2. Click on the Brush Preset picker button within the Options bar.
3. Adjust the settings to create a brush of the appropriate size and functionality for your artwork.
4. Click on the Brush Preset picker button to close selection menu and apply the new brush settings to your Pattern Stamp tool.
5. Click on the Pattern picker button within the Options bar.
6. Double click on a pattern from the Pattern picker list to choose it.
7. Check the Aligned setting to maintain a consistent sampling point regardless of the number of individual applications of the tool.
8. Check the Use All Layers setting if you want artwork from non-active layers to be included in your sampling.
9. Click the mouse button on the part of your image you wish to stamp, dragging the cursor while holding the mouse button to increase the area as you wish. (Note the results of the Pattern Stamp tool, as shown in Figure 127-2.)



**Figure 127-2:** The Pattern Stamp tool's results

## Task 127

### *tips*

- Press the S key to switch your currently selected tool to the Clone tool most recently selected. Pressing Shift+S again will cycle between the Clone Stamp tool and the Pattern Stamp tool.
- Choose a soft, feather-edged brush and press the Airbrush button to better blend the edges of your stamping work.
- Press Shift key while painting to constrain your strokes along 90° angles.

### *cross-reference*

- Instead of painting a pattern across your image, you can paint a previous History state, as shown in Task 129.



## Part 9: Advanced Painting Techniques

Task 128: Using the History Brush to Paint with a History State

Task 129: Painting from or Recovering Your Previous Work Using Snapshots

Task 130: Adding Artistic Style to an Image with the Art History Brush

Task 131: Erasing to a History State

Task 132: Filling a Selection or Layer with a History State

Task 133: Using the Gradient Tool to Apply a Color Gradient

Task 134: Creating a Custom Gradient

Task 135: Saving and Loading Gradient Libraries

Task 136: Creating and Defining a Pattern

Task 137: Setting Brush Dynamics

Task 138: Creating Custom Brushes

Task 139: Editing a Preset Brush

Task 140: Creating and Saving a Brush Set



# Task 128

## Using the History Brush to Paint with a History State

The History Brush tool works like a small tool at an archeology dig — it enables you to chip or brush away the present to see what was buried in the past. With this tool, instead of painting color on top of an image, you are simply brushing away what is already on the surface to see what has been created before.

### notes

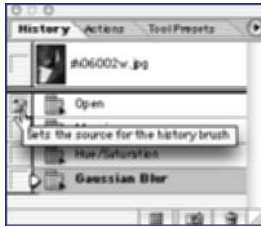
- If you crop your image or change its size, the History Brush tool will not work.
- The Flow setting controls how fast the brush effect is applied to the image .

1. To work with the History Brush tool, open an image (we chose the image shown in Figure 128-1).



**Figure 128-1:** A sample image to be worked on

2. Apply a filter to or work on the image in some way so that it is visually different from what it looked like when you opened it. This change adds what is referred to in Photoshop lingo as a history state, which is required for the History Brush tool.
3. Select the History Brush tool from the toolbox.
4. In the History palette, click in the column to the left of the history state you want to restore with the brush (see Figure 128-2). You'll notice the History Brush icon appear, indicating that this history state will be used as the source from which the History Brush tool will paint over your current image state.



**Figure 128-2:** Selecting a history state

5. To modify the History Brush tool's opacity setting, enter a percentage value in the Opacity text box on the options bar, or drag the Opacity slider to specify a new value.
6. To adjust the blending mode for the History Brush, select the type of blend you want from the Mode drop-down menu.
7. To set the flow for the History Brush, enter a percentage value in the Flow text box on the options bar, or drag the Flow slider to select a new value.
8. Apply the brush tool to the document window. As you paint, Photoshop reveals the contents of the state you selected as the source, as shown in Figure 128-3.



**Figure 128-3:** The results of applying the History Brush tool to the image in Figure 128-2

## Task 128

### *cross-reference*

- Task 110 explains how to use the Brush tool.

# Task 129

## note

- You can create a Snapshot every time you save your image. To set this option, open the History palette's options menu, select History Options, and then select the Automatically Create New Snapshot When Saving check box in the resulting dialog box and press OK.

## Painting from or Recovering Your Previous Work Using Snapshots

When you are on vacation or hanging out with friends, you take out your digital camera and take a picture. Instantly, you have a record of what had just happened a few seconds ago.

Snapshots, which are copies of an image including layers, made in Photoshop are tiny records similar to those photos. They won't disappear as easily as history states, which are just records of the edits made to an image. And unlike digital photographs, you can use snapshots to bring back a past version of your image. The following steps show you how to create a snapshot with the History Brush.

1. To work on a snapshot of an image, open an image and edit it to give it a history (see Figure 129-1 for an example).



**Figure 129-1:** The image we will be using to demonstrate the use of the Snapshot command

2. In the History palette, select the state from which you want to create a new snapshot.
3. Click the Create New Snapshot button at the bottom of the History palette. This adds your new snapshot at the top of the History palette, as shown in Figure 129-2.



Figure 129-2: Creating a snapshot

4. To select a snapshot as the source image for the History Brush tool, select the square to the left of the snapshot thumbnail and view, as shown in Figure 129-3.



Figure 129-3: Creating a snapshot

5. Apply the Brush tool to the contents of the document window.
6. If you want to rename a snapshot, double-click the current snapshot name and enter a new name in the resulting dialog box.
7. To delete a snapshot, drag it to the Trash icon at the bottom of the History palette. Alternatively, you can select the Snapshot and then click the Trash icon at the bottom of the History palette, or select Delete from the History palette's options menu (which you can access by clicking the small arrow icon in the upper right corner of the palette).

## Task 129

### tip

- If you want to set the name of the snapshot or what part of the image document you want the snapshot taken from (Full Document, Merged Layers, Current Layer), press Alt-click (Windows OS) or Option-click (Mac OS) the New Snapshot button at the bottom of the History palette.

### cross-reference

- To learn more about the History brush, refer to Task 129.

**Task 130**

## Adding Artistic Style to an Image with the Art History Brush

The Art History Brush tool takes the concept of the History Brush tool one step further. Instead of gradually bringing back the past brush stroke by brush stroke, you can make a new image out of it. Using different brush stroke styles, your past image can look like a watercolor print (the Dab style), a bunch of multicolored curly fries (the Tight Curl Long style) or other styles that you can select.

1. Open an image and edit it to create a trail of history states in the History palette (see Figure 130-1).



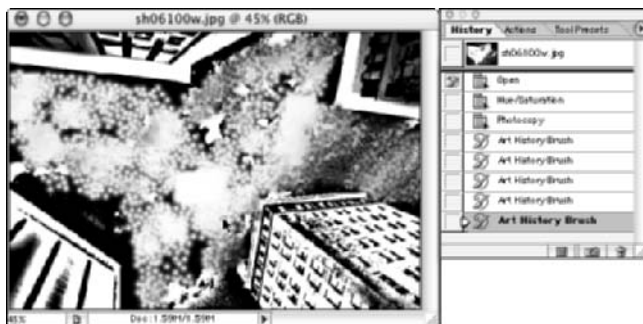
**Figure 130-1:** An image that has been worked on for a little bit

2. In the History palette, select the state or snapshot you want to work from.
3. Select the Art History Brush from the toolbox. If you don't see this tool, click the History Brush tool icon to open a submenu and then select the Art History Brush tool, as shown in Figure 130-2.
4. Select an art style from the Style drop-down menu on the Options Bar.
5. To control the size of your brush strokes, enter a value in the Area text box. You can enter a value ranging from 0 to 500 pixels.



**Figure 130-2:** Selecting the Art History Brush tool

6. To control the appearance of the strokes in the document window, specify a percentage value in the Tolerance text box. A higher percentage value instructs Photoshop to apply brush strokes only on areas of colors that are dissimilar to the source image.
7. Apply the Art History Brush tool to the content in your document window. Figure 130-3 shows the effects of the Art History Brush tool on our sample image. For this image, we selected the Dab style and set the Area value to 50 pixels and the Tolerance value to 43. To see the images in full color, go to our Web site at [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).



**Figure 130-3:** An example of what you can do with the Art History Brush tool

## Task 130

### tips

- To create more interesting effects, change the type of brush on the options bar.
- Be sure to use some control with this effect. A little dab of the Art History Brush tool can go a long way; a lot will probably render the image unrecognizable.

### cross-reference

- To learn more about working with snapshots, see Task 129.

**Task 131**

## Erasing to a History State

Just like you can paint to a history state or snapshot, you can also erase to a history state, using the Block, Pencil, or Brush mode.

1. Open an image. We used the image shown in Figure 131-1 to demonstrate using the Erase to History tool.



**Figure 131-1:** A sample image

2. Edit your image to create a history trail. Figure 131-2 demonstrates what we have done to our sample image.



**Figure 131-2:** The modified sample image

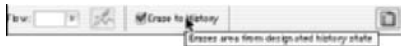
3. In the History palette, select the state of the state that you want to use for your source image.

### notes

- You can also select a snapshot as a source image for erasing to the history of an image.
- If you select Brush from the Mode drop-down list, you can also select the Airbrush checkbox on the options bar.

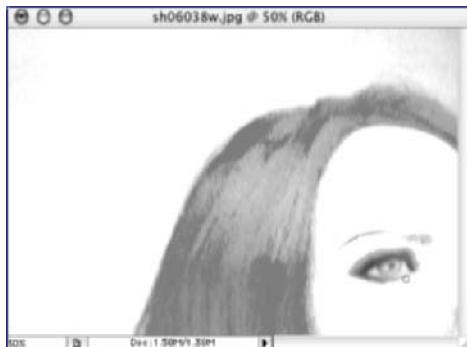
**Task 131**

4. Select the Eraser tool from the toolbox.
5. Select the Erase to History checkbox on the options bar, as shown in Figure 131-3.



**Figure 131-3:** Selecting the Erase to History check box

6. Select the tool you want to use from the Mode drop-down list on the Options Bar. Your options are Block, Pencil, or Brush.
7. To modify the opacity (how transparent a layer is) for the History Brush, enter a percentage value in the Opacity text box on the options bar, or drag the Opacity slide to specify a new value.
8. If you want to set the flow for the History Brush, enter a percentage value in the Flow text box on the options bar next or drag the Flow slider to a specify a new value.
9. If you selected Pencil or Brush from the Mode drop-down list, you can select a different Brush.
10. Apply the Erase to History tool to the content of your document window. Figure 131-4 shows the result using this tool on our sample image. Note the detail of the eye. You can view the full color version of the image at the Web site, [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).



**Figure 131-4:** Using the Erase to History tool

**cross-reference**

- To learn more about the Eraser tool, see Task 114.



**Task 132**

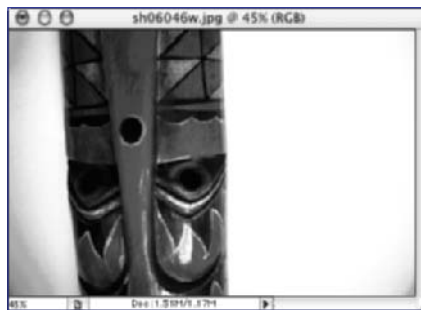
## Filling a Selection or Layer with a History State

**note**

- You can also press Shift+Backspace (Windows) or Shift+Delete (Mac OS) to open the Fill dialog box.

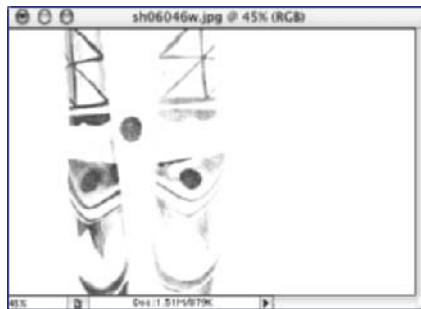
Rather than paint or erase an image from history into present day, you can also use the Fill tool to do the trick. There's an almost hidden setting in the Fill dialog box that provides the magic for this feature. The steps below detail how to fill a selection or layer with a History State. (You can view the full-color versions of these images at the web site, [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).)

1. Open an image We used the image shown in Figure 132-1 for this task.



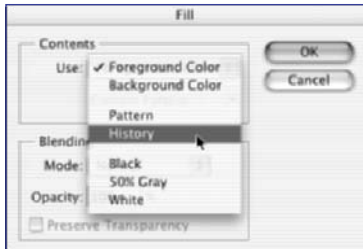
**Figure 132-1:** A sample image

2. Alter the image by applying a filter effect or editing it (see Figure 132-2).



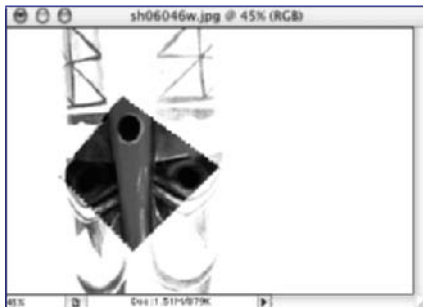
**Figure 132-2:** The image has been modified.

3. Select a non-transparent layer to fill the entire document window.
4. To fill only a portion of an image, use the Marquee tool and draw a selection in the document window.
5. Select the history state or snapshot you want to use as the fill in the History palette.
6. Select Edit ⇨ Fill to open the Fill dialog box.
7. Under Contents, select History from the Use list (see Figure 132-3).



**Figure 132-3:** Using the Fill dialog box

8. Modify the other settings in the Fill dialog box to your liking.
9. Click OK to fill your image with the selected history state or snapshot (see Figure 132-4).



**Figure 132-4:** A sample image with portions filled with a history state

## Task 132

### tip

- If you have experience working with selections, you might want to use this History Fill procedure rather than using the History Brush tool.

### cross-reference

- See Task 117 for more information on applying a Fill in a layer.

# Task 133

## Using the Gradient Tool to Apply a Color Gradient

**W**ith the Gradient tool, you can set up a transition between two or more colors in an image. You can use the Gradient tool to make blends from white to black to create a multicolor rainbow effect or any other color effect. The following steps show you how to add a blend to a layer.

### notes

- Verify you are working with an RGB or CMYK document. You can not apply a gradient to your document window when in the image mode.
- How far you drag the mouse when creating your gradient controls the width of the color transitions in the gradient. Shorter distances result in color banding; longer distances result in smoother and less noticeable color banding.

1. Open an image you want to work on.
2. To fill an entire image, select a layer.
3. To fill a part of an image, use the Marquee tool to select the area you want.
4. Select the Gradient Tool from the toolbox (as shown in Figure 133-1), or press G.



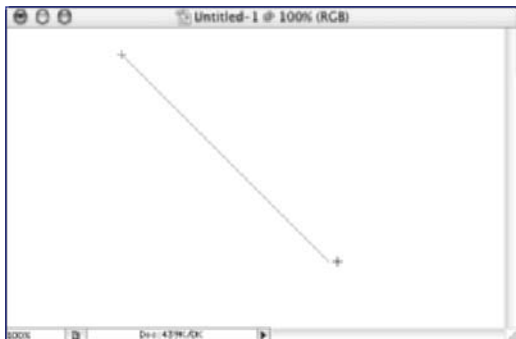
**Figure 133-1:** Selecting the Gradient tool

5. Adjust the tool's setting on the options bar. Select a gradient style from the Style drop-down list.
6. To select a gradient from the default set of gradients, click the small triangle button next to the gradient thumbnail on the options bar and select the gradient you want (see Figure 133-2).



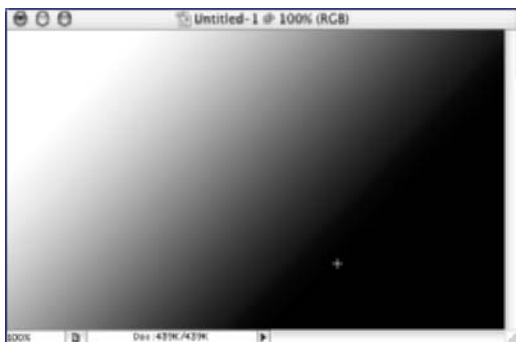
**Figure 133-2:** The default set of gradients

7. To flip the color direction of a gradient, select the Reverse checkbox. If you want a better gradient without noticeable bands of color, check Dither.
8. To use a gradient that contains partial transparency (which has been set in the gradient itself) select the Transparency checkbox.
9. To create your gradient, click inside your document window and then drag the mouse in the direction you want the gradient to go (see Figure 133-3).



**Figure 133-3:** Dragging the line to map the direction of the gradient

10. Once you are done dragging the cursor, release the mouse button to reveal your gradient (see Figure 133-4). The distance of the drag has a direct effect on the length of the gradient.



**Figure 133-4:** A gradient has been created.

## Task 133

### tips

- You can use an Adjustment Layer to apply a gradient. Simply click the Create New Fill button or Adjustment Layer button at the bottom of the Layers palette, select a gradient from the pop-up menu, specify your gradient options in the resulting dialog box, and click OK to apply your settings. If you want to edit the gradient, double-click the Adjustment Layer.
- To draw gradients with angles in multiples of 45 degrees, press Shift while dragging in the direction you want the gradient to go.

### cross-reference

- To learn how to create your own colors for gradients, see Task 134.

# Task 134

## Creating a Custom Gradient

### notes

- If you used an adjustment layer to create your gradient, double-click the layer thumbnail to access the Gradient Editor dialog box.
- To create a gradient that has randomly placed colors, select Noise from the Gradient Type drop-down list. In a Noise Gradient, you can adjust the amount of color, restrict colors, add transparency, and adjust how roughness or smoothness of the gradient blends.

After working with the predefined set of gradients, you might find that you want to create your own color blends. Using the Gradient Editor you can do just that. The Gradient Editor enables you to specify the placement of the colors in the gradient through the use of stops. A stop is a marker or place in a gradient where the values set for the markers has been reached. The Gradient Editor provides two kinds of stops: one for color and one for opacity. Color stops are used to determine the placement of color in a gradient as well as the hue. Opacity stops control the level of visibility at points in the gradient. Between stops are midpoints, which are represented by diamonds. They can be moved to speed up or slow down transitions between colors.

1. To access the Gradient Editor, select the Gradient tool from the toolbox and then double-click on the gradient thumbnail on the options bar (see Figure 134-1).



Figure 134-1: The gradient thumbnail on the options bar

2. Under Presets, select the gradient you want to edit (see Figure 134-2). You can view the settings of the selected gradient under Gradient Type.

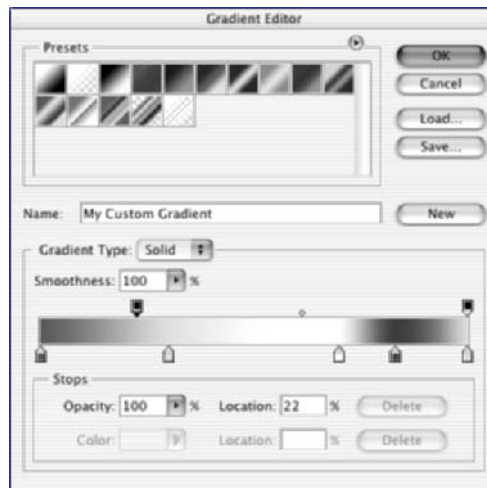


Figure 134-2: The Gradient Editor dialog box

**Task 134**

3. To reduce the color banding in a gradient, lower the percentage value in the Smoothness text box or drag the Smoothness slider to the left. The higher the percentage value, the less smooth the gradient.
4. To change the opacity of a color in the gradient, click one of the Opacity stops on top of the gradient preview bar under Gradient Type. Under Stops, you can adjust the opacity and location of the selected stop in the gradient. The lower the opacity percentage, the lighter the gradient.
5. To change a color in the gradient, select a color stop below the gradient preview. Then double-click either the color stop or the Color swatch under Stops to launch the Color Picker dialog box. Alternatively, you can also click the arrow button to the right of the Color swatch to select the foreground or background color.
6. To change a color's placement in the gradient, click and drag the appropriate color stop. You can also enter a percentage value in the Location text box under Stops after selecting the color marker.
7. To remove a color from a gradient, click and drag the color stop that is located at the bottom of the dialog box.
8. No matter how slight the change, when you adjust a preset gradient setting, Photoshop changes the name of the gradient to Custom. Enter a descriptive name of your new custom gradient in the Name text box and click New to add it to the list of thumbnails under Presets.
9. Click OK to select your new gradient, which Photoshop now displays on the options bar.

***cross-reference***

- To place a gradient in an image, see Task 133.

# Task 135

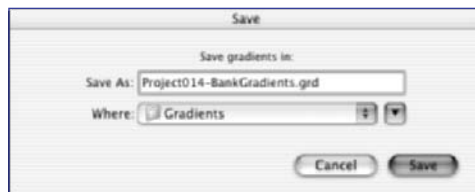
## Saving and Loading Gradient Libraries

To help you better manage your gradients, Photoshop enables you to create and save libraries of gradients. Saving a library of gradients enables you to save project-specific gradients in one file for easy access, or to collect all your custom gradients in a separate file than the gradient presets. In the following steps you will learn how to save and load gradient libraries.

### note

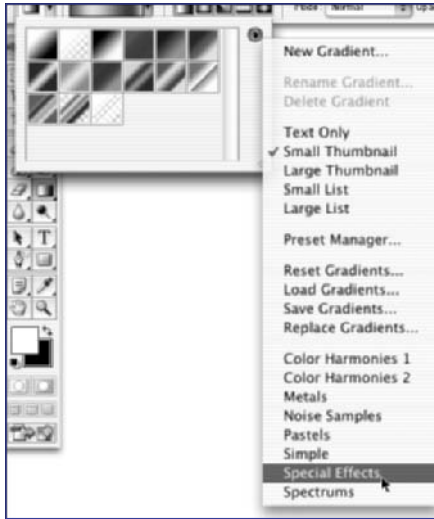
- Although you can save your library files in a location of your choice, saving them in the default Presets/Gradients folder enables Photoshop to recognize the files and list their names on the Gradient pickers option menu together with the other predefined gradient libraries.

1. To save a custom gradient library, first open the Gradient Editor dialog box.
2. Then create your custom gradients or make edits to existing gradients in the Gradient Editor dialog box. To delete a gradient from the list, press (Windows) Alt-click or (Mac) Option-click on the gradient thumbnail.
3. When you have finished compiling the list of presets you want, click Save to open the Save dialog box (see Figure 135-1).



**Figure 135-1:** The Save dialog box

4. Enter a descriptive name for your library in the Save As text box, specify the location where you want to save your library file (the default location is the Gradients folder), and click Save.
5. To load a gradient library, open the Gradient Editor dialog box.
6. Click Load to open the Load dialog box. Locate the gradient library file you want and click OK. Alternatively, you can also click the arrow button next to the gradient thumbnail on the options bar to open the Gradient picker. Next, click the small triangle to the right of the Presets list and select the name of the gradient library you want from the lower part of the resulting popup menu (see Figure 135-2)



**Figure 135-2:** Selecting a gradient library

7. When you try to load a gradient library, Photoshop wants to know whether you want to replace the current gradient library or append the library you are about to load to the current one (see Figure 135-3). Click OK to replace the current library or Append to add a new set of gradients to the current library.



**Figure 135-3:** Decide whether you want to replace or expand the current gradient library.

8. If you want to return everything to what it was like before you started editing the gradient libraries, select Reset Gradients from the palette menu, which is located by pressing the triangle on the upper left-hand of the Presets fieldset.

## Task 135

### *tip*

- To change the name of a gradient that has already been placed in a gradient library, double-click the gradient under Presets and edit the name in the resulting dialog box.

### *cross-reference*

- To learn about creating your own gradients, see Task 134.



# Task 136

## Creating and Defining a Pattern

**H**ow do you create a repeating image or tile effect in Photoshop without having to copy and paste your images or design repeatedly by hand? Follow these steps and you'll find out.

1. To create and define a pattern, open an image or select a layer with pixels on it.
2. Use the Marquee tool to select the area you want to use as a pattern.
3. Select Edit ⇨ Define Pattern (see Figure 136-1).

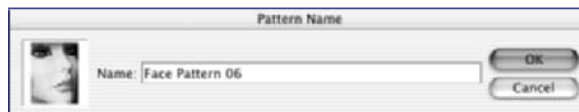
### notes

- When you define a pattern, enter 0 in the feather text box on the Options Bar.
- You don't have to worry about applying a pattern to an image that has been saved in a different color mode than the image that provides the source for the pattern. Photoshop automatically changes the color mode of the pattern so it can be used with your image.



**Figure 136-1:** Choosing to define a pattern from a selection

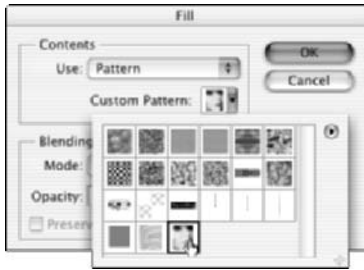
4. Enter a descriptive name for your pattern in the Name text box of the Pattern Name dialog box (see Figure 136-2) and click OK to save the pattern to a list of custom patterns.



**Figure 136-2:** The Pattern Name dialog box

**Task 136**

5. To apply a pattern to part of an image, use the Marquee tool and select the area of your image that you want to modify.
6. Select Edit ⇨ Fill to open the Fill dialog box.
7. Under Contents, select Pattern from the Use list.
8. From the Custom Pattern list, select the pattern you want to use (see Figure 136-3).



**Figure 136-3:** Selecting a Custom Pattern from the Fill dialog box

9. Under blending adjust the Mode and Opacity settings to specify your blending options.
10. Click OK to apply the pattern to your image (see Figure 136-4).



**Figure 136-4:** An image that has been filled by a pattern

***cross-reference***

- To learn more about how to blend patterns, check out Task 125.

# Task 137

## Setting Brush Dynamics

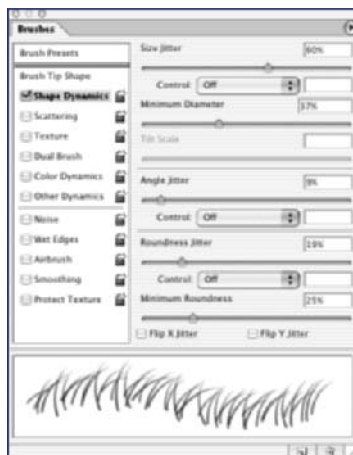
### note

- When using the Pencil tool, you will not be able to set the Flow control.

Painting on a digital canvas is a different activity than painting on an actual canvas with real paints. When you paint on a real canvas, you can see the skill of an artist in the detail and control of her brush strokes. Not only will a skilled painter have many paintbrushes that provide her the ability to paint with different marks on a canvas, an artist can vary the pressure of the brush onto the canvas, change the direction of the brush, and so on. This skill with a paintbrush is learned over time through practice and experimentation.

With Photoshop, you have the ability to change some of the parameters with brushes. By no means will you have the flexibility or capabilities that a skilled painter would, but using Brush Dynamics will allow you the freedom to create more realistic (or even unrealistic) brush strokes for your digital creations. To see an example of these Brush dynamics, check out the example sheet at the book's companion Web site at [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).

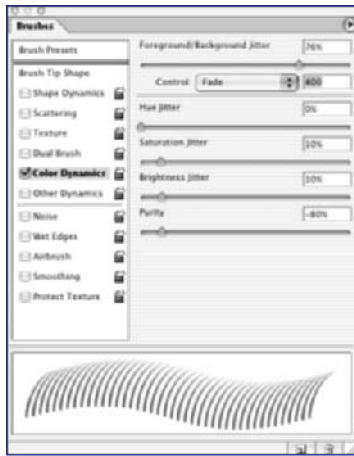
- To set Brush Dynamics, first bring up the Brush palette, which is in the palette well by default, or can be accessed via Window ⇨ Brushes.
- To adjust the different tip shape marks that can be made with a brush, press the name Shape Dynamics in the Brush palette (see Figure 137-1).



**Figure 137-1:** The options available for Shape Dynamics

- In Shape Dynamics, you can set the amount of Jitter for size, angle and roundness. In Photoshop, Jitter refers to how much the brush variation over the course of brush stroke at the tip of a pen. It's just one more way to create interesting effects in Photoshop.

4. To adjust the way color will come out from a brush stroke, press the name Color Dynamics in the Brush palette (see Figure 137-2).



**Figure 137-2:** The options available for Color Dynamics

5. In Color Dynamics, you have the ability to set how much of change is allowed between the foreground and background color.
6. In Color Dynamics, you can also specify the change in hue, saturation and brightness.
7. The Purity setting in Color Dynamics determines how much of the foreground or background color is allowed in a brush stroke.
8. To adjust how a stroke will be formed over the course of a brush stroke, press the name Other Dynamics. (See Figure 137-3.)



**Figure 137-3:** The options available for Other Dynamics

## Task 137

### tip

- Simply filling the checkbox of Brush Dynamics will not bring up the options for Brush Dynamics.

### cross-reference

- To learn how to create your own brush, check out Task 138.

# Task 138

## Creating Custom Brushes

From bristles to sticks, painters are limited in terms of what they can use as a brush. In Photoshop, however, you can make a brush out of almost anything in an image. The following steps will show you how to make a custom brush out of a portion of an image.

### note

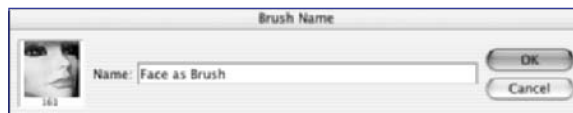
- You can select an area of any size up to 2,500 pixels by 2,500 pixels when creating your custom brush.

1. To create a custom brush, open an image or select a layer with pixels on it.
2. Select the Rectangular Marquee tool from the toolbox.
3. Draw a selection in the portion of the image that you want to convert into a brush (see Figure 138-1).



**Figure 138-1:** Drawing a selection that will be used to create a brush

4. Select Edit ⇨ Define Brush to open the Brush Name dialog box (see Figure 138-2).



**Figure 138-2:** The Brush Name dialog box

5. Enter a descriptive name for your custom brush and click OK.
6. To select the custom brush you just created, select the Brush tool.
7. On the Options Bar, select the drop-down menu next to the brush thumbnail.
8. Select the custom brush from the list of preset brushes (see Figure 138-3).



**Figure 138-3:** Selecting the custom brush

9. Click in your canvas and start painting (see Figure 138-4).



**Figure 138-4:** Painting with the new custom brush

## Task 138

### tip

- In a crafts store you can buy rubber stamps and ink pads to accentuate stationery. You can do the same thing in Photoshop. Find or create an image you like and make it a custom brush. Then select the brush and make one solid impression of it on your image. Print it out on your color printer and — voilà! You have made your own digital stamp.

### cross-reference

- To find out how to set the dynamics of a brush stroke, check out Task 137.

# Task 139

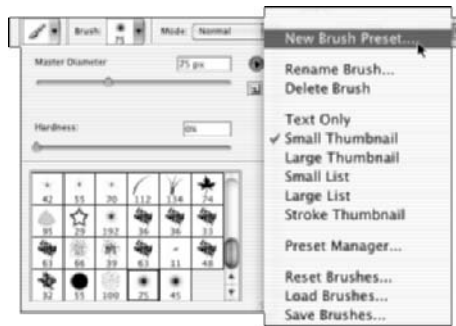
## Editing a Preset Brush

When you are using the preset brushes provided by Photoshop, you might realize that you want to modify a brush just a little bit to suit your needs. In order to do this, you can simply modify an existing brush. Or, as described in the following steps, you can create a copy of the original brush and then edit the settings of your copied brush, keeping the original brush intact.

### note

- To learn more about brush dynamics, see Task 137.

1. Select the Brush tool from the toolbox.
2. Click the Brush Preset picker on the options bar.
3. Click the Brush Preset picker's option button (the black triangle in the upper right) to open the picker's options menu.
4. Select New Brush Preset (see Figure 139-1).



**Figure 139-1:** Getting ready to create a new brush preset

5. Enter a descriptive name for your new custom brush in the Brush Name dialog box and click OK (see Figure 139-2).



**Figure 139-2:** The Brush Name dialog box

6. To edit the brush you just created, select Windows ⇨ Brushes to open the Brushes palette.
7. Click Brush Presets and select the custom brush you created in Step 5.
8. Modify the settings of the brush to your liking as shown in Figure 139-3.



**Figure 139-3:** Modifying a preset brush

## Task 139

### tip

- To create a new brush based on an existing brush or to rename or delete a brush, right-click (Windows OS) or Command-click (Mac OS) the brush you want in the Brush Preset picker on the options bar. This opens a shortcut menu which enables you to select the New Brush, Rename Brush, and Delete Brush commands.

### cross-reference

- To learn how to create a brush from an image, see Task 138.



# Task 140

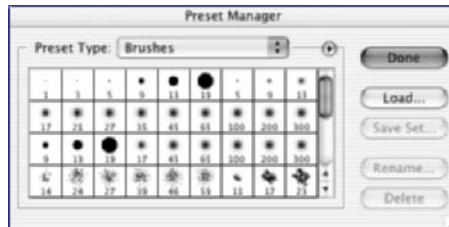
## Creating and Saving a Brush Set

**C**reating and saving custom brush libraries enables you to organize and store your brushes. You can define sets of brushes that are custom-made for a specific purpose or collect themes of brushes. When you have finished a project, you can save and store all the brushes you used as one set for future reference. The following steps explain how to create a brush set.

### notes

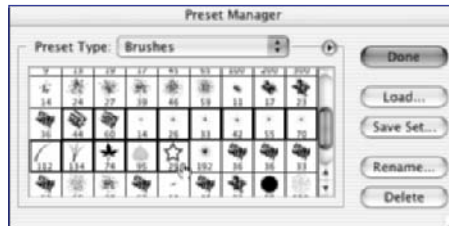
- Although you can save your files in a location of your choice, saving them in the default Presets/Brushes folder enables Photoshop to recognize the files and include them in the list of predefined brush libraries
- If you want to load a set of brushes, select Load Brushes from the Brush Preset picker's options menu.

1. Select a Brush tool from the toolbox.
2. Choose Edit ⇨ Preset Manager to open the Preset Manager dialog box (see Figure 140-1).



**Figure 140-1:** The Preset Manager dialog box

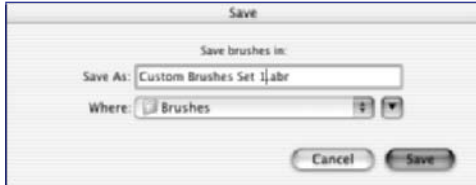
3. Shift-click the brushes you want to collect in a set (see Figure 140-2).



**Figure 140-2:** Shift-click the brushes you want to include in a set. Notice the thicker border around the selected brushes.

**Task 140**

4. To remove the brushes you don't want, Alt-click (Windows OS) or Option-click (Mac OS) the unwanted brushes.
5. When you have whittled down the list of brushes to those you really want to keep for future reference, click Save Set.
6. Enter a descriptive name for your custom set of brushes in the Save As text box of the Save dialog box (see Figure 140-3).



**Figure 140-3:** Provide a descriptive name for your custom brushes set.

7. Select the location where you want to save your set. By default, Photoshop saves your brushes in the Presets/Brushes folder of your Photoshop installation.
8. Click OK to finish saving your custom set.

***cross-reference***

- To learn how to create your own brushes, see Task 139.



## Part 10: Channels and Masks

Task 141: Working with Color Channels

Task 142: Splitting Channels into Separate Images

Task 143: Creating and Editing an Alpha Channel

Task 144: Converting a Selection to a Channel

Task 145: Using the Quick Mask Mode to Isolate an Image Area

Task 146: Changing the Quick Mask Options

Task 147: Storing Masks in Channels for Later Use

Task 148: Using the Channel Options in the Save Selection Dialog Box

Task 149: Using the Channel Mixer to Create Interesting Color Effects

# Task 141

## Working with Color Channels

### note

- Although you can load an existing color channel as a selection, once you have made your changes to the image that channel will have been modified and you will not be able to load the exact channel again. So, it's best to make a copy of the color component before editing your image.

**C**olor channels are fundamental to every image you open in Photoshop. When you look at an image on your screen, your eyes and brain will scan the shape and outline of the image to construct a mental representation of what you are looking at. From a Photoshop perspective, however, this content is made up of individual channels that, when combined, result in a simulated full-color image. For example, when you are working with an RGB image and look at the Channels palette, you'll see the red, green, and blue color channels displayed. A CMYK image produces four color channels: cyan, yellow, magenta, and black. When working with color images, however, you will typically edit the composite channel, which represents all the color channels for your image, instead of modifying the individual channels that make up an image. Still, if you experience an artistic itch that needs scratching, you can always modify the look and feel of an image with a few clicks of the mouse after dipping your digital pen or brush into an individual color channel and editing it to your liking or duplicating it and using it as a selection or a mask.

1. To create a duplicate of a color channel, open an RGB or CMYK image. For this task, we chose to work in the image shown in Figure 141-1. (For a color version of this figure, check out the companion Web site to this book at [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).)



**Figure 141-1:** The initial image

2. Select Window ⇨ Channels to open the Channels palette.
3. Select Image ⇨ Mode to verify that you are working either in RGB or CMYK mode.
4. In the Channels palette, click and drag the color channel you want and drop it on the Create New Channel button at the bottom of the palette to create a duplicate of the selected channel.
5. To edit the areas of the image that are defined by the copied channel, select the channel and click the Load Channel As Selection button (see Figure 141-2).



**Figure 141-2:** Loading the Red color channel copy as a selection

## Task 141

### tip

- For this task, we used the Hue/Saturation command to modify the image. However, you can use all the editing tools available in Photoshop to modify the image to your liking.

- Click the top-most channel in the Channel palette to open the composite color channel.
- Modify your image.
- To turn off the selection, select the Marquee tool and click inside the document window.
- To hide the selection and preview the image (see Figure 141-3), press Ctrl+H (Windows OS) or Command+H (Mac).



**Figure 141-3:** The image has been modified by inverted colors that were only selected through the copy of the red color channel. The resulting image looks like an overexposed photograph.

### cross-reference

- To learn how to save a channel, see Task 143.

# Task 142

## Splitting Channels into Separate Images

Photoshop enables you to split individual channels into separate images. This is ideal in case you need to carry your individual color channels to another image editing or printing program that does not understand how to handle channels. To split channels into separate images, follow these steps:

1. Open an RGB or CYMK image. For this task, we used the image shown in Figure 142-1.



**Figure 142-1:** Our sample image before it is split into separate images

2. Check the Layers palette to verify that the image has only one layer.
3. If the image has more than one layer, select Layer ⇨ Flatten Image. Alternatively, you can also select Flatten Image from the Layers palette's options menu.
4. Select Window ⇨ Channels to show the Channels palette.
5. Select Split Channels from the Channels palette's options menu (see Figure 142-2).



**Figure 142-2:** Select the Split Channels command

### notes

- Make sure your image is flattened; otherwise, Photoshop will not be able to split your source image into separate images.
- By default, Photoshop assigns the source image's filename plus an acronym for the source channel (Windows) or the full channel name (Mac) to split images.

Task **142**

6. If your source image is an RGB image, it will be replaced by three images based on the red, green, and blue channels (see Figure 142-3). For CMYK images, the image will be replaced by four images based on the cyan, yellow, magenta and black channels. To keep the files for later use, select each file and choose File ⇨ Save. Alternatively, you can also press Ctrl+ (Windows OS) or Command+S (Mac).
7. To merge the grayscale images that came out of splitting RGB or CMYK images, open the grayscale images you want to merge. Since you have already split the previous image into three images, you can merge them back into one image.



**Figure 142-3:** The result of splitting channels in an RGB image

8. Select Merge Channels from the Channels palette's options menu to open the Merge Channels dialog box (see Figure 142-4).
9. From the Mode popup list, select the type of merge you want to perform. Your options are: RGB, CMYK, Lab Colors and Multi Channels (see Figure 142-4). In the Channels text box, specify the number of channels you want. You will need to select three channels for RGB and Lab colors and four for CMYK.



**Figure 142-4:** Selecting a color mode in the Merge Channels dialog box

10. After pressing OK, a Merge Channels dialog box will appear, allowing you to determine which file will be earmarked for each channel. For each file, select the channel destination you want and click. Your images will now be compiled into one image.

### *cross-reference*

- To learn more about layers, refer to Task 152.



# Task 143

## Creating and Editing an Alpha Channel

An alpha channel is an 8-bit channel containing 256 levels of gray, from 0 to 255 representing black to white respectively. In an alpha channel, the black areas hide the image from digital manipulation; white represents a selected area. The shades of gray are representations of opacity determining how much of an image will be selected. For example, areas of an alpha channel that are a dark gray will still be open for manipulation by filters and brushes but not as much as an area that is lighter or all white. The following steps detail how to create, edit and load an alpha channel to aid in digital manipulation:

### notes

- To edit the default settings of a new alpha channel, including the channel name or color, Alt-click (Windows OS) or Option-click (Mac) the Create New Channel button.
- A Photoshop file can hold up to 24 channels. However, the more channels you have the more unwieldy your file might become in the editing process.
- To add a dash of complexity to this is a simple effect, select a different color, vary the border width or reapply the effect with different colors.

1. Open an image.
2. Select Window ⇨ Channels to open the Channels palette.
3. Click the Create New Channel button at the bottom of the Channels palette to create a new channel (see Figure 143-1).

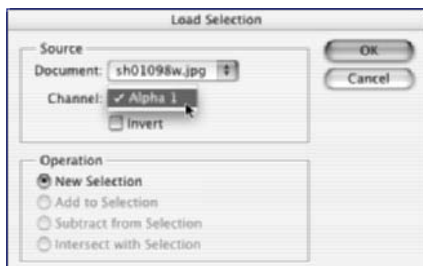


**Figure 143-1:** Clicking the Create New Channel icon

4. Press Ctrl+A (Windows) or Command+A (Mac), or choose Select ⇨ All to select the contents of the document window.
5. Choose Select ⇨ Modify ⇨ Border to open the Border Selection dialog box. Enter a value of 20 pixels for the width of the border selection and press OK.

**Task 143**

6. Press Alt+Delete+D (Windows OS) or Option+Delete+D (Mac) to fill the area of the border selection with white.
7. Click inside the image to cancel the selection.
8. Click the composite RGB color channel or press Ctrl+~(Windows OS) or Command+~ (Mac) to work on the composite color channel.
9. Choose Select ⇨ Load Selection to open the Load Selection dialog box. Select the name of the alpha channel you want from the Channel drop-down menu (see Figure 143-2).



**Figure 143-2:** Selecting a channel in the Load Selection dialog box

10. Click Delete to clear away the area around the edges of the image, creating a nice faded border (see Figure 144-3).



**Figure 143-3:** The results of working with an alpha channel

***cross-reference***

- To learn more about making selections, see Task 69.

# Task 144

## note

- Essentially any method you can use to make a selection from the simple rectangle marquee tool to color range enables you to create complex selections as channels.

## Converting a Selection to a Channel

After selecting an area of your image, you can convert your selection into a channel and then save it along with the native Photoshop file format and bring it back for later use in digital imaging. So, if you want to bring back a specific selection ten minutes or ten months from now, you can! Perform the following steps to save a selection into a channel:

1. Open an image. For this task, we used the image shown in Figure 144-1. (For a color version of this figure, check out the companion Web site to this book at [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).)



**Figure 144-1:** The image that will be used as demonstration

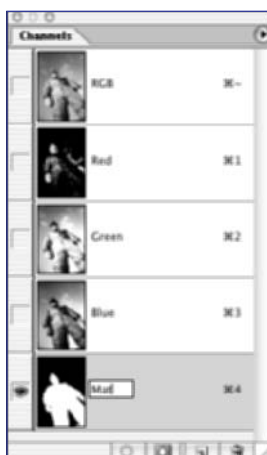
2. Select a Marquee tool from the toolbox.
3. Select an area in your image (see Figure 144-2).
4. Select Window ⇨ Channels to show the Channels palette.
5. Click the Save Selection As Channel button at the bottom of the Channels palette to create a new channel (see Figure 144-3).
6. To rename the channel, double-click its current name and enter a new name (Figure 144-4).



**Figure 144-2:** A selection that will be turned into a channel



**Figure 144-3:** Getting ready to create a new channel



**Figure 144-4:** Renaming a channel

## Task 144

### *tip*

- Remember that you can only store up to 24 channels per image file. However, unless you want your file to become more difficult to edit, don't pile up on your channels.

### *cross-reference*

- After converting a selection into a channel, you can edit it like any other image. See Task 143 for more information.

**Task 145**

## Using the Quick Mask Mode to Isolate an Image Area

### note

- When you create a mask with a gray color, the resulting selection will display a line halfway between the open and filled areas of the mask.

The Quick Mask mode enables you to select an area of an image using tools other than the Marquee tools. You can liken working in Quick Mask mode to creating a template. For example, if you wanted to create a series of stars painted on the walls of a room, you could cut out the star shape from construction paper using a sharp blade like an X-acto knife. Then you could take the construction paper and apply paint onto the walls by dabbing on the template. In this example, cutting and using the star shape in the template is like painting in a Quick Mask mode. When in Quick Mask mode, you can use any editing or paint tool, with or without filter, to define a mask and then switch back into your normal editing mode to turn your mask into a selection.

To familiarize yourself with the Quick Mask function, follow these steps:

1. Open an image For this example, we used the image shown in Figure 145-1. (For a color version of this figure, check out the companion Web site to this book at [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).)



**Figure 145-1:** The initial image

2. Select a Marquee tool from the toolbox.
3. Select a rectangular area in your image that covers about 80 percent of the image.
4. Click the Edit In Quick Mask Mode button in the toolbox to switch into the Quick Mask edit mode (see Figure 145-2). Note that Photoshop covers the part of the image that is outside your selection in a red-tint overlay. This is the mask.



Figure 145-2: Selecting the Quick Mask edit mode

## Task 145

### tip

- You can not save your mask. However, you can save the selection that results from working in Quick Mask mode. To do this, finish creating your mask, switch back into the standard editing mode, and then choose **Select** ⇨ **Save Selection**.

5. If you want to keep on editing the mask, use a painting or editing tool to modify the mask to your liking. You can also apply one or more filters to your mask; for example, we applied the Halftone filter to our mask (see Figure 145-3). To increase the size of your mask, paint in black over the area you want to add. To decrease the size of your mask, paint in white over the area you want to subtract. To create a feathered selection, paint in gray or any other color.



Figure 145-3: Editing a Quick Mask

### cross-reference

- To learn about Quick Mask options, see Task 147.

6. When you have finished editing your mask, click the **Edit In Standard Mode** button in the toolbox (which is to the left of the **Edit In Quick Mask Mode** button) to transform your mask into a selection.
7. Edit the area you selected in Step 3.
8. When you have finished, click outside of the selection, press **Ctrl+D** (Windows) or **Command+D** (Mac), or choose **Select** ⇨ **Deselect** to cancel your selection.

# Task 146

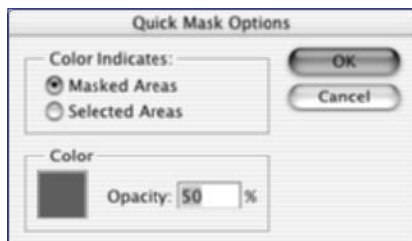
## note

- When you select the Selected Areas option, the Quick Mask icon changes into a dark circle.

## Changing the Quick Mask Options

While working in Quick Mask mode, you might want to fine-tune the Quick Mask editing options to suit your preferences. For example, if you have problems seeing the color red, you might not want the mask to appear in the default red at 50 percent opacity. Or you might want the coloration to show up on the selection rather than on the mask. Whatever your preferences, you can set them by following these steps:

1. Double-click the Quick Mask icon in the toolbox to open the Quick Mask dialog box (see Figure 146-1).



**Figure 146-1:** The Quick Mask Options dialog box

2. To have color indicate parts of the mask as shown in Figure 146-2, select the Masked Areas option under Color Indicates. (You can find color versions of the figures in this task on the companion Web site to this book at [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).)



**Figure 146-2:** The color on the image shows the mask.

3. To have color indicate the selection or selections of an image as shown in Figure 146-3, select the Selected Areas.



**Figure 146-3:** The color on the image now shows the selected parts of an image.

4. To select a different color for your mask, click the color swatch in the Quick Mask Options dialog box to open the Color Picker dialog box.
5. Select the color you want to use with your mask and click OK.
6. To make your mask lighter or darker, enter a percentage value in the Opacity text box under Color. The higher the value the darker the mask.
7. When you have finished modifying the settings, click OK.

## Task 146

### *tip*

- While in Quick Mask mode, Alt-click (Windows) or Option-click (Mac) the Quick Mask icon in the toolbox to switch the color overlay from the mask to the selected areas and vice-versa.

### *cross-reference*

- To learn more about using the Color Picker, refer to Task 39.



# Task 147

## Storing Masks in Channels for Later Use

After working on a quick mask, you might want to keep it around for future reference. However, since quick masks are temporary, you can only store them as a channel. Follow these steps to store the channel:

### notes

- Figure 145-2 illustrates how to make to switch to the Quick Mask editing mode.
- Photoshop converts any existing selection in your document window into a temporary Quick Mask channel when you switch to the Quick Mask editing mode.
- To save a quick mask for future reference, you can also switch back into the standard editing mode, which converts your quick mask into a selection, and then click the Save Selection As Channel button at the bottom of the Channels palette.

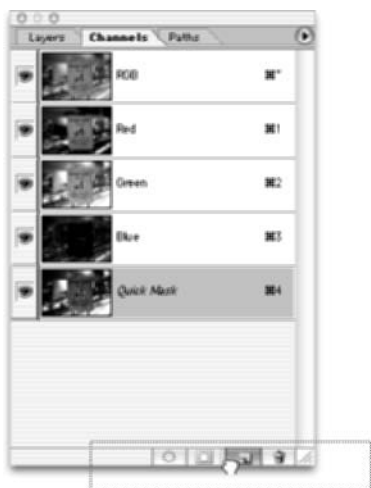
1. Select part of an image.
2. Click the Edit In Quick Mask Mode icon in the toolbox to switch to the Quick Mask editing mode.
3. Select Window ⇨ Channels to show the Channels palette. In the Channels palette, you will see an extra channel called *Quick Mask* (see Figure 147-1). This is a temporary channel that is created when you are working in Quick Mask mode.



**Figure 147-1:** The name in italics indicates it is a temporary channel.

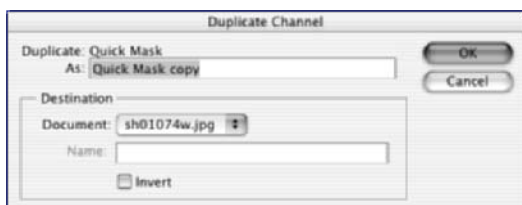
**Task 147**

4. To save your quick mask as a channel, drag the channel onto the Create New Channel icon at the bottom of the Channels palette (see Figure 147-2). This creates a new channel called Quick Mask copy.



**Figure 147-2:** Creating a permanent channel out of a temporary quick mask

5. Alternatively, you can also select Duplicate Channel from the Channels palette's options menu to the Duplicate Channel dialog box (see Figure 147-3).



**Figure 147-3:** The Duplicate Channel dialog box

6. Edit the name for the channel and the click OK to add the new channel to the Channels palette.

**cross-reference**

- To learn more about working in Quick Mask mode, see Task 145.

**Task 148**

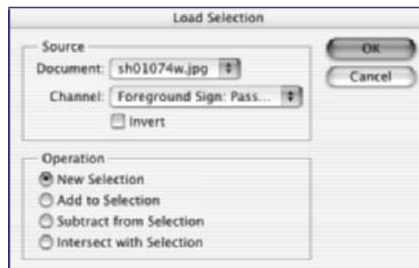
## Using the Channel Options in the Save Selection Dialog Box

**W**hen you create a selection, you can use that selection to modify a previously stored channel. The Save Selection dialog box not only enables you to do what the title suggests (saving a selection), you can also use it to add, subtract, or intersect your selection with the selection area from another channel. Follow these steps to learn how:

**note**

- When saving a file it's good to know which image formats can hold an alpha channel. The following formats can hold an alpha channel: BMP, Photoshop PSD, PDF, PICT, Pixar, Raw, and TIFF.

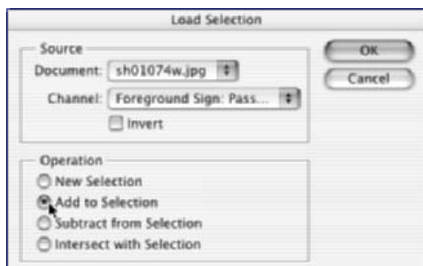
1. Open an image.
2. Select an area in your image using a Marquee tool.
3. Choose Select ⇨ Save Selection to open the Save Selection dialog box (see Figure 148-1).



**Figure 148-1:** The Save Selection dialog box

4. To save the selection as a channel in the image, leave the option for Document under Destination.

5. To save the selection as a new channel, leave the setting for the Channel dropdown list set to New. To transfer the selection to an existing channel, select the channel you want from the Channel drop-down list.
6. Enter a descriptive name for your new channel in the Name text box.
7. Under Operation, choose the New Channel option if it isn't selected already. Note that if you are transferring the selection to an existing channel, you will see additional options under Operation (see Figure 148-2).



**Figure 148-2:** Getting ready to add a selection to an existing channel

8. Select the Add To Channel option, if you want to add the area of the selection to the target channel. With Subtract from Selection option selected, whenever both the new selection and channel overlap in an image window, that area will be removed from the target channel. Select the Intersect With Channel option to make that area that is common to both the selection and target channel the new selection area in the target channel.
9. Click OK to finish saving your selection as a channel.

## Task 148

### tip

- To access the Save Selection dialog box, you can also right-click (Windows) or Option-click (Mac) your selection and choose Save Selection from the shortcut menu.

### cross-reference

- To learn more about converting a selection to a channel, see Task 144.

# Task 149

## note

- Use the Load and Save buttons in the dialog box, to keep and reuse your settings for future use.

## Using the Channel Mixer to Create Interesting Color Effects

Since Photoshop uses channels to represent the different colors that make up an image, you can do interesting visual effects. The Channel Mixer plays to this feature making it easy to create color effects in your image. To tint an image slightly or transform it into monochrome, perform the following steps:

1. Open an image. Figure 149-1 shows the image we used for this task. (You can find color versions of the figures in this task on the companion Web site to this book at [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).)



**Figure 149-1:** Our sample image before it gets “mixed up”

2. Verify that you are working with an RGB or CMYK image by selecting Image ⇨ Mode.
3. Selecting Image ⇨ Adjustments ⇨ Channel Mixer to open the Channel Mixer dialog box (see Figure 149-2).



**Figure 149-2:** The Channel Mixer dialog box

4. Select the Preview checkbox to view the changes you make in real time in your document window.
5. Select the channel you want to adjust from the Output Channel drop-down list.
6. Under Source Channels, drag the sliders or enter a percentage value in the text boxes to modify the color available in each of the color channels. You can specify a value from -200 percent to 200 percent.
7. To add white or black to a channel, drag the Constant slider or enter a value between -200 percent and 200 percent in the text box. A negative value adds black to the channel (the smaller the number, the stronger the black); a positive value adds white (the higher the number, the more white you add).
8. To create a monochrome image, select the Monochrome check box.
9. When you have finished, click OK. Figure 149-3 shows the results of our efforts of using the Channel Mixer command.



**Figure 149-3:** Our sample image after adding more blue to the image

## Task 149

### tip

- You can check and clear the Monochrome checkbox throughout the image editing process. For example, start working on an image with the Monochrome setting selected to create a monotone image. Then clear the Monochrome checkbox and modify a color channel (or two) to create an interesting coloring effect.

### cross-reference

- For a quick-and-easy way to create monochrome images, see Task 66.



## Part 11: Layer Essentials

- Task 150: Creating a Basic Layered Image
- Task 151: Organizing Your Layers by Naming and Color Coding
- Task 152: Selecting, Moving, and Duplicating Layers
- Task 153: Adjusting Master and Fill Opacities in a Layer
- Task 154: Locking Layers or Layer Attributes
- Task 155: Linking Layers or Layer Sets
- Task 156: Using Layer Sets to Organize Layers
- Task 157: Aligning and Distributing Linked Layers
- Task 158: Changing the Stacking Order of Layers and Layer Sets
- Task 159: Blending Layers Using Layer Blend Modes
- Task 160: Restricting Blending to Specific Channels
- Task 161: Adding and Editing a Hide All or Reveal All Layer Mask
- Task 162: Creating a Gradient Layer Mask
- Task 163: Using a Solid Color or Gradient Fill Layer
- Task 164: Using a Pattern Fill Layer to Enhance Another Patterned Layer
- Task 165: Using an Adjustment Layer to Fine-Tune Color Adjustments
- Task 166: Making Use of an Adjustment Layer's Mask
- Task 167: Moving Layers to Other Images
- Task 168: Cleaning Up Edges with Defringe and Remove Matte Commands
- Task 169: Using Layers to Create a Collage
- Task 170: Creating a Knockout Effect with Knockout Options
- Task 171: Merging Layers in Different Ways
- Task 172: Rasterizing and Flattening Layers
- Task 173: Utilizing the Layer Comps Feature
- Task 174: Exporting Layers as Files



# Task 150

## Creating a Basic Layered Image

You can only imagine the relief early animators felt when they first discovered they could draw portions of their artwork on different pieces of acetate and composite them together for the final product. There was no longer a need to replicate stationary objects in the background in every frame. The good folks at Adobe realized there would be a similar benefit for image editors, and the resulting implementation is known as “layers.” Using layers, you can place artwork on transparent “sheets” which can be rearranged and moved independently of (or jointly with) other sheets. The following steps will help you create layers in your document.

### notes

- You can convert a document with a transparent background to one with a flat background by choosing Layer ⇨ New ⇨ Background from Layer after selecting your desired layer. Keep in mind that wherever your document was transparent will be filled with the Background Color selected in the Tools palette.
- Whenever you issue a Paste command in a Grayscale, RGB, or CMYK document, the pasted content will appear on a new layer.

1. Create a new document with a transparent background.
2. Make a selection, and fill its contents with the foreground color.
3. Open the Layers palette (if it is not already open) by choosing Window ⇨ Layers. (The Layers palette is shown in Figure 150-1.)



Figure 150-1: The Layers palette

4. Choose Layer ⇨ New ⇨ Layer to create a new layer.
5. Enter a name for your new layer in the Name field of the New Layer command dialog box (shown in Figure 150-2).

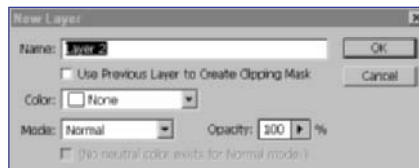
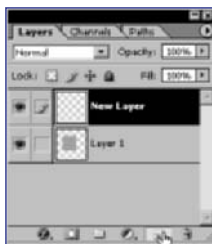


Figure 150-2: The New Layer command dialog box

### caution

- If you are working in an office with several different versions of Photoshop, beware of how many layers you create. Older versions had a limit to how many layers could be present in one document.

6. Press the OK button when you have finished typing the layer's name. You should now see a new item in the Layers palette with the name you have just provided.
7. Press the Create a new layer icon at the bottom of the Layers palette (see Figure 150-3) to create additional layers without providing a layer name.



**Figure 150-3:** The Create a new layer button

## Task 150

### tips

- Choose Layer ⇄ New ⇄ Layer via Copy to create a new layer with a duplicate of your selection's contents.
- You can also create a new layer by choosing New Layer from the Layers palette's fly-out menu.

### cross-reference

- To learn how to stroke a selection, please refer to Task 77.

**Task 151**

## Organizing Your Layers by Naming and Color Coding

### note

- Photoshop only comes with seven colors with which to code your layers, and you do not have the ability to edit these colors.

When dealing with a document with dozens of layers or more, you may find Photoshop's default layer naming convention less than useful. For instance, a co-worker opening your document will have no idea what content is on "Layer 1" or "Layer 137." To alleviate the confusion such generic labeling can cause, Photoshop allows you several organizational devices. Two of these devices are layer names and layer colors. Instead of leaving a layer containing an image of an eye named "Layer 7," you could label it "Eye ball." This ability, as well as the color-coding, provides yourself and others an easy way of sorting through your document's construction at a later date.

1. Create a new document with a transparent background.
2. Open the Layers palette (if it is not already open) by choosing Window ⇨ Layers.
3. Press the little paper icon at the bottom of the Layers palette (see Figure 151-1) to create a new layer.

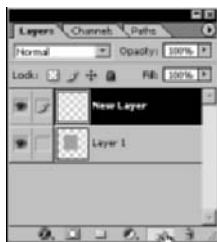


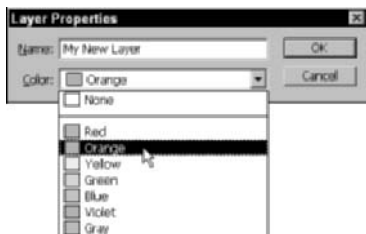
Figure 151-1: The New Layer button

4. Choose Layer Properties from the Layer palette's fly-out menu.
5. Enter a name for your new layer in the Name field of the Layer Properties command dialog box.

### caution

- Double-clicking on a layer outside of the layer name will launch the Blending Options dialog box, not the Layer Properties dialog box.

6. Choose a color from the pull-down menu (as shown in Figure 151-2) to color code your layer.



**Figure 151-2:** Applying color to your Layer palette items

7. Press the OK button when you have finished typing the layer's name and choosing a color. You should now see your item in the Layers palette with the name you have just provided and the selected color highlighting its options.

## Task 151

### *tips*

- Right-click (Windows) or Ctrl-click (Mac) on a layer name to access the Layer Properties command in a quicker fashion.
- Use color-coding to visually group layers with similar content together. For example, you could apply Blue to all text layers.
- Double-click on the layer name in the Layers palette to begin editing it. The layer's name will become selected, and a thin black rule will appear around the name to show that it is editable.

### *cross-reference*

- In Task 155, you'll learn how to organize layers using Layer Sets, a concept akin to file folders in your hard drive's directory structure.

**Task 152**

## Selecting, Moving, and Duplicating Layers

### notes

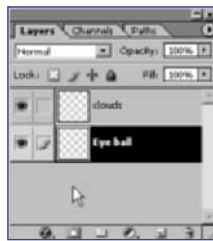
- You can also rearrange the order of your layers by using the Arrange commands, found under the Layer menu.
- The Duplicate Layer command allows you to create a new document based upon your selected layer. You can also choose to have a selected layer copied into any open document.

### caution

- You must select a layer before you edit any of its contents. Otherwise, you will edit the contents of the layer you have currently selected.

**L**ayers become more useful when you have the ability to reorganize and duplicate them. Invariably, you will need to reorder your layers, moving one layer above or below another to change the document's composition. You may also find yourself wanting to duplicate a layer to quickly edit the clone of another layer's contents without affecting the original. Either way, you will need the ability to specify which layer to modify, and the Layers palette provides a means to handle all these tasks.

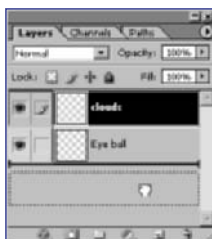
1. Open an existing document with layers.
2. Click on a layer's name in the Layers palette to select that layer. Upon clicking, the selected layer will appear highlighted with a paint brush icon in its second column and its name bolded (as shown in Figure 152-1).



**Figure 152-1:** A selected layer

3. To change a layer's order in the Layers palette, click and hold on the layer's name.
4. While continuing to hold the mouse down, drag your layer above or below another layer. Notice your cursor will change from a pointing selection finger to a closed, dragging fist upon movement.

5. Release your mouse click when a black stroke with in-pointing arrows at each end appears in a position above or below the other layer, as illustrated in Figure 152-2.



**Figure 152-2:** Moving a layer below another existing layer

6. To duplicate a layer, click and hold on the layer's name in the Layers palette.
7. Drag the layer over the little paper icon at the bottom of the Layers palette.
8. Release your mouse button, and a duplicate version of the layer just dragged will appear in your Layers palette above the original layer.

## Task 152

### *tip*

- Right-click (Windows) or Ctrl-click (Mac) on a layer and choose the Duplicate Layer command to get additional options, such as naming and location, for duplicating the selected layer.

### *cross-reference*

- Task 158 shows how to change the ordering of Layer Sets.

# Task 153

## Adjusting Master and Fill Opacities in a Layer

### notes

- Layer opacity is different from Fill opacity. Layer opacity adjusts both a layer's contents and its effects, whereas Fill opacity only adjusts a layer's contents.
- Adjusting the opacity of several of your artwork layers will produce a denser image in places where the layers' imagery intersects and a lighter image in isolated areas.

### caution

- If you set a layer to 0 percent opacity, the layer's contents will be completely transparent and thus invisible.

As you begin compositing the contents of several layers together, you may find yourself needing to adjust the opacity of layers in their entirety. By adjusting the level of transparency for the layer, you can create interesting effects such as ghosting or the blending together of two objects. As with nearly all things related to layers, the quickest means of opacity adjustment lie in the Layers palette.

1. Create a new document with a transparent background.
2. Form a selection using one of the Marquee or Lasso tools, and then use the Paint Bucket Tool to fill the selected area with the foreground color.
3. Open the Layers palette (if it is not already open) by choosing Window ⇨ Layers.
4. Click on the arrow button to the right of the Opacity field in the Layers palette. After clicking, you will see a slider pop up beneath the Opacity field. (The slider is shown in Figure 153-1.)

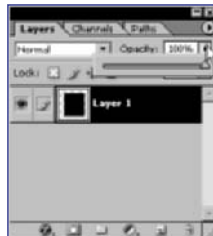


Figure 153-1: The layer Opacity slider

5. Click and hold on the slider button (a small arrow pointing upward).
6. Drag the slider to determine to what level of opacity the layer should be set. (A lower percentage value makes the object more transparent.)
7. Click on the arrow button to the right of the Opacity field in the Layers palette to confirm your opacity change. Figure 153-2 shows a before-and-after 50 percent opacity change of the top layer.



**Figure 153-2:** The results (right) of a 50 percent opacity change

8. To adjust the opacity again, double-click in the Opacity field in the Layers palette.
9. Type in a numerical value, between 0 and 100, and press the Return key to confirm your new opacity value.

## Task 153

### *tips*

- You can also adjust the opacity through a similar slider in the Blending Options command, available by choosing Layer ⇨ Layer Style ⇨ Blending Options.
- Rather than using the Opacity option in the Eraser tools, use Layer opacity to adjust your artwork. This keeps the original artwork intact should you need to make any changes to it later.

### *cross-reference*

- In Task 184, you'll learn how to apply other Layer Styles, such as a pattern overlay, beyond simple opacity changes.



# Task 154

## Locking Layers or Layer Attributes

To prevent accidental editing of certain parts of your document, you have the ability to “lock down” aspects of your layers. Whether it is eliminating any type of editing whatsoever, movement, painting, or transparency, the Layer palette’s locking buttons provide you with an extended level of control over a layer’s contents. By using these controls, you can reduce the amount of cleanup required from accidental mistakes.

### notes

- A light-colored padlock icon will appear in the layer listing in the Layers palette whenever a Lock button is pressed. If the Lock All button is pressed, a darker icon appears.
- All modifications, even including opacity changes and layer effects, are blocked when the Lock All button is pressed.
- The Lock Position button can be pressed with either the Lock Transparent Pixels or the Lock Image Pixels buttons to further refine your locking settings.

1. Create a new document with a transparent background.
2. Make a selection, and fill its contents with the foreground color.
3. Press the Lock Transparent Pixels button in the Layers palette, shown depressed in Figure 154-1, to allow editing of the layer while preserving the transparent areas of the layer.

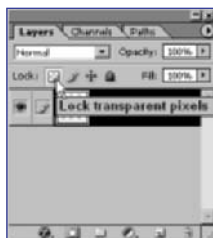


Figure 154-1: The Lock Transparent Pixels button

4. Press the Lock Image Pixels button in the Layers palette, shown depressed in Figure 154-2, to prevent any modifications of the layer using the Painting or Eraser tools.



Figure 154-2: The Lock Image Pixels button

### caution

- You are still able to move selected content while the Lock Position button is pressed.

5. Press the Lock Position button in the Layers palette, shown depressed in Figure 154-3, to prevent the use of the Move tool on the layer's contents.

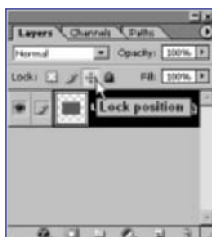


Figure 154-3: The Lock Position button

6. Press the Lock All button in the Layers palette, shown depressed in Figure 154-4, to prevent any and all editing of the layer.

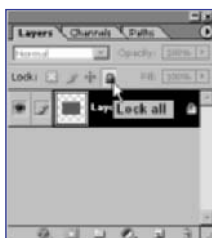


Figure 154-4: The Lock All button

7. Depress any of the lock buttons to disable the locking effects.

## Task 154

### tip

- Press the Lock Transparent Pixels button when you are looking to preserve the edge of an object while painting over its contents.

### cross-reference

- If you are worried about someone inadvertently editing your file, Task 18 shows how to save a copy of your file as a backup.

# Task 155

## Linking Layers or Layer Sets

Just as couples hold hands while walking in unison, Photoshop layers (and layer sets) can be “linked” to move in conjunction with other layers. Symbolized as a chain link in the second column of the Layers palette’s listing, linking allows you to bind two or more layers together. This can reduce the amount of steps needed to move objects that should retain a fixed distance between each other.

### notes

- A Layer Style can be applied to all linked layers by right-clicking (Windows) or Ctrl-clicking (Mac) on any layer in a linked chain and selecting Paste Layer Style to Linked after copying the Layer Style.
- If you drag a layer between documents, any layers linked to the layer dragged will be copied as well.

1. Open an existing document with several layers.
2. Open the Layers palette (if it is not already open) by choosing Window ⇨ Layers.
3. Select a layer with artwork you would like to link with another layer.
4. Click in the second column of the layer listing the layer you wish to link. Upon clicking, a “chain link” icon will appear within this square, as shown in Figure 155-1.

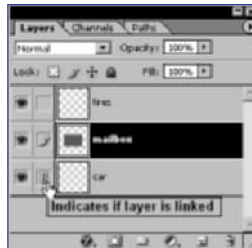


Figure 155-1: Linking layers together

5. Click in the second column of the layer listing of any other layers you wish to link to the selected layer.

### caution

- If one of the layers in your link chain is locked, you will receive an error message when trying to move any of the linked layers. Simply unlock the culprit layer, and you will be free to move the linked layers at will.

6. Select the Move tool from the first row and second column of the Tools palette, shown in Figure 155-2.



**Figure 155-2:** The Move tool

7. Click and hold anywhere in your document.
8. Drag your cursor to move the contents of all the linked layers simultaneously.
9. Release the mouse when your linked layers' contents are in their desired location.

## Task 155

### *tips*

- Link layers of similar content, such as navigational buttons for a Web site, to ensure their contents retain their relative location data.
- You can delete, merge or lock several layers simultaneously if they are linked together. Click on the Layers palette's fly-out menu to see the various commands available after linking your layers.

### *cross-reference*

- Layers aren't the only item in the Layers palette you can link. You can also link Layer Sets, described in Task 156.

# Task 156

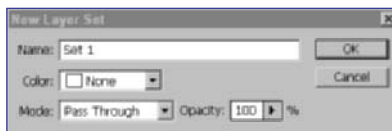
## Using Layer Sets to Organize Layers

If you use a computer, you more than likely use “folders,” or directories, to organize your data. With Photoshop 6, Adobe finally introduced folders to the Layers palette, dubbing them “layer sets.” These sets allow you to group layers of like data together, making organization of your Layers palette considerably more efficient and enabling the stacking order of a series of layers to be changed considerably more quickly. After using layer sets in a document, you’ll never want to organize Photoshop files any other way. The following steps show this method of organization in action.

### notes

- Layer sets can be created from a series of linked layers by choosing Layer ⇨ New ⇨ Layer Set from Linked.
- Layer sets can be used to quickly lock, hide, or fade a series of layers by applying the appropriate controls on the layer set level rather than on an individual layer basis.

1. Open an existing document with layers.
2. Open the Layers palette (if it is not already open) by choosing Window ⇨ Layers.
3. Choose Layer ⇨ New ⇨ Layer Set to create a layer set and open the New Layer Set dialog box (shown in Figure 156-1).



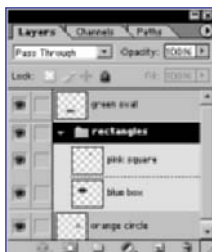
**Figure 156-1:** The New Layer Set dialog box

4. Enter a name into the Name field to describe the upcoming contents of the set, such as “Flowers.”
5. Choose a color from the Color drop-down menu to color code your layer set just as you would a layer.
6. Press the OK button after you have finished. A folder icon will now appear in your Layers palette listing next to the name you provided for the new set.
7. Click and hold on a layer you wish to move into the new layer set.
8. Drag the layer onto the layer set’s name or folder icon.

### caution

- While Photoshop CS now supports nested layer sets, it only does so up to 5 levels deep. If you need more than 5 levels, you will likely need to wait until the next major release of the application.

9. Release your mouse to move the layer into the layer set. The layer will now appear indented from the list under the layer set's listing (as seen in Figure 156-2).



**Figure 156-2:** A Layer Set and its contents

10. To demonstrate further organizational prowess, create a new layer set and click and drag it into your previously created set. With Photoshop CS, you can now nest layer sets within each other.

## Task 156

### *tips*

- Layer sets are incredibly useful for documents with dozens of layers. If your document only has a handful of layers, however, using layer sets may seem like overkill.
- You can also create a layer set by clicking the folder icon at the bottom of the Layers palette, although you will need to manually rename the set as the New Layer Set dialog box is not launched.

### *cross-reference*

- To learn how to color code a layer, flip back to Task 151.

# Task 157

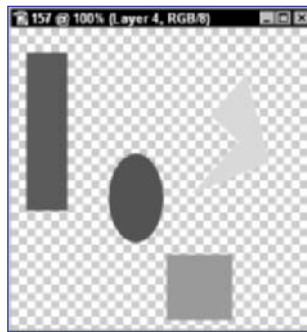
## Aligning and Distributing Linked Layers

Photoshop provides a means of aligning your imagery based upon the edges of your layers' contents. Using the Align Linked and Distribute Linked commands, you can let Photoshop handle the dirty work of moving each layer to align horizontally or vertically with the edge of the selected layer's contents. This process mimics the alignment features found in most other graphics programs, such as Adobe Illustrator and Macromedia Flash. The major difference in Photoshop's technique, however, is that its process is layer-oriented and not object-oriented.

### notes

- Layer sets can also be aligned with other layers and layer sets if they are linked.
- Distributions are calculated based upon the two extreme layers (i.e. the topmost and bottommost, or the leftmost and the rightmost).

1. Open an existing document with several layers. (An example document is shown in Figure 157-1.)

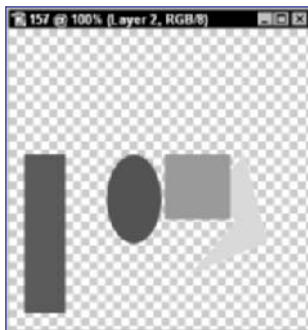


**Figure 157-1:** A document with 4 layers of content to be aligned

2. Open the Layers palette (if it is not already open) by choosing Window ⇨ Layers.
3. Select a layer with artwork you would like to link with another layer.
4. Click in the second column of the layer listings of the other layers you wish to link.
5. Choose Layer ⇨ Align Linked ⇨ Top Edges to move all linked layers so that their top edges align with the top edge of the selected layer. (The results of such an alignment on the contents of Figure 157-1 are shown in Figure 157-2.)

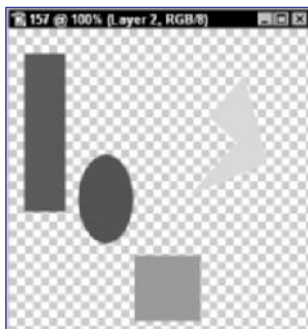
### caution

- Alignment is based upon the edges of your selected layer, not the extreme edges of all linked layers, unlike distribution.



**Figure 157-2:** The results of a top edge alignment

6. Choose **Edit ⇨ Undo** to return your layers' contents to their original location before trying the next step.
7. Choose **Layer ⇨ Distribute Linked ⇨ Horizontal Centers** to move all linked layers so that their horizontal center points are equidistant from each other. (The results of such a distribution on the contents of Figure 157-1 are shown in Figure 157-3.)



**Figure 157-3:** The results of a horizontal centers distribution

8. Click on the link icons of the layer listings of the linked layers you wish to unlink after completing your alignment or distribution.

## Task 157

### *tips*

- Use the Alignment commands to clean up your files rather than trust your eye to judge if your artwork is aligned or dragging a guide from the ruler.
- Alignment and distribution is based upon the contents of your layers. If you are seeing unexpected results, check to see if you have a small, seemingly insignificant pixel hidden off in a remote corner of your layer's content.

### *cross-reference*

- Task 30 shows how to use the Undo command to return to a previous state in your document.



# Task 158

## Changing the Stacking Order of Layers and Layer Sets

### notes

- You can also rearrange the order of your layers and layer sets by using the Arrange commands, found under the Layer menu.
- The ability to move layer sets within layer sets is new to Photoshop CS. Many longtime users will consider this option alone motivation to upgrade.

### caution

- You will receive an error message if you try to move a layer set that contains a layer set into the layer set it contains.

Just as you can reorder the priority of folders in your filing cabinet, Photoshop allows you to change the stacking order of layers and layer sets. Reordering your layers and/or layer sets will allow you to quickly move a series of layers in front of or behind other layers (and layer sets), a task that was quite tedious before the introduction of the layer set to Photoshop. Aside from the organizational benefits of such a feature, the ability to change stacking order can also determine what objects appear in front of others. Layers and layer sets that are listed higher in the Layers palette will appear above lower-listed layers in the document window. The following steps will have you moving layers and layer sets around in no time flat.

1. Open an existing document with layers and layer sets.
2. Click on a layer set's name in the Layers palette to select that layer set. Upon clicking, the selected layer set will appear highlighted with its name bolded (as shown in Figure 158-1).

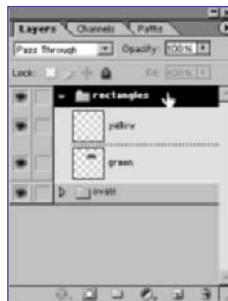


Figure 158-1: A selected layer set

3. To change a layer set's order in the Layers palette, click and hold on the layer set's name.
4. While continuing to hold the mouse down, drag your layer set above or below another layer or layer set. Notice your cursor will change from a pointing selection finger to a closed, dragging fist upon movement.

5. Release your mouse click when a black stroke with in-pointing arrows at each end appears in a position above or below the other layer or layer set, as illustrated in Figure 158-2.

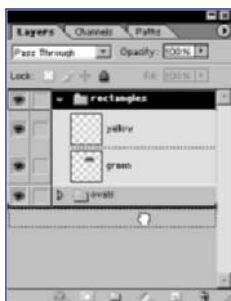


Figure 158-2: Moving a layer below another existing layer

6. To move a layer or layer set within another layer set, click and hold on the to-be-moved layer or layer set.
7. While continuing to hold the mouse down, drag your layer or layer set onto another layer set. Notice your cursor will change from a pointing selection finger to a closed, dragging fist upon movement.
8. Release your mouse click when the text of the layer set listing name to which you are dragging becomes inverted (white text on a black field).

## Task 158

### tips

- The Duplicate Layer Set command allows you to create a new document based upon your selected layer set. You can also choose to have a selected layer set copied into any open document.
- Right-click (Windows) or Ctrl-click (Mac) on a layer set in the Layers palette and choose the Delete Layer command to quickly eliminate the Layer Set.

### cross-reference

- Task 167 shows how to move layers between documents. Layer Sets can be moved in a similar fashion.

# Task 159

## Blending Layers Using Layer Blend Modes

### notes

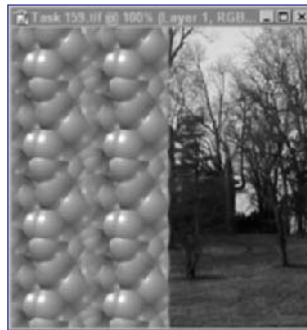
- Immediately after you have selected a blend mode from the Layers palette you can use the up and down arrow keys to apply different modes from the blending modes menu.
- The blend modes are grouped according to their functions. Color adjustment modes are found at the bottom of the list.

### caution

- If you are blending a layer above a white background, you may not notice any change in appearance. This is not an error, but rather the manner in which blend modes are calculated.

When blending different pieces of artwork together in Photoshop, one of the most convenient and non-effacing methods is to use the layer blend modes. These modes determine what calculations will be used to blend the selected layer with any layers below it. Depending on the mode you select, your layer's contents may darken (via the Multiply mode), colorize (Hue), or intensify (Saturation) the contents of lower-level layers.

1. Open an existing document containing a photograph.
2. Choose Layer ⇄ New ⇄ Layer to create a new layer.
3. Choose the Pattern Stamp tool from the fifth row and first column of the Tools palette. (Click and hold on the Clone Stamp tool's icon until a small menu is displayed, move your cursor on the Pattern Stamp tool icon, and release your mouse button.)
4. Click and drag to paint a swash of the tool's pattern across half of your photograph. Figure 159-1 illustrates the results.



**Figure 159-1:** A patterned layer atop a photograph

5. Open the Layers palette (if it is not already open) by choosing Window ⇄ Layers.
6. Click and hold on the Layer Blend Mode drop-down menu in the Layers palette.

7. Choose a blending mode, such as those shown in Figure 159-2, from the list and release the mouse.



**Figure 159-2:** The blending mode menu

8. Experiment with different blending modes to see how Photoshop CS composites the two pieces of imagery together, as shown in Figure 159-3.



**Figure 159-3:** Different blending modes applied to the same image

## Task 159

### tips

- You can apply blend modes to layer sets just as easily as you can to layers. After selecting a layer set, choose a blend mode from the same Layer blend mode as you would use for a layer.
- Layer blend modes can also be modified outside of the Layers palette. Simply choose Layer ⇨ Layer Style ⇨ Blending Options to launch the Blending Options command.

### cross-reference

- In Task 112 you can learn how to use blending modes for a paintbrush rather than a layer.

# Task 160

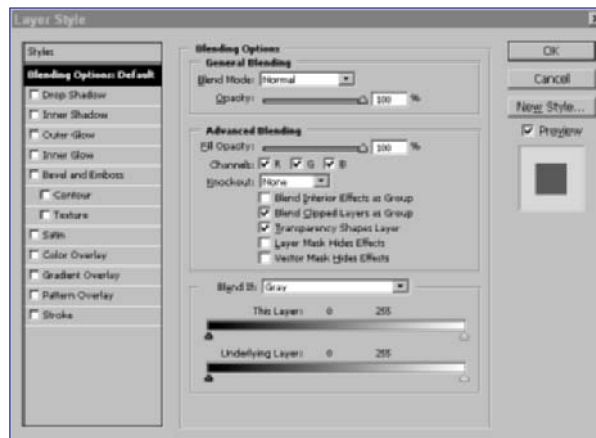
## Restricting Blending to Specific Channels

**B**yond determining what calculations are used to blend layers together, Photoshop allows you to specify whether a blending operation modifies only certain channels of the layers beneath it. Choosing a channel such as Magenta will limit the blending of your selected layer's content only to those areas of the subsequent layers with Magenta channel information.

### notes

- You can determine the levels available to your channel mask through a series of channel sliders at the bottom of the Blending Options command.
- You can adjust a number of other settings simultaneously, such as layer and fill opacity, blending mode, etc. Simply tweak the other settings before pressing the OK button

1. Open an existing document with layers.
2. In the Layers palette, click on the name of a top layer that you wish to blend with lower layers.
3. Choose Layer ⇨ Layer Style ⇨ Blending Options to open the Blending Options dialog box (shown in Figure 160-1) to specify advanced blending options.



**Figure 160-1:** The Blending Options dialog box

### caution

- Adjusting a blend according to a color channel may produce odd results, due in large part to the surprising amount of other colors in nearly every object.

4. If it is not already checked, check the Preview option underneath the New Style button.
5. Uncheck all but one of the channel checkboxes listed under the Advanced Blending section to restrict the layer's blending to the remaining channel(s). As you uncheck channels, the live preview will update to show you the results of such a blend. (Figure 160-2 shows the three types of checkboxes available, depending on which color space your document uses.)



**Figure 160-2:** Channel checkboxes for RGB (top), CMYK (middle), and Lab Color (bottom)

6. Press the OK button to confirm your blending settings. The result will look very different from the result of the blending to all channels.

## Task 160

### *tips*

- Use the selective channel blend to composite complex imagery within a flat-colored object.
- You can also access the Blending Options dialog box from the Layers palette's fly-out menu.

### *cross-reference*

- Task 141 explains how to directly work with channels.

# Task 161

## Adding and Editing a Hide All or Reveal All Layer Mask

### notes

- If you right-click (Windows) or Ctrl-click (Mac) on a Layer mask thumbnail in the Layers palette, you will activate a contextual menu that allows you to quickly discard a mask you don't like.
- A mask is a grayscale channel. If you choose a color to paint with, Photoshop will use the color's value to determine what level of gray to use.

### caution

- A Background layer cannot be masked. If the Background layer is selected, the Add Layer Mask menu will not appear. To mask this layer, double-click on the layer first to convert it to a standard layer before applying a mask.

Layer masks allow you to selectively show or conceal parts of your layer's content using a grayscale channel. In many ways, you can think of a layer mask as a keyhole. Looking through the keyhole, only a portion of what is beyond the door is visible; however, the content that is not visible through the keyhole never ceases to exist. In the same way, layer masks can show only a portion of what really exists within your Photoshop file without actually erasing the invisible content.

1. Open an existing document with artwork on different layers.
2. In the Layers palette, click on the name of a top layer that you wish to mask.
3. Choose Layer ⇨ Add Layer Mask ⇨ Reveal All to apply a mask with an opening in the current dimensions of your document.
4. Click on the Layer mask thumbnail in the Layers palette's current layer listing (shown in Figure 161-1) to select a mask for editing.

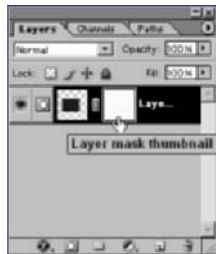


Figure 161-1: A Reveal All layer mask

5. Select the Paintbrush tool from the fourth row and second column of the Tools palette.
6. Choose a brush size from the Brush Preset picker.

7. Enter “100%” in the Color palette’s entry field (shown in Figure 161-2) to choose Black to paint with. Within a mask, black is used to obstruct your layer’s content.



**Figure 161-2:** Masks are grayscale-only channels

8. Paint in your document where you wish to let lower layers peek through. As you paint, you will be revealing content from layers underneath your current layer (instead of showing up as a black stroke).
9. Use the Eraser tool to remove (or the Brush tool to paint over) any brush strokes that reveal too much of your lower layers.

## Task 161

### *tips*

- Click on the link icon between your Layer thumbnail and the Layer mask thumbnail in your layer listing to move the mask independently of your layer’s content.
- To make a more precise mask, make a selection in the shape of the mask you wish to create. Then choose Layer ⇨ Add Layer Mask ⇨ Reveal Selection.

### *cross-reference*

- Task 147 shows you how to save a mask to be used later or within another document.



# Task 162

## Creating a Gradient Layer Mask

As mentioned in the previous task, layer masks use a grayscale channel to determine what is displayed. Whatever area is black in the mask channel is hidden, whatever is white is displayed, and the various shades in between determine the opacity of display. Because of this, you can create a gradient in your layer mask to transition softly between what is visible and what is hidden.

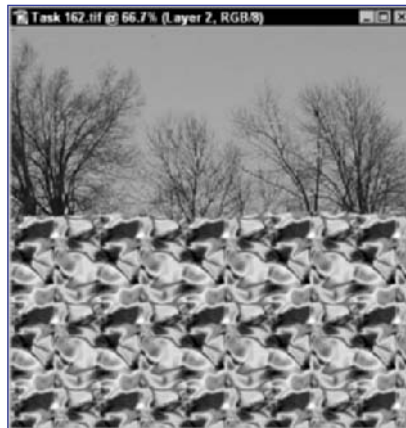
### notes

- If you right-click (Windows) or Ctrl-click (Mac) on a mask preview in the Layers palette, you will activate a contextual menu that allows you to quickly discard a mask you don't like.
- A mask is a grayscale channel. If you choose a color for your foreground or background swatches, Photoshop will use the color's value to determine what level of gray to use.

### caution

- Drawing a second gradient within your mask will discard the original gradient and replace it entirely with your new gradient.

1. Open an existing document containing a photograph in Photoshop CS.
2. Choose Layer ⇨ New ⇨ Layer to create a new layer.
3. Choose the Pattern Stamp tool from the fifth row and first column of the Tools palette. Click and hold on the Clone Stamp tool's icon until a small menu is displayed, move your cursor on the Pattern Stamp tool icon, and release your mouse button.
4. Click and drag to paint a swash of the tool's pattern across half of your photograph. Figure 162-1 illustrates the results.



**Figure 162-1:** A patterned layer atop a photograph

5. Choose Layer ⇨ Add Layer Mask ⇨ Reveal All to apply a mask with an opening in the current dimensions of your document.
6. Click on the Layer mask thumbnail in the Layers palette's current layer listing to select a mask for editing.
7. Select the Gradient tool from the sixth row and second column of the Tools palette.

8. Press the D key to set your foreground and background colors to their default (white and black).
9. Pick a gradient type from the Options bar (shown in Figure 162-2).



**Figure 162-2:** A gradient layer mask across an image

10. Click and hold in your document where you want the mask's gradient to begin. (Remember, wherever black is in your gradient, you will be revealing content from layers underneath your current layer.) Drag the cursor to the end point of your gradient, and release the mouse button to complete the gradient mask, resulting in an image with effects similar to Figure 162-3.



**Figure 162-3:** The resulting image

## Task 162

### *tips*

- Click on the link icon between your layer preview icon and the mask preview icon in your layer listing to move the mask independently of your layer's content.
- To make a more precise mask, make a selection in the shape of the mask you wish to create. Then choose Layer ⇨ Add Layer Mask ⇨ Reveal Selection. Following this, you can apply a gradient just as you did in this task's steps.

### *cross-reference*

- Task 133 teaches you the basics of the Gradient tool.

# Task 163

## Using a Solid Color or Gradient Fill Layer

### notes

- You can edit your gradient or fill layer at any time by double-clicking on the thumbnail preview in the layer listing.
- To apply a solid fill instead of a gradient, simply choose Layer ⇨ New Fill Layer ⇨ Solid Color and repeat this task's steps according to the fill's dialog boxes.

To quickly apply a color or a gradient across your entire image visually, but without actually changing the pixels of your artwork, you can use the Fill Layer command. This command creates a new layer with adjustable attributes, such as a fill color or gradient values. Using the Fill Layer command, you can alter the way your document appears with a great deal of security: if you don't like the results, you can simply adjust the layer's attributes or turn off its display, and your image is back to normal.

While there are several instances where you may need just a flat color or gradient applied to your image, you can also use these layers in conjunction with a blending mode to composite their effects with your existing artwork. In this task, you will walk through the creation of a gradient fill layer. Once you are finished, however, you should experiment with this layer and its ability to blend with artwork underneath it.

1. Open an existing document with artwork on different layers.
2. In the Layers palette, click on the name of the top layer.
3. Choose Layer ⇨ New Fill Layer ⇨ Gradient to apply an editable gradient across your entire image.
4. Enter a name (such as "Background Blend") for your gradient fill layer in the New Layer dialog box, as shown in Figure 163-1, and press the OK button to then launch the Gradient Fill dialog box.

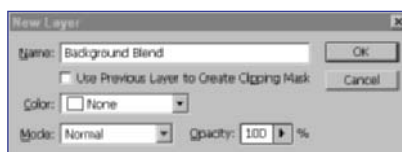


Figure 163-1: The New Layer dialog box

5. Click on the downward-pointing arrow in the Gradient Fill dialog box (shown in Figure 163-2) to open the Gradient Picker.

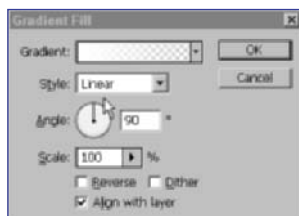
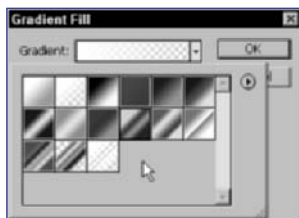


Figure 163-2: The Gradient Fill dialog box

### caution

- A gradient or fill layer will fully obstruct the content behind it, as it fills the entire document. You can use the adjoining layer mask to further edit what areas of your document the layer covers.

6. Double-click on a gradient thumbnail to pick a gradient type from the Gradient Picker palette (shown in Figure 163-3).



**Figure 163-3:** Picking a gradient type

7. Choose a gradient style from the Style drop-down menu (such as Radial or Linear).
8. Enter a numerical value in the Angle field to determine at what angle your gradient is applied.
9. Enter a numerical value in the Scale field to determine the size of your gradient in relationship to your document's dimensions.
10. Press the OK button, and you will now see a gradient across your entire document.

## Task 163

### *tips*

- Check the Reverse check-box in the Gradient Fill dialog box to invert your gradient.
- Click on the gradient in the Gradient Fill dialog box to launch a gradient editor. Within this editor, you will have more control over what type of gradient you will use.

### *cross-reference*

- In Task 134, you learn how to create custom gradients which can be used in a gradient fill layer.

# Task 164

## Using a Pattern Fill Layer to Enhance Another Patterned Layer

### notes

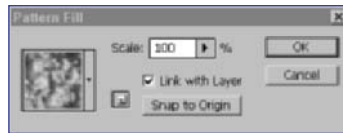
- Patterns are tiny graphic images that were created at a set resolution. If you increase the scale of your pattern in the Pattern Fill dialog box, the pattern will appear blocky and pixelated.
- Press the 'Create a new preset' button in the Pattern Fill dialog box to save your command settings for a later use.

### caution

- Layer effects applied to pattern fill layers will not be visible.

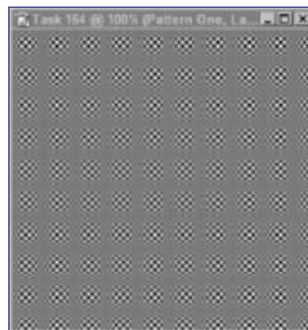
**P**attern fill layers work in a similar fashion to color and gradient fill layers. By keeping the pattern as an adjustable setting on the layer level, you can quickly change the pattern, its opacity, and its other options. Not only is the pattern fill layer useful for adjusting the appearance of the artwork below it, it can be used in conjunction with other pattern fill layers to create an interesting texture. Creating several pattern fill layers with varying levels of opacity will result in artwork that may otherwise be difficult to create.

1. Create a new document.
2. Choose Layer ⇨ New Fill Layer ⇨ Pattern to apply an editable pattern across your entire image.
3. Enter a name for your pattern fill layer (such as "Pattern One") in the New Layer dialog box, and press the OK button to then launch the Pattern Fill dialog box (shown in Figure 164-1).



**Figure 164-1:** The Pattern Fill dialog box

4. Click on the downward-pointing arrow to open the Pattern Picker.
5. Double-click on a pattern thumbnail to pick a pattern from the Pattern Picker palette.
6. Enter a numerical value in the Scale field to determine the size of your pattern in relationship to your document's dimensions.
7. Press the OK button, and you will now see a pattern across your entire document, as shown in Figure 164-2.



**Figure 164-2:** A pattern fill layer's results

- Repeat steps 2 through 7 to create a new pattern fill layer, such as the one shown in Figure 164-3. In this case, be sure to use a completely different pattern and a different scale than those you just picked previously.



**Figure 164-3:** A second pattern fill layer to be blended

- Adjust the master opacity of your new pattern fill layer using the Layer palette's Opacity setting so that the new layer partially reveals the layer underneath (as shown in Figure 164-4).



**Figure 164-4:** Visually combining pattern fill layers

## Task 164

### *tips*

- Check the Link with Layer checkbox in the Pattern Fill dialog box to create a movable pattern. If you do, you can use the Move tool to adjust your pattern's positioning on its layer.
- You can also adjust the Blending Mode of the pattern fill layer to create more customizable layer compositions.

### *cross-reference*

- Create a pattern fill layer based upon a self-created pattern, described in Task 136.

# Task 165

## Using an Adjustment Layer to Fine-Tune Color Adjustments

**A**djustment layers may be one of the most useful additions to Photoshop in recent years, alongside the Healing tools. Using an adjustment layer, you can alter the appearance of content below the new layer. Whether you are adjusting the hue, saturation, brightness, or color balance of your artwork, these layers provide a means of making non-permanent adjustments to your artwork.

To try such an effect, the following steps will walk you through a Hue/Saturation adjustment layer modification. As an example of the results, Figure 165-1 demonstrates the before and after appearance of the artwork layer.

### notes

- There are several color adjustment layers available, including Color Balance, Selective Color, Levels and Curves.
- You can choose to adjust specific color channels (such as Red or Magenta) in the Hue/Saturation dialog box by choosing a particular channel under the Edit drop-down menu.

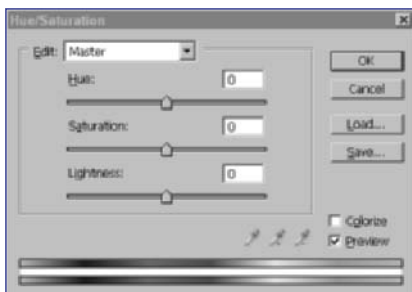


**Figure 165-1:** Before and after a Hue/Saturation adjustment layer

1. Open an existing color photograph document.
2. In the Layers palette, click on the name of a layer with color imagery.
3. Choose Layer ⇨ New Adjustment Layer ⇨ Hue/Saturation to apply an editable color adjustment across your entire image.
4. Enter a name for your adjustment layer (such as “Color Shift”) in the New Layer dialog box, and press the OK button to then launch the Hue/Saturation dialog box (shown in Figure 165-2).

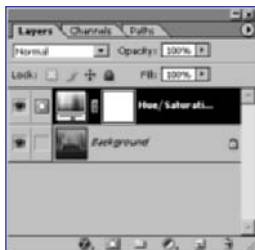
### caution

- The eyedropper tools in the Hue/Saturation dialog box are only available when editing a specific color channel.



**Figure 165-2:** The Hue/Saturation dialog box

5. Click and drag on the Hue setting's slider arrow to the right to shift all the hues in the document at the same angle along the color wheel.
6. Click and drag on the Saturation setting's slider arrow to the left to decrease the saturation of the entire image. (Increasing the setting intensifies all the colors, while decreasing the setting dulls the image.)
7. Click and drag on the Lightness setting's slider arrow to the right to increase the image's values. (Increasing the setting adds white to all the colors, while decreasing the setting adds black.)
8. Press the OK button, and you will now see an adjustment layer in your Layers palette (shown in Figure 165-3) above your original layer.



**Figure 165-3:** An adjustment layer

## Task 165

### tips

- Check the Colorize checkbox in the Hue/Saturation dialog box to apply a single hue across the entire image.
- You can change the adjustment layer's master opacity to quickly tone down any of the layers' results.

### cross-reference

- For more information on the Hue/Saturation command, Task 57 describes it in detail.



# Task 166

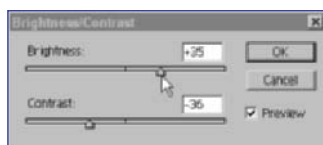
## Making Use of an Adjustment Layer's Mask

**W**hen it is created, every adjustment layer is applied within a mask. (This may not be readily apparent, as the mask is set to reveal the entire document.) You have the ability, however, to modify this mask in any way you see fit, allowing you to selectively apply or remove the adjustment layer's effects on the contents beneath it.

### notes

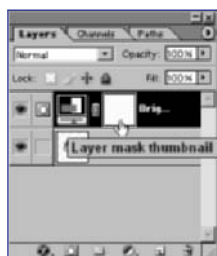
- Double-clicking on any adjustment layer's preview thumbnail will open that adjustment layer's associated command dialog box for after-the-fact editing.
- When an adjustment layer is created, it creates a layer mask similar to the Reveal All command's results.

1. Open an existing color photograph document.
2. In the Layers palette, click on the name of a layer with color imagery.
3. Choose Layer ⇨ New Adjustment Layer ⇨ Brightness/Contrast to apply editable value and contrast adjustments across your entire image.
4. Enter a name for your adjustment layer in the New Layer dialog box, and press the OK button to then launch the Brightness/Contrast dialog box (shown in Figure 166-1).



**Figure 166-1:** The Brightness/Contrast dialog box

5. Adjust the brightness and contrast settings, and press the OK button.
6. Click on the Layer mask thumbnail of the newly created adjustment layer's Layers palette listing (shown in Figure 166-2) to begin editing the mask.

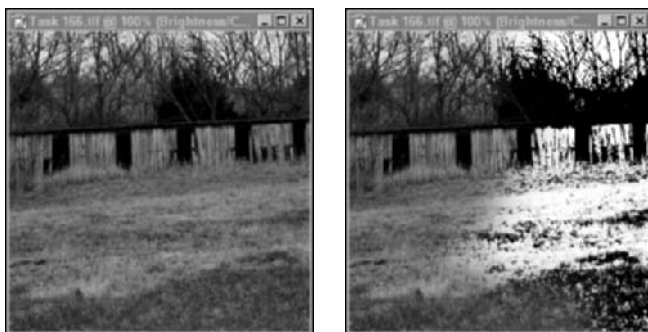


**Figure 166-2:** An adjustment layer's mask

### caution

- Be sure you have selected the Layer mask thumbnail before editing a mask. Otherwise, you may end up inadvertently painting over your original artwork.

7. Select the Paintbrush tool from the fourth row and second column of the Tools palette.
8. Choose a brush size from the Brush Preset picker.
9. Enter “100%” in the Color palette’s entry field to choose Black to paint with. Within a mask, black is used to obstruct your layer’s content.
10. Paint in your document where you wish to hide the adjustment layer’s effects, resulting in an image similar to Figure 166-3.



**Figure 166-3:** Before and after an adjustment layer mask modification

## Task 166

### *tip*

- Use the Eraser tool to remove any brush strokes that reveal too much of your lower layers.
- Always use an adjustment layer instead of applying these adjustments directly on your artwork. This will ensure your document remains fully editable.

### *cross-reference*

- Task 147 shows how to save masks to be used later or by other documents.

# Task 167

## Moving Layers to Other Images

### notes

- Any layer effects, such as a drop shadow, applied to a layer will be copied over during a layer copy.
- When dragging a layer between documents, Photoshop ignores the original document's layer placement and places the content wherever you drag the layer in the new document.

In addition to copying and pasting, Photoshop allows you to drag and drop layers from one document to another. Whereas the copy and paste commands work great for duplicating artwork only, the ability to move a layer provides a means of bringing all layer information (such as name, color, effects, etc.) along with the artwork. Such a feature allows you to reduce some of the mundane aspects of layer management when duplicating content between files.

Keep in mind, however, that a layer's contents are dependent on their original home. For instance, if you move artwork from a 72dpi document into a 300dpi document, your layer will appear considerably smaller (as it is scaled to the point where its contents can achieve 300dpi resolution). Also, if you drag an RGB color layer into a Grayscale document, the color information will be converted into levels of gray. With this in mind, the following steps will demonstrate how the layer moving process works.

- Create a new document named "Task 167a."
- Create a second document named "Task 167b" with a transparent background (as shown in Figure 167-1).

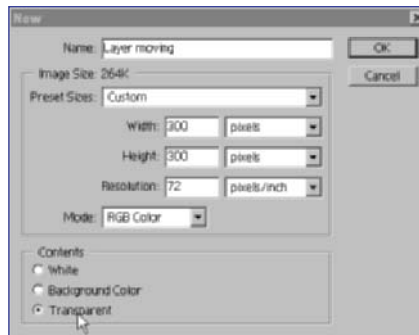


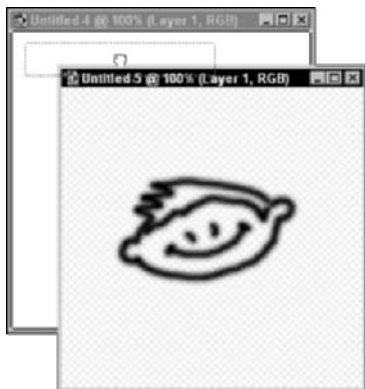
Figure 167-1: Creating a transparent document

### caution

- A layer copy will work only if you drag a layer into the canvas area of another document. Dragging onto a different document's title bar will result in nothing.

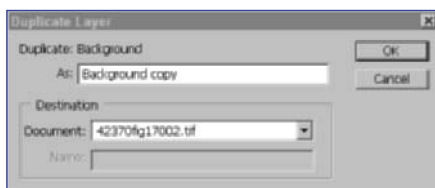
- Move the second document's window so that a portion of the first document's canvas area is visible.
- Select the Paintbrush tool from the fourth row and second column of the Tools palette.
- Paint in your second document (which is still on top) to provide the layer with some minimal artwork.
- Click the Layer thumbnail or layer name in the Layers palette, and then drag the layer over the destination image.

7. Release the mouse button when the dragged layer is above the first document. If the first document is recognizing your drag-and-drop attempt it will highlight the interior of its canvas with a 2-point stroke (shown in Figure 167-2).



**Figure 167-2:** Dragging a layer between documents

8. Click back on the first document to ensure a copy of the second document's layer is indeed in the first document. If not, repeat Steps 6 and 7.
9. If you are having difficulty, return to your document with the artwork. Select the layer with the artwork that you wish to move, and choose Layers ⇨ Duplicate Layer. A Duplicate Layer dialog box will appear, as shown in Figure 167-3.



**Figure 167-3:** The Duplicate Layer dialog box

10. Choose the file to which you wish to copy the layer from the Document drop-down menu ("Task 167a"), and enter a new name for the layer (if you like) in the As field. Press the OK button, and your layer content will appear centered in the destination document.

## Task 167

### tips

- To move multiple layers between documents, simply link the layers together before dragging them into another document's window.
- For an even faster move, use the Move tool to drag a layer's content between documents.

### cross-reference

- In Task 18, you learn how to save and use the .PSD format which is required if you wish to retain layer effects and the sort.

# Task 168

## Cleaning Up Edges with Defringe and Remove Matte Commands

### notes

- The Defringe command is used to shave off a consistent number of pixels around all edges of the document.
- The Matting commands weren't designed to repair imagery not laying over black or white artwork. Consider using an Eraser tool to clean up the edges of such a situation.

### caution

- Make sure you are using a transparent-backgrounded image to ensure you can place a solid color fill layer behind your photograph.

One of the most difficult tasks a Photoshop user is faced with is the process of “knocking out” an object from its surrounding artwork (such as a person in front of an office wall) to place in front of another background. Because the artwork's edges originally encountered colored pixels different from its new setting, a dirty “halo” of the old surrounding's pixels appears around it. To help expedite the removal of such a halo, Photoshop's Matting commands provide three such mechanisms: Defringe, Remove Black Matte, and Remove White Matte.

1. Open an existing color photograph document with an object/subject against a white or black background (see Figure 168-1).



**Figure 168-1:** A photo with a solid-colored background

2. Select the Magic Wand tool from the second row and second column of the Tools palette.
3. Click on the photograph's background (either white or black), and press the delete key to remove the original image's background.
4. Create a solid color fill layer (using a bright color not used in your photograph, such as pink) beneath the photographic layer.
5. Select the layer with the photograph again.

6. Choose Layer ⇄ Matting ⇄ Remove White Matte (or Remove Black Matte) to apply editable value and contrast adjustments across your entire image, resulting in an image similar to Figure 168-2.



**Figure 168-2:** A photo after Photoshop's Matting tools

7. Create a new fill layer by choosing Layer ⇄ New Fill Layer ⇄ Solid Color. When the New Layer dialog box appears, simply press the OK button.
8. Choose a color that contrasts with the edges of the artwork you just defringed from the color picker that appears. Press the OK button to complete the fill layer.
9. Move the newly-created fill layer underneath the defringed artwork layer so that you can make sure that the newly-edited edges don't continue to have a halo-like matte edge. (If your image no longer has any fringe edges, you can delete the fill layer.)

## Task 168

### *tips*

- Several third-party plug-ins are available to speed up the process of knocking out the unwanted parts of an image for easier compositing. Visit the companion Web site for this book at [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless) for links to these vendors and more.
- There are a number of software packages that do nothing other than create smooth-edged composites. Visit the book's Web site for more information.

### *cross-reference*

- Learn how to create a solid color fill layer in Task 163.

# Task 169

## Using Layers to Create a Collage

The art of collage has long been used to create a piece of artwork from pieces of other objects, whether they are artwork or just scraps of paper. One of the benefits of the medium is the ability of the artist to quickly add and remove pieces to strengthen the composition. Using Photoshop, a similar technique of creating artwork through the arrangement of layered content is possible.

To demonstrate, you can create a simple collage using a single image, taking assorted pieces from the original to create an entirely new image. The following steps will walk you through the manipulation of the photo in Figure 169-1.

### notes

- Don't be afraid to cut images out of a magazine to scan in for use in Photoshop. Remember, Photoshop is one of your many tools. Combine multiple media to create more interesting results.
- If you are using someone else's imagery as pieces of your collage, be certain to not use large, recognizable pieces of their work. Read over U.S. Copyright laws to make sure what you are creating falls within the guidelines of fair use.



**Figure 169-1:** A photo ripe for a collage reworking

1. Open or create a background image to use as a base for your collage.
2. Using a selection tool, such as the Lasso tool (located in the second row and first column of the Tools palette), select an element from the image you wish to use as a piece of material for the collage, as shown in Figure 169-2. Be sure to set a fairly large feather amount (such as 15 pixels) in the tool's Options bar so that the outer edges of the selected area will blend once placed into the collage.



**Figure 169-2:** Selecting an element to duplicate

### caution

- Once you paste a copied selection, your active layer becomes the one you just pasted instead of the original layer with the selection. Be sure to select the original layer before attempting another copy.

3. Copy and paste your selection to create a duplicate of your selection's contents on a new layer.
4. Using the Move tool (located in the first row and second column of the Tools palette), reposition the element elsewhere in your document. In the case of this task's photo, move the selected window element elsewhere along the same wall for a more seamless blend into the background image.
5. Choose Edit ⇨ Transform ⇨ Free Transform to activate the transformation bounding box around your new layer's artwork.
6. Click and drag one of the bounding box's corners to scale your artwork so that the second instance of your duplicate item isn't identical in size to the original item. If you'd like, you can also skew, distort, or rotate the duplicate to further alter its appearance.
7. Repeat Steps 2 through 6 as many times as you desire, each time remembering to select the original artwork layer first to ensure a copying of the original artwork, to produce a series of elements you can compose across your original image.
8. Use the Eraser tool (located in the sixth row and first column of the Tools palette) with the Brush mode and a feathered brush to clean up the graduated edges of any of your duplicate elements to ensure a more realistic blend with the background image, such as the image in Figure 169-3.



**Figure 169-3:** The results of collaged elements on top of an original image

9. You can create as realistic or abstract a collage as you would like. To push for a more abstract appearance, adjust the opacity and blend mode of each object in the Layers palette. You can even apply layer effects to the artwork pieces to create some bizarre effects.

## Task 169

### *tips*

- Use a mixture of small and large pieces to create a varied visual texture to your image.
- Be sure to use the Transform commands to further alter the “pieces” of your collage. By rotating, scaling, and distorting your imagery, you'll get even greater control over the appearance of your collage than if you worked with a magazine and scissors.

### *cross-reference*

- Use the Zoom tool, detailed in Task 24, to find interesting components of your image to become collage pieces.



# Task 170

## Creating a Knockout Effect with Knockout Options

### notes

- Remember, a knockout is almost always preferable to erasing a piece of your artwork. By using one layer to hide another, you maintain a greater level of editing that erasing won't provide.
- If you link the knockout and knocked-out layers together, you can ensure the punch-through effect retains its location if you move either layer around your document.

### caution

- Be sure to group the knockout layers together in a layer set. If you don't, the knockout effect will punch all the way to the Background no matter what Knockout setting you choose.

Layer masks aren't the only means of constraining the edges of a layer's display. Using a layer's blending options, you can have artwork on a top layer “punch” through to the Background layer. And, just like layer masks, applying a punch effect will not actually modify the original artwork; rather, it serves as a temporary adjustment to your artwork that is easily modified.

Keep in mind that every knockout requires three components: (1) a layer that appears to cut through another, (2) a layer that is cut through, and (3) a layer whose content shows through the cut. For this example, you can use simple geometric shapes to get an idea of how a knockout can be achieved.

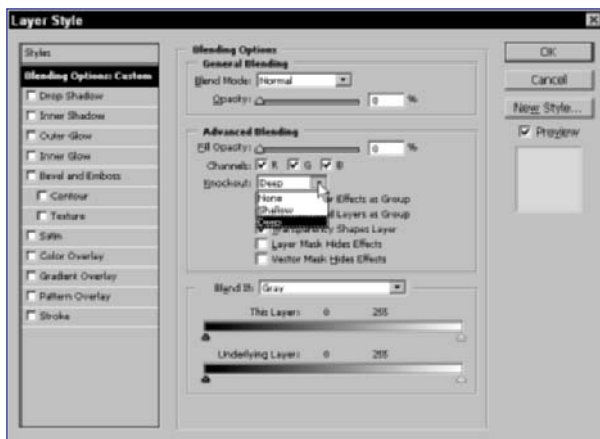
- Create a new document.
- Using a fill layer command, flood an entire layer with a color (such as pink), gradient or pattern. (This is the third layer described in this task's opening paragraphs.)
- Create a new layer, select the Rectangular Marquee tool, make a selection, and fill it with a different color than the background (such as black). (This will create the second layer described in this task's opening paragraphs.)
- Create a new layer again, select the Elliptical Marquee tool, make a selection that overlaps the filled rectangle you created in Step 3, and fill it with a color (such as yellow). (This will create the first layer described in this task's opening paragraphs.) Figure 170-1 shows the document as it should appear at this stage.



**Figure 170-1:** Three layers ready for a knockout

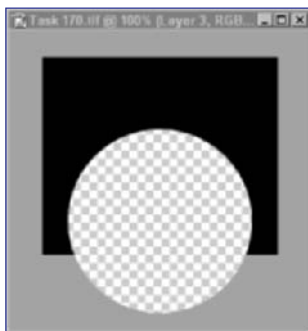
- Create a new layer set and move the two layers created in Steps 3 and 4 into the set. Make sure that the oval layer is above the rectangular layer.

6. Choose Layer ⇄ Layer Style ⇄ Blending Options, when you have the oval layer selected, to edit the knockout options.
7. Drag the Fill Opacity setting's slider down to 0 percent so that the oval's visibility is completely reduced.
8. Choose a Knockout setting from the drop-down menu (as shown in Figure 170-2). A Shallow setting will knock through the layer right below the selected layer, whereas a Deep setting will knock out all layers until it reaches the Background.



**Figure 170-2:** The Knockout settings in the Layer Style dialog box

9. Press the OK button to complete the task, resulting in an image similar to Figure 170-3.



**Figure 170-3:** A document with Knockout settings applied

## Task 170

### tips

- A layer clipping group can also be used to create a knockout effect.
- You can also create a knockout effect by using the selection of one layer's content edges to hide another layer's pixels. Simply Command/Ctrl+click on a layer's listing in the Layers palette to select its edges, select the layer you wish to knockout, and choose Layer ⇄ Add Layer Mask ⇄ Hide Selection.

### cross-reference

- To create a filled rectangle or oval, refer to Task 77 where you learned how to stroke a selection. Rather than choosing Edit ⇄ Stroke, choose Edit ⇄ Fill.

# Task 171

## Merging Layers in Different Ways

**K**eeping each piece of artwork separate on its own layer is a means of maintaining an easily editable document. However, there will be times when you'll need to combine the contents of some or all layers together, such as when your document becomes unwieldy or too RAM-intensive. When this becomes the case, you'll have two options: to merge only those layers that are currently visible or to merge all layers linked to the currently selected layer.

### notes

- The Merge commands can be very useful if you accidentally duplicate a layer instead of cloning its contents during a selection drag. Rather than keep your content on two separate layers then, you can merge them together to achieve your intended results.
- Holding the Option (Mac) or Alt (Windows) key while choosing a Merge command will merge a clone of all the appropriate layers into the selected layer.

### caution

- Merging hidden linked layers will not blend their contents with visible linked layers. Rather, the hidden layers' information will be discarded in the merge.

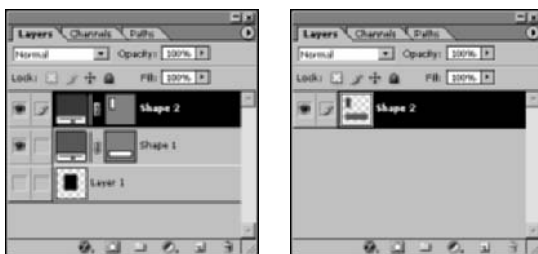
1. Create a new document.
2. Make a selection, and fill its contents with the foreground color. Once you have filled the rectangle, choose Select ⇧ Deselect All.
3. Specify a new Foreground color in the Color palette, and then select the Rectangle tool from the ninth row and second column of the Tools palette (as seen in Figure 171-1). (Be sure to specify the Shape Layers mode in the tool's Options bar.)



**Figure 171-1:** The Rectangle tool in the Tools palette

4. Click and drag the cursor in your document to define the boundaries of your vector box, releasing the cursor when your rectangle is shaped as desired. By drawing a shape layer, you will automatically create a new layer.

5. After specifying a different foreground color in the Color palette, click, drag, and release again with the Rectangle tool to create another rectangle elsewhere in your document.
6. Click on the eyeball icon in the first column of the original layer's layer listing in the Layers palette to hide the layer.
7. Click in the second column of the layer listings of the other layers to link them all together.
8. Choose Layer ⇨ Merge Linked to combine the two layers together into one. Once layers have been merged, the Layers palette's listings condense into a single layer, as shown in Figure 171-2.



**Figure 171-2:** The before and after view of the Layers palette with a Merge Linked command

9. Choose Edit ⇨ Undo to return your layers' contents to their original location before trying the next step.
10. Choose Layer ⇨ Merge Visible to combine only those two layers with their visibility in the Layers palette

## Task 171

### tips

- Instead of merging all visible layers, consider selecting your entire document and choosing Edit ⇨ Copy Merged. This copies all visible layers as one pixelated image, allowing you to paste the result in another document (or on a topmost layer) to accomplish your goal while retaining the original artwork for editing.
- The Merge commands can also be found under the Layer palette's fly-out menu.

### cross-reference

- All layers can be combined together using the Flatten Image command, detailed in Task 172.

# Task 172

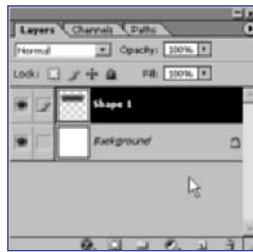
## Rasterizing and Flattening Layers

**B**ecause type and shape layers reference vector path information, Photoshop cannot visually modify the data and will throw up a warning message if you try to edit either with Painting tools. To get around this issue, you can rasterize any path-based layer (such as paths, masks, text, and shape-based layers), converting that layer's contents into its pixel counterpart. Even more, you can “flatten” your entire document, rasterizing all of the document's contents into one fixed-pixel document.

### note

- You are not limited to rasterizing your entire document at once. You can also choose to rasterize only text or only shapes, thus allowing other vector objects to retain their original shapes.

1. Create a new document with a white background.
2. Specify a new Foreground color in the Color palette, and then select the Rectangle tool from the ninth row and second column of the Tools palette. (Be sure to specify the Shape Layers mode in the tool's Options bar.)
3. Click and drag the cursor in your document to define the boundaries of your vector-based rectangular box, releasing the cursor when your rectangle is shaped as desired. (The resulting rectangle's layer is shown in Figure 172-1.)



**Figure 172-1:** An editable vector rectangle in the Layers palette

4. Select the Direct Selection tool from the eighth row and first column of the Tools palette. (Click and hold on the Path Selection tool's icon until a small menu is displayed, move your cursor on the Direct Selection tool icon, and release your mouse button.)

### caution

- While allowing you to edit a shape on a pixel-by-pixel basis, rasterization makes a shape resolution-dependent. Thus, should you enlarge your artwork, the shape will look jagged and pixelated.

5. Click on one of the rectangle's corners to ensure the vector path data is still editable. (If a bounding box appears with tiny square handles in each corner, your box was drawn correctly as a shape layer. If not, try repeating Steps 2 through 4 again.)
6. With the Rectangle tool, click, drag, and release again to create a second rectangle elsewhere in your document.
7. Choose Layer ⇨ Rasterize ⇨ All Layers to stamp all path data into its pixelated counterparts. (The resulting layers are shown in Figure 172-2.)

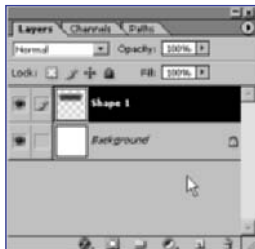


Figure 172-1: Layers after being rasterized

8. Choose Layer ⇨ Flatten Image to combine all layers together into one layer.

## Task 172

### tips

- Right-click (Windows) or Ctrl-click (Mac) on a shape layer in the Layers palette and choose Rasterize Layer to rasterize only the selected layer.
- Rather than flattening the entire document, you can merge only those layers that are linked together.
- Instead of flattening your image, consider selecting your entire document and choosing Edit ⇨ Copy Merged. This copies all visible layers as one pixelated layer, allowing you to paste the result in another document (or on a topmost layer) to accomplish your goal while retaining the original artwork for editing.

### cross-reference

- To learn how to draw vector-based shapes, read through Task 187.

# Task 173

## Utilizing the Layer Comps Feature

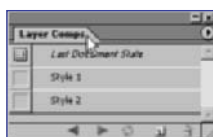
### notes

- You can leave a note within your layer comp's Comments field (viewable within the Layer Comp Options dialog box).
- Layer comps can recognize changes in both Master and Fill opacities.

**C**reating multiple versions of a Photoshop document with little content variation can be a pain. For instance, in the past, if you are putting together 5 different versions of the same design (known as “comps”), each with a different color wash applied to the background and unique placements for the company’s logo, you could either create five versions of the same file (each with the aforementioned differences) or export a copy of the file for review each time you apply one version’s changes. Each has its disadvantages. The first option could easily encounter version control problems; if you make a text change in one file, you’ll have to remember to make it in all the others. The second option, on the other hand, means never maintaining an exact copy of the other 4 versions in your Photoshop file, as your document would only save the most recently modified version.

With Photoshop CS’s new Layer Comps feature, however, you can kiss both these half-pint solutions goodbye. Similar to ImageReady’s Animation cells, Layer Comps allow you to save record states, such as the position, opacity, and layer style effects, of all your layers. By capturing different states for these layers and their effects, you can quickly switch between different views of the same document while ensuring that your content doesn’t change.

1. Open an existing document with multiple layers.
2. Choose Window ⇨ Layer Comps to open the Layer Comps palette, as shown in Figure 173-1, and then drag the palette by its header outside of the Options bar palette well to ensure the palette stays visible while you are working.



**Figure 173-1:** The Layer Comps palette

3. Choose New Layer Comp from the Layer Comps palette’s fly-out menu to record the initial state of your document.
4. Within the resulting New Layer Comp dialog box, enter a title for your comp state in the Name field (such as “Comp01”), make sure the Visibility, Position, and Appearance settings are checked, and press the OK button. (These settings will ensure that your comp will contain the display information needed to replicate this image later.)
5. Using the Move tool, move the position of any layer within your document.

### caution

- If you rotate or transform a layer’s contents within one layer comp, that layer’s distortion will propagate throughout all layer comps, as Photoshop only recognizes position, opacity, and layer effects changes.

6. Select a layer other than the one you just moved and apply a green wash to it by choosing Layer ⇨ Layer Style ⇨ Color Overlay, choosing a green color from the dialog box's color picker, and pressing the OK button.
7. Using the Layer palette's Master Opacity slider, reduce the opacity of a third layer to 50 percent.
8. Repeat steps 3 and 4 to save a new layer comp state, using a new name (such as "Comp02") to reflect the changes you just make in Steps 5 through 7.
9. Press the Layer Comp icon (shown as a newspaper in Figure 173-1) to the right of the previous layer comp listing in the Layer Comps palette to switch Photoshop's view back to the previous layer comp's settings.
10. To quickly save each layer comp in your document as its own Web-ready file (such as a JPEG) for client approval, choose File ⇨ Scripts ⇨ Layer Comps to Files. Within the resulting dialog box (shown in Figure 173-2), choose your file format, naming prefix, destination, and other sundry settings to determine the output of these files before pressing the OK button.



**Figure 173-2:** The Layer Comps to Files dialog box

## Task 173

### tips

- Update recent changes to an existing layer comp by choosing the Update Layer Comp from the Layer Comps palette's fly-out menu.
- If you need to share your different layer comps with others online, you can also choose Layer Comps to PDF from the Scripts menu.

### cross-reference

- You can apply a solid color across a layer by using the Color Overlay layer style described in Task 182.



# Task 174

## Exporting Layers as Files

New to Photoshop CS is the ability to export each layer in your document as separate, individual files. Using the new Scripts menu, you can let Photoshop handle the grunt work of creating new documents for each layer and saving each out according to a file name and file type that you establish in the Export Layers to Files dialog box. Using this script, you can export your layers to JPEG, PDF, PSD, Targa, TIFF, or BMP files to a destination of your choice. The following steps will help you export your layers into new documents.

### notes

- You can leave a note within your layer comp's Comments field (viewable within the Layer Comp Options dialog box).
- Photoshop-specific features, such as transparency, layer effects, etc., may not appear as intended if your destination file format does not support the features you are using on a particular layer. Be sure to review your exported files to ensure the script results were as intended.

1. Open an existing document with multiple layers in Photoshop CS.
2. Choose File ⇨ Scripts ⇨ Export Layers to Files to initiate the export script.
3. In the resulting dialog box, shown in Figure 174-1, press the Browse button next to the Destination field to determine where the exported layers will be saved. A Select Destination dialog box will pop up.



Figure 174-1: The Export Layers to Files dialog box

4. In the Select Destination window, navigate to the folder on your hard drive that you wish save this script's resulting files, and then press the Choose button. The folder's file path will now appear in the Destination field.
5. Enter text that you wish to start the file name of every exported layer file in the File Name Prefix field. By default, Photoshop assumes you will use the existing file's name as the prefix, but you can change this to anything you desire (for instance, "NewPoster"). After your prefix, Photoshop will automatically add the following in sequence: an underscore, a four-digit number representing the layer sequence, another underscore, and the original layer name. Thus, for example,

### caution

- The Export Layers to Files script unfortunately doesn't allow you to include spaces in your names. Instead, it uses the ASCII character "%20" to represent a space. Thus, if you include spaces in the naming prefix, you may see this bizarre notation in place of the spaces you intended.

if your document had three layers (named “red,” “white,” and “blue,” respectively) and you exported them as PSD files, your files would be named:

- NewPoster\_0001\_red.psd
  - NewPoster\_0002\_white.psd
  - NewPoster\_0003\_blue.psd
6. If you have certain layers disabled and do not wish to have them exported, you can check the Visible Layers Only checkbox. If checked, hidden layers will not be exported when you run this script.
  7. Pick the file format you desire for the exported files from the File Type section.
  8. Specify any additional options for your chosen file type in the File Type’s Options section, such as the level of quality for JPEG files or the color depth for BMP files.
  9. When you are finished, press the Run button to have Photoshop execute the script, thereby creating a series of new documents (as shown in Figure 174-2) according to your specifications.



**Figure 174-2:** Before and after the Export Layers to Files script

10. Review your exported files for visual parity with the original document.

## Task 174

### tips

- You can use the Export Layers to Files script to create a storyboard for your movie or animation. By exporting each layer as an individual file, you can then print the whole batch of resulting files in a group from your desktop (in OS X 10.3 and Windows) to produce a step-by-step sequence of images.
- Certain file types, such as JPEG, PDF, PSD, and TIFF, will allow you to save an ICC profile in each exported file. By default, this option is checked to ensure your files retain any color-correction information.

### cross-reference

- You can apply a solid color across a layer by using the Color Overlay layer style described in Task 182.



## Part 12: Layer Styles and Shape Layers

- Task 175: Using the Preset Styles in the Styles Palette
- Task 176: Creating a New Drop Shadow Style
- Task 177: Creating a New Inner Shadow Style
- Task 178: Creating a New Outer Glow Style
- Task 179: Creating a New Inner Glow Style
- Task 180: Creating a New Bevel and Emboss Style
- Task 181: Creating a New Satin Effect Style
- Task 182: Creating a New Color Overlay Style
- Task 183: Creating a New Gradient Overlay Style
- Task 184: Creating a New Pattern Overlay Style
- Task 185: Creating a New Stroke Style
- Task 186: Converting Layer Styles to Image Layers
- Task 187: Using a Shape Tool to Create a Shape Layer
- Task 188: Use the Shape Tool Options to Modify the Shape
- Task 189: Creating a Raster Shape or Path with the Shape Tools
- Task 190: Fashioning a Unique Image Using only Preset Shapes
- Task 191: Creating, Saving, and Loading Custom Shapes
- Task 192: Using the Line Shape Tool and Creating Arrowhead Lines
- Task 193: Creating a Vector Layer Mask with a Shape Tool
- Task 194: Creating a Layer Clipping Group

# Task 175

## Using the Preset Styles in the Styles Palette

### notes

- If you keep your mouse over a style option thumbnail in the Styles palette for a couple seconds, a “tool tip” will pop up providing the name of the particular style.
- Pressing the Append button in the warning dialog box (shown in Figure 175-2) will add the selected style options after the existing style options in the palette.

One of the recent additions to the Photoshop family of features is the layer style. Layer styles allow you to add editable modifications to a layer’s contents (such as bevels, glows, and drop shadows), thus keeping your original artwork as it was originally. And while Photoshop allows you to create, add, and combine layer styles together to create unique appearances, it ships with a number of preset styles to speed you along in your content modification spree.

Layer style presets are stored in a Styles folder in the application’s Presets folder as .ASL files (Photoshop’s Styles file format). When you launch Photoshop CS, the application opens with 19 styles available in its Styles palette, but you can load additional presets and even add your own from the palette’s fly-out menu. To apply a Preset Style, follow these steps:

1. Create a new document with a transparent background and add a new layer.
2. Select the Paintbrush tool from the fourth row and second column of the Tools palette.
3. Draw a dense, freeform shape that is large but doesn’t fill the entire canvas area.
4. Choose Window ⇨ Styles to open the Styles palette (shown in Figure 175-1).

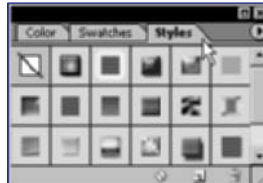
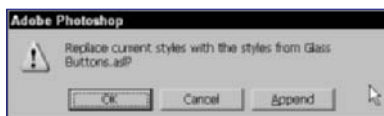


Figure 175-1: The Styles palette

### caution

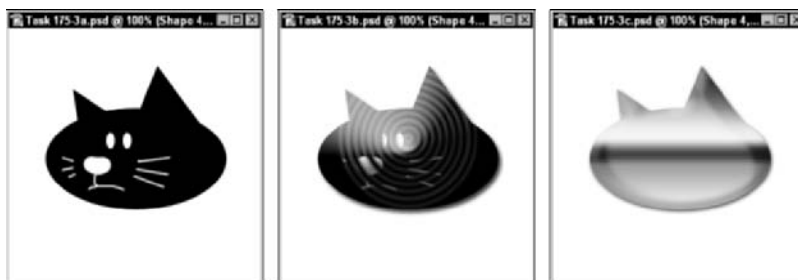
- As style options are pre-sets created from layer styles, their effects are determined by the artwork to which they are applied. Because of this, the results of the same style on different pieces of artwork can vary significantly.

5. Select a style grouping, such as Glass Buttons, Photographic Effects, or Textures, from the Style palette's fly-out menu in the top-right corner.
6. Press the OK button in the dialog box, shown in Figure 175-2, that will appear to replace the current Style palette options with your newly selected styles.



**Figure 175-2:** The alert dialog box

7. Click on a style option from the Style palette to apply a style to your currently selected layer.
8. Continue to click on different style thumbnails to change the appearance of your artwork as many times as you would like. Figure 175-3 shows how a simple illustration can take on radically different appearances with several Preset Styles.



**Figure 175-3:** Original artwork (left) can look very different with the Striped Cone (Button) style (middle) or the Chromed Satin (Text) style (right).

## Task 175

### tips

- Save your own style presets by choosing New Style from the Styles palette's fly-out menu after selecting a layer with a custom layer style.
- To quickly remove a style from your currently selected layer, click the Clear Style button at the bottom of the Styles palette (shown with a universal "no" symbol as its icon).

### cross-reference

- Task 176 shows how to apply only one particular layer style: the drop shadow.

# Task 176

## Creating a New Drop Shadow Style

With earlier versions of Photoshop, creating a drop shadow for a layer's contents was a risky proposition. Once a drop shadow was created by applying a filter to the artwork, it was fused permanently to that image. Should you have decided at a later date to change the shadow, you often needed to find an earlier saved version of your file to edit again. With Photoshop's layer styles, however, you can add, subtract, and modify a drop shadow with considerable ease.

### notes

- You can change the color of the drop shadow by using the color picker off to the side of the Blending mode's selector in the Layer Style dialog box.
- You can also apply a drop shadow to a layer by choosing the option from the Layer Style menu at the bottom of the Layers palette.

1. Create a new document and add a new layer.
2. Select the Rectangular Marquee Selection tool from the first row and first column of the Tools palette. You will be creating a simple piece of artwork to use to test the Drop Shadow effect.
3. Draw a rectangular selection that is approximately half the size of the entire canvas area.
4. Fill the selection with the foreground color, completing the creation of your simple test artwork.
5. Choose Layer ⇨ Layer Style ⇨ Drop Shadow to open the corresponding panel of the Layer Style dialog box (shown in Figure 176-1).



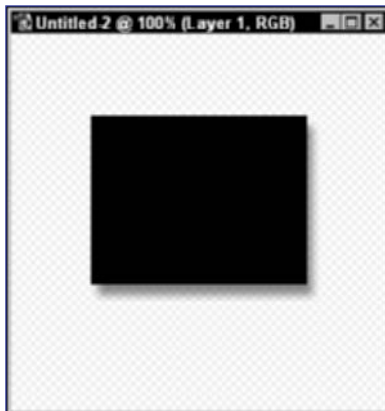
**Figure 176-1:** The Drop Shadow panel of the Layer Style dialog box

6. Leave the Blending Mode drop-down menu setting on Multiply (unless you wish to create a drop shadow with a non-standard appearance) so that the drop shadow darkens the content it lays over, and drag the Opacity selector to determine the degree of transparency of the drop shadow (such as 50%).
7. Click and drag within the Angle circle to set the angle of the light source casting the shadow on your object. Think of this setting as determining at which angle sunlight would cast a shadow behind your object.

### caution

- If the Use Global Light checkbox is selected, any changes you make to the light source's angle will modify any other layer style's light source.

8. Drag the Distance slider to determine the drop shadow's offset (in pixels) from the original artwork, and drag the Size selector to determine the size of the drop shadow (in pixels). The Distance slider determines how far away from the original object a drop shadow begins, whereas the Size slider determines how many pixels wide the shadow's feathering should extend.
9. Click on the Contour picker's drop-down menu in the Quality section of the dialog box to further adjust the drop shadow's appearance, and double-click on an arc thumbnail to determine how smooth a transition the shadow makes between its darkest and lightest points (generally going from full color to transparent).
10. Press the OK button to see the drop shadow applied to your artwork (as shown in Figure 176-2).



**Figure 176-2:** A drop shadow

## Task 176

### *tips*

- Uncheck Layer Knocks Out Drop Shadow in the Layer Style dialog box to let your drop shadow bleed behind all of your artwork.
- If you are running Photoshop on an older, slower machine, consider unchecking the Preview checkbox in the Layer Style dialog box to reduce the amount of rendering your machine will need to execute.

### *cross-reference*

- Aside from adjusting the opacity of a layer style effect, you can also adjust the opacity of the entire layer (described in Task 153).



# Task 177

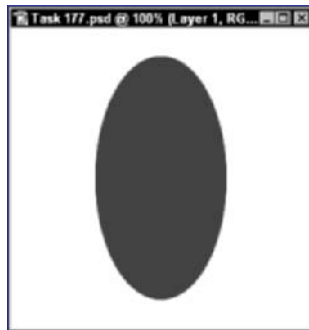
## Creating a New Inner Shadow Style

To make an object appear to be recessed within its surroundings, you can often apply shading effects to the interior areas of a corner of the object. By having these shadows follow the direction of your document's light source (which would determine the angle of drop shadows and the sort) your artwork will *appear* to fall back in space from its surrounding artwork. Using a layer style, you can create this effect quickly, applying internal shadows to any and all layers.

### notes

- You can change the color of the inner shadow by using the color picker off to the side of the Blending mode's selector in the Layer Style dialog box.
- You can also apply an inner shadow to a layer by choosing the option from the Layer Style menu at the bottom of the Layers palette.

1. Create a new document and add a new layer.
2. Select the Elliptical Marquee Selection tool from the first row and first column of the Tools palette. You will be creating a simple piece of artwork to use to test the Inner Shadow effect.
3. Draw an elliptical selection that is approximately half the size of the entire canvas area.
4. Fill the selection with red, completing the creation of the simple test artwork, as shown in Figure 177-1.

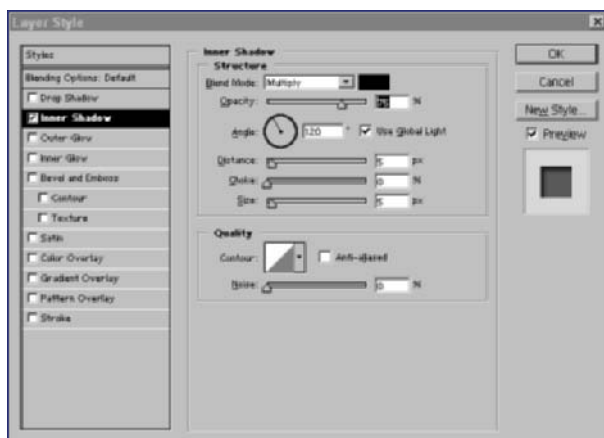


**Figure 177-1:** A simple oval

5. Choose Layer ⇄ Layer Style ⇄ Inner Shadow to open the corresponding panel of the Layer Style dialog box (shown in Figure 177-2).
6. Leave the Blending Mode drop-down menu setting on Multiply (unless you wish to create an interior shadow with a non-standard appearance) so that the shadow darkens the content it lays over, and drag the Opacity selector to determine the transparency of the drop shadow (such as 65%).
7. Click and drag within the Angle circle to set the angle of the light source casting the shadow within your object. Think of this setting as determining at which angle sunlight would cast a shadow within your object.

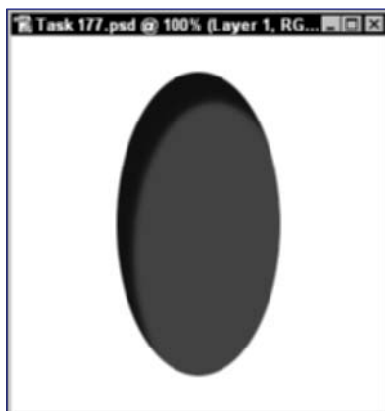
### caution

- If the Use Global Light checkbox is selected, any changes you make to the light source's angle will modify any other layer style's light source.



**Figure 177-2:** The Inner Shadow panel of the Layer Style dialog box

8. Drag the Distance slider to determine the inner shadow's offset (such as 26 pixels) from the original artwork, and drag the Size selector to determine the size of the inner shadow (such as 11 pixels). The Distance slider determines how far away from the original object's edge the shadow begins, whereas the Size slider determines how many pixels wide the shadow's feathering should extend.
9. Click on the Contour picker's drop-down menu in the Quality section of the dialog box to further adjust the shadow's appearance, and double-click on an arc thumbnail to determine how smooth a transition the shadow makes between its darkest and lightest points (generally going from full color to transparent).
10. Press the OK button to see the inner shadow applied to your artwork (as shown in Figure 177-3).



**Figure 177-3:** An inner shadow

## Task 177

### tips

- If you are running Photoshop on an older, slower machine, consider unchecking the Preview checkbox in the Layer Style dialog box to reduce the amount of rendering your machine will need to execute.
- Adjust the Choke value in the Layer Style dialog box to determine the softness of the shadow.

### cross-reference

- Task 180 shows how to create a bevel and emboss appearance to make your artwork appear even more dimensional.

# Task 178

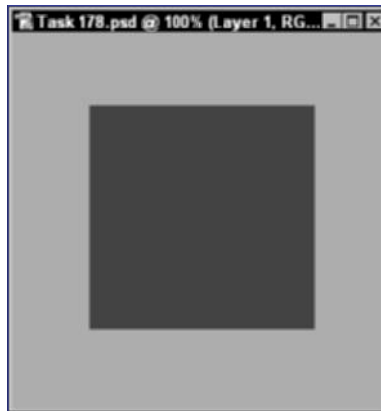
## Creating a New Outer Glow Style

Few good ghost stories are complete without the harrowing description of a glowing, translucent apparition approaching its victim. And while Photoshop can't help you write a good ghost story, it can help you create a great glowing effect around any layer. After specifying a color, size, and other settings for your glow, Photoshop can make even the most mundane object appear to have a heavenly or sinister glow surrounding it.

### notes

- You can change the color of the outer glow by using the color picker off to the side of the Blending mode's selector in the Layer Style dialog box.
- Outer glows can also be applied by choosing the option from the Layer Style menu at the bottom of the Layers palette.

1. Create a new document and add a new layer.
2. Select the Rectangular Marquee Selection tool from the first row and first column of the Tools palette. You will be creating a simple piece of artwork to use to test the Outer Glow effect.
3. Draw a square selection that is approximately half the size of the entire canvas area.
4. Fill the selection with green, completing a piece of simple artwork similar to Figure 178-1.

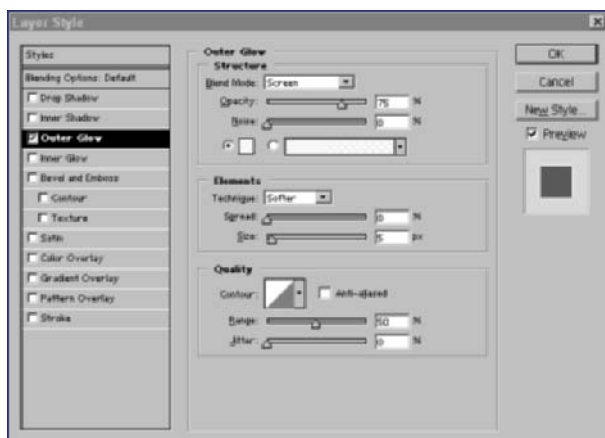


**Figure 178-1:** A simple rectangle before an Outer Glow style is applied

### caution

- If you change the Layer Style dialog box's Technique setting to Precise, the results can be some overly mechanical blends that appear computer generated.

5. Choose Layer ⇄ Layer Style ⇄ Outer Glow to open the corresponding panel of the Layer Style dialog box (shown in Figure 178-2).
6. Leave the Blending Mode drop-down menu setting on Screen (unless you wish to create a darker glow or one that blends in a unique manner) so that the outer glow lightens the content it lays over, and drag the Opacity selector to determine the transparency of the glow.



**Figure 178-2:** The Outer Glow panel of the Layer Style dialog box

7. Click on the color swatch beneath the Noise selector to pull up a color picker.
8. Choose a color from the color picker to determine the color of the glow, and press the OK button to confirm your selection.
9. Drag the Size selector to determine the size of the outer glow (such as 40 pixels).
10. Press the OK button to see the outer glow applied to your artwork (as shown in Figure 178-3).



**Figure 178-3:** An outer glow

## Task 178

### tips

- If you are running Photoshop on an older, slower machine, consider unchecking the Preview checkbox in the Layer Style dialog box to reduce the amount of rendering your machine will need to execute.
- Changing the Blend Mode in the Layer Style dialog box will determine how the outer glow blends with any background imagery.

### cross-reference

- If you want to create a glow effect through filters, Task 215 describes how to use the Blur filter.

# Task 179

## Creating a New Inner Glow Style

Unlike ghosts and angels, which without a doubt are known to glow outwards, some objects appear to glow inside, such as a television screen or a static electricity ball. To help you replicate such effects, you can create an inner glow layer style. Allowing you to choose the color, size, and other settings, the inner glow style creates a uniform glow within an object's boundaries.

### notes

- You can change the color of the inner glow by using the color picker off to the side of the Blending mode's selector in the Layer Style dialog box.
- Inner glows can also be applied by choosing the option from the Layer Style menu at the bottom of the Layers palette.

- Create a new document and add a new layer.
- Select the Lasso tool from the second row and first column of the Tools palette. You will be creating a simple piece of artwork to use to test the Inner Glow effect.
- Draw an irregularly-shaped selection that is approximately half the size of the entire canvas area.
- Fill the selection with orange to finish the simple artwork.
- Choose Layer ⇄ Layer Style ⇄ Inner Glow to open the corresponding panel of the Layer Style dialog box (shown in Figure 179-1).

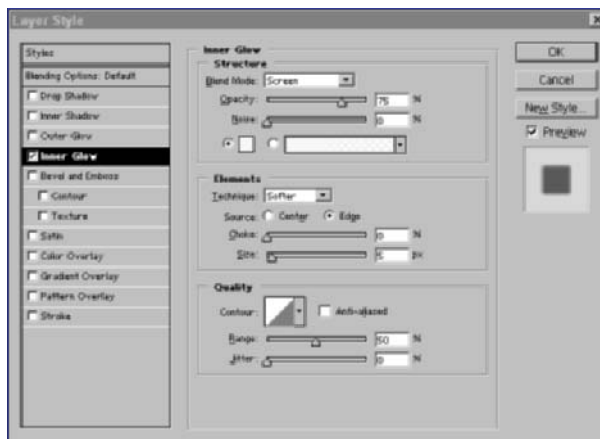


Figure 179-1: The Inner Glow panel of the Layer Style dialog box

### caution

- The Inner Glow's initial Blend Mode setting is Screen, which can produce very slight visual changes if the glow color is darker than the original artwork.

6. Leave the Blending Mode drop-down menu setting on Screen (unless you wish to create a dark inner glow) so that the inner glow lightens the content it lays over, and drag the Opacity selector to determine the transparency of the glow (such as 75%).
7. Click on the color swatch beneath the Noise selector to pull up a color picker.
8. Choose a color from the color picker to determine the color of the glow, and press the OK button to confirm your selection.
9. Drag the Size selector to determine the size of the inner glow (such as 25 pixels). The Size slider determines how many pixels wide the glow's feathering should extend.
10. Press the OK button to see the inner glow applied to your artwork (as shown in Figure 179-2).



**Figure 179-2:** An inner glow

## Task 179

### *tips*

- If you are running Photoshop on an older, slower machine, consider unchecking the Preview checkbox in the Layer Style dialog box to reduce the amount of rendering your machine will need to execute.
- Increasing the Noise value can produce a glow that has a “dirtier,” less smooth blend.

### *cross-reference*

- Task 77 shows how to add a sharper-edged stroke within your selection.

# Task 180

## Creating a New Bevel and Emboss Style

### notes

- You can also apply a bevel or emboss to a layer by choosing the option from the Layer Style menu at the bottom of the Layers palette.
- You can change both the highlight and shadow colors of the emboss by clicking on the color swatches next to each mode's drop-down menus.

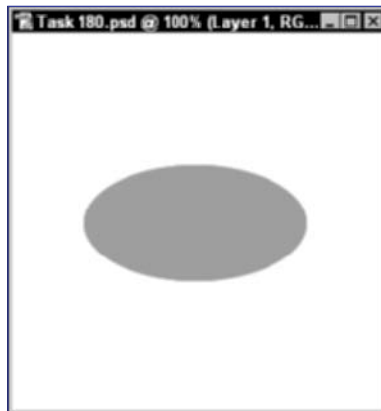
### caution

- If the Use Global Light checkbox is selected, any changes you make to the light source's angle will modify any other layer style's light source.

Few graphics programs go on the market these days without the ability to provide their users with some level of bevel and emboss capabilities. And while the results of a computer-generated emboss or bevel are rarely mistaken for being photo-realistic, they can help create the illusion of depth or extrusion. With this style, you can change a standard oval into what appears to be a dimensional button.

The following steps will show you how to create a Bevel and Emboss layer style on an elliptical shaped-button.

1. Create a new document, and fill its initial layer with a light blue.
2. Create a new layer.
3. Select the Elliptical Marquee Selection tool from the first row and first column of the Tools palette. You will be creating a simple piece of artwork to use to test the Bevel and Emboss effect.
4. Draw an elliptical selection that is approximately half the size of the entire canvas area.
5. Fill the selection with purple, finishing the simple piece of artwork. The resulting image should appear similar to Figure 180-1.



**Figure 180-1:** A button-like oval before a Bevel and Emboss style

6. Choose Layer ⇄ Layer Style ⇄ Bevel and Emboss to open the corresponding panel of the Layer Style dialog box (shown in Figure 180-2).



**Figure 180-2:** The Bevel and Emboss panel of the Layer Style dialog box

7. Choose Emboss from the Style drop-down menu to make your original artwork appear to be popping out from the background of your document.
8. Drag the Depth slider to determine how deep the embossing effect should attempt to render the object, such as 50%.
9. Drag the Size selector to determine the size of the inner shadow (such as 40 pixels).
10. Click within the Angle and Altitude circle to set the angle and height of the light source casting the shadow within your object, and press the OK button to see the results applied to your artwork (as shown in Figure 180-3). Think of these settings as determining at which angle sunlight would cast shadows on your object.



**Figure 180-3:** An emboss

## Task 180

### tips

- If you are running Photoshop on an older, slower machine, consider unchecking the Preview checkbox in the Layer Style dialog box to reduce the amount of rendering your machine will need to execute.
- To further edit the settings of a Bevel and Emboss command, simply choose the item from the Layer ⇄ Layer Style menu again.

### cross-reference

- Task 208 details how to make a selection appear to pop from the background using a filter.



# Task 181

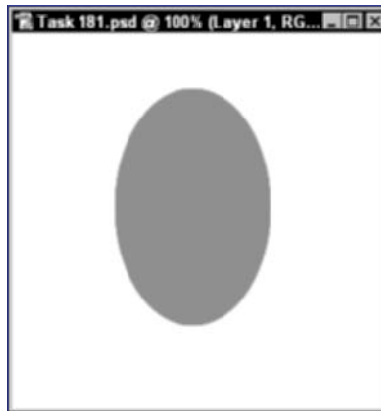
## Creating a New Satin Effect Style

Similar to the Inner Glow layer effect, the Satin effect applies a modification to the internal portions of a layer's contents. By combining the layer's content's shapes into repeating, intersecting, stroked patterns, the Satin effect can create very soft, undulating textures within your layer's contents. The effect can use any of the various blending modes to determine how its progeny merge with the actual layer content.

### notes

- You can also apply a satin effect to a layer by choosing the option from the Layer Style menu at the bottom of the Layers palette.
- You can change the color of the satin effect's tile intersections by using the color picker off to the side of the Blending mode's selector in the Layer Style dialog box.

1. Create a new document and add a new layer.
2. Select the Elliptical Marquee Selection tool from the first row and first column of the Tools palette. You will be creating a simple piece of artwork to use to test the Satin effect.
3. Draw an elliptical selection that is approximately half the size of the entire canvas area.
4. To finish the sample artwork, fill the selection with pink, resulting in an image similar to Figure 181-1.



**Figure 181-1:** An oval before the Satin effect

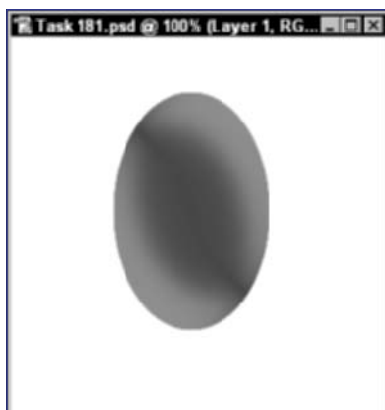
### caution

- If you don't check the Anti-alias checkbox, the resulting effect can appear to have a hard edge within the object.
5. Choose Layer ⇄ Layer Style ⇄ Satin to open the corresponding panel of the Layer Style dialog box (shown in Figure 181-2).
  6. Drag the Opacity selector to the desired point on the scale from 0 to 100%. This will determine the relative transparency or opacity of the object.



**Figure 181-2:** The Satin panel of the Layer Style dialog box

7. Click within the Angle circle to set the angle of the image tiling. Think of this setting as determining at which angle the image tiles overlap.
8. Drag the Distance slider to determine the tiles' offset (such as 35 pixels) from each other.
9. Drag the Size selector to determine the amount of blur (such as 50 pixels) to apply to the tile's intersections.
10. Press the OK button to see the satin effect applied to your artwork (as shown in Figure 181-3).



**Figure 181-3:** A satin effect

## Task 181

### tips

- If you are running Photoshop on an older, slower machine, consider unchecking the Preview checkbox in the Layer Style dialog box to reduce the amount of rendering your machine will need to execute.
- Check the Invert checkbox to flip the appearance of the effect.

### cross-reference

- Task 138 details how to define a repeating pattern.

# Task 182

## Creating a New Color Overlay Style

Filling an object on a layer with a flat color is generally a two- to three-step process, and the results are permanent. Using a Color Overlay layer style, however, you can apply a solid color across all content on a layer while avoiding any transparent areas. This effect can be great if you're looking to apply a tint across an area of your image (such as a green cast across a child who is supposed to appear to be ill).

### notes

- Color Overlays can also be applied by choosing the option from the Layer Style menu at the bottom of the Layers palette.
- Setting the Blend Mode to Normal will fill the layer's contents with a solid color.

1. Open an existing document with a photographic image, such as the image in Figure 182-1.

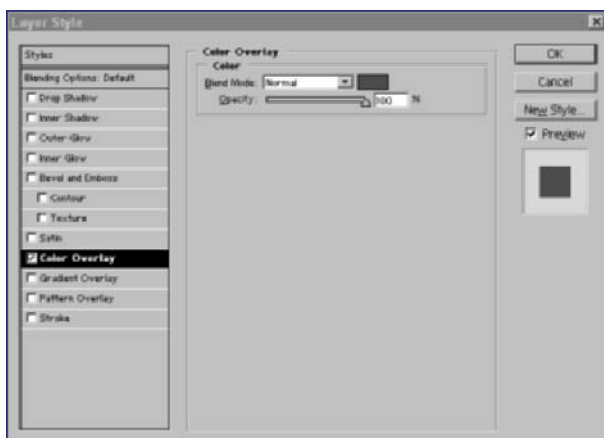


**Figure 182-1:** An image before a Color Overlay effect

2. Select the layer with a photographic image.
3. Choose Layer ⇨ Layer Style ⇨ Color Overlay to open the corresponding panel of the Layer Style dialog box (shown in Figure 182-2) so that you can apply a solid tone across your image.
4. Select a mode from the Blend Mode drop-down menu, such as Multiply, to determine how the color wash will blend with the image on the selected layer.
5. Click on the color swatch next to the Blend Mode to pull up a color picker.

### caution

- If you set the Color Overlay's opacity setting to zero, your layer effect will have no change to your image.



**Figure 182-2:** The Color Overlay panel of the Layer Style dialog box

6. Choose a color from the color picker to determine the color of the overlay, and press the OK button to confirm your selection.
7. Drag the Opacity selector to determine the transparency of the color overlay.
8. Press the OK button to see the color overlay applied to your artwork (as shown in Figure 182-3).



**Figure 182-3:** A red color overlay multiplied over a photo

## Task 182

### tips

- If you are running Photoshop on an older, slower machine, consider unchecking the Preview checkbox in the Layer Style dialog box to reduce the amount of rendering your machine will need to execute.
- To further edit the settings of a Color Overlay command, simply choose the item from the Layer ⇄ Layer Style menu again.

### cross-reference

- In Task 166, you can learn how to create a solid color fill layer.

# Task 183

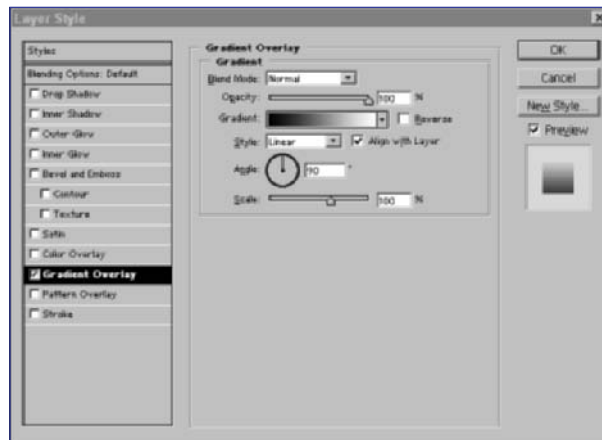
## Creating a New Gradient Overlay Style

Similar to the Color Overlay layer style, the Gradient Overlay layer style applies its effects only within a layer's artwork. Calculating its spread from the furthest corners of the layer's contents, this style applies a customizable gradient spanning the artwork. Using a number of different settings, you are allowed to use anything ranging from simple two-color linear gradients to complex, transparent, angled noise gradients.

### notes

- Checking the Reverse checkbox will flip your gradient.
- Gradient Overlays can also be applied by choosing the option from the Layer Style menu at the bottom of the Layers palette.

1. Open an existing document with a photographic image.
2. Select the layer with a photographic image.
3. Choose Layer ⇨ Layer Style ⇨ Gradient Overlay to open the corresponding panel of the Layer Style dialog box (shown in Figure 183-1).



**Figure 183-1:** The Gradient Overlay panel of the Layer Style dialog box

4. Drag the Opacity selector to determine the transparency of the gradient atop your image (such as 45%).
5. Click on the downwards arrow at the right of the Gradient strip to open the Gradient picker. This picker will allow you to choose from a series of gradient presets, as well as fine-tuning the gradient's particulars, such as color and smoothness.

### caution

- If the Align with Layer checkbox is not checked, the gradient overlay will have its dimensions based upon the size of the document, not the selected layer. If you move the layer around the canvas, the gradient will remain stationary.

6. Double-click on the Blue, Yellow, Blue gradient thumbnail to choose a particular gradient, and check the Reverse checkbox to invert the gradient.
7. Choose the type of gradient (such as Diamond) you wish to apply across the selected layer via the Style drop-down menu.
8. Click within the Angle circle to set the angle of the gradient across your object.
9. Drag the Scale selector to 120% to determine the breadth of the gradient across your layer's artwork. (At 100%, the gradient will be calculated from edge to edge of your artwork. A percentage lower or higher than this number will produce a gradient that doesn't fully extend or extends beyond the confines of the layer's shape. Keep in mind, though, that the layer's shape will act as a mask for the gradient, preventing the gradient from actually spilling over the edges of the original artwork.)
10. Press the OK button to see the gradient overlay effect applied to your artwork (as shown in Figure 183-2).



**Figure 183-2:** A black-to-white gradient over a photo

## Task 183

### *tips*

- Apply a unique gradient across your layer by loading a custom gradient through the Gradient Picker interface.
- To further edit the settings of a Gradient Overlay command, simply choose the item from the Layer ↔ Layer Style menu again.

### *cross-reference*

- Task 135 shows how to load a custom gradient preset from the gradient preset picker library.

# Task 184

## Creating a New Pattern Overlay Style

The Pattern Overlay style is similar to both the Color and Gradient Overlay styles. Rather than applying a pattern across the entire document, this effect constrains the pattern fill to the document's layer only. Drawing from Photoshop's large collection of default patterns, as well as any you create yourself, you will have the ability to quickly apply a repeating, tiling image across your layer's contents.

### notes

- Pattern Overlays can also be applied by choosing the option from the Layer Style menu at the bottom of the Layers palette.
- Pressing the Snap to Origin button will return the pattern to its default tiling state if you have moved it.

1. Create a new document and add a new layer.
2. Select the Rectangular Marquee Selection tool from the first row and first column of the Tools palette. You will be creating a simple piece of artwork to use to test the Pattern Overlay effect.
3. Draw a rectangular selection that is approximately half the size of the entire canvas area.
4. Fill the selection with black to complete the simple piece of artwork that you will apply a pattern across in the next steps.
5. Choose Layer ⇄ Layer Style ⇄ Pattern Overlay to open the corresponding panel of the Layer Style dialog box (shown in Figure 184-1).

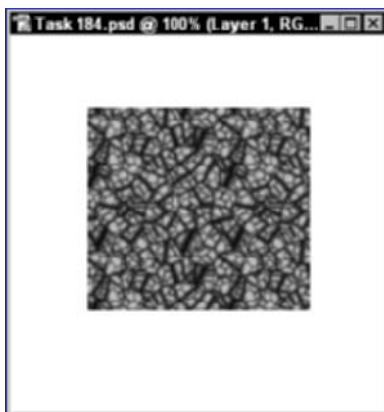


Figure 184-1: The Pattern Overlay panel of the Layer Style dialog box

### caution

- If the Link with Layer checkbox is not checked, the pattern overlay will have its position based upon the document, not the selected layer. If you move the layer around the canvas, the pattern will remain stationary.

6. Drag the Opacity selector to determine the transparency of the pattern (such as 75%).
7. Click on the downwards arrow at the right of the Pattern image to open the Pattern picker. This picker will let you see a series of pattern presets to help you choose which pattern may be right for your needs. By placing your cursor on a thumbnail and waiting a second or two, you will see a name and description of the preset pop up above the thumbnail.
8. Double-click on a pattern thumbnail (such as Metal Landscape) to choose a particular image to tile .
9. Drag the Scale selector to determine the size of the pattern tiles. A smaller number (such as 85%) will produce more of the tiles across your image.
10. Press the OK button to see the pattern overlay effect applied to your artwork (as shown in Figure 184-2).



**Figure 184-2:** A pattern overlay

## Task 184

### tips

- If you move the Layer Style palette so that your document is visible behind it, you can click and drag the previewed pattern to precisely position it across your image.
- To further edit the settings of a Pattern Overlay command, simply choose the item from the Layer ↔ Layer Style menu again.

### cross-reference

- In Task 164, you learn how to create a pattern fill layer to create a similar effect across your entire document.



# Task 185

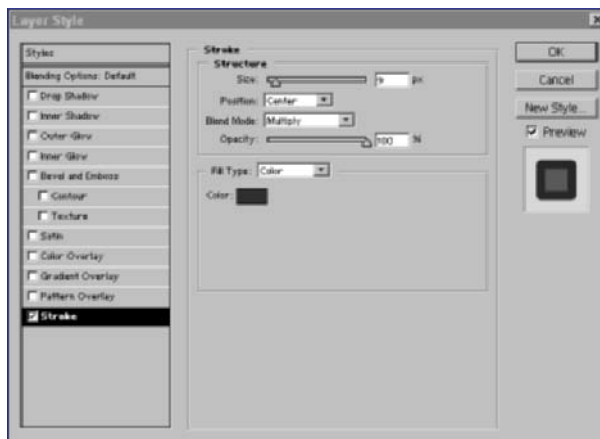
## Creating a New Stroke Style

Earlier in the book, you learned how to apply a stroke to a selection, thus resulting in a “picture frame” around your layer’s other content. To speed this process up, though, you can use the Stroke Layer Style dialog box. Adding a uniform weight line around your artwork, the command allows you to quickly modify a stroke to improve its appearance at a later date.

### notes

- Not only can you fill a Stroke effect with a flat color, you can also use gradients or patterns, accessible via Fill Type drop-down menu.
- You can also apply a stroke effect to a layer by choosing the option from the Layer Style menu at the bottom of the Layers palette.

1. Create a new document and add a new layer.
2. Select the Lasso tool from the second row and first column of the Tools palette. You will be creating a simple piece of artwork to use to test the Stroke effect.
3. Draw an irregular selection that is approximately half the size of the entire canvas area.
4. To complete the artwork, fill the selection with gray.
5. Choose Layer ⇄ Layer Style ⇄ Stroke to open the corresponding panel of the Layer Style dialog box (shown in Figure 185-1).

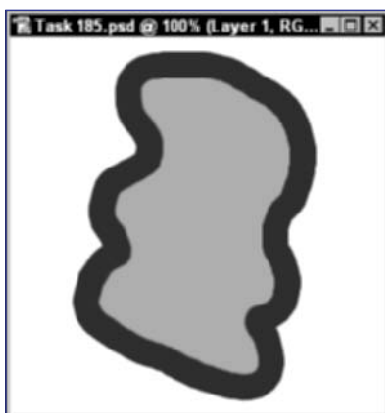


**Figure 185-1:** The Stroke panel of the Layer Style dialog box

### caution

- If your stroke size is too large, you can completely obscure the layer it is modifying.

6. Drag the Size selector to determine the width of the stroke, such as 21 pixels.
7. Select the Outside setting from the Position drop-down menu to determine where the stroke is drawn in relation to your layer's content's edges. (Your options include Outside, Inside, and Center.)
8. Click on the color swatch near the bottom of the dialog box to pull up a color picker.
9. Choose a color from the color picker to determine the color of the stroke, and press the OK button to confirm your selection.
10. Press the OK button to see the stroke effect applied to your artwork (as shown in Figure 185-2).



**Figure 185-2:** A stroke effect

## Task 185

### *tips*

- Pressing the Command (Mac) or Ctrl (Windows) or Option (Mac) or Alt (Windows) key while the Layer Style box is open will allow you to click to zoom in or out of your document behind the box with any click inside the document window.
- Use the Blend Mode and Opacity settings to “fine tune” the appearance of your stroke and how it blends with background layers.

### *cross-reference*

- In Task 76, you'll learn how to stroke a selection rather than a layer.

# Task 186

## Converting Layer Styles to Image Layers

### notes

- Not all effects can be converted into image layers. Be sure to check your document after you convert it to ensure the results are as planned.
- Not only can you fill a Stroke effect with a flat color, you can also use gradients or patterns, accessible via Fill Type drop-down menu.

### caution

- Turning layer styles into image layers discards much of your ability to quickly edit and manipulate the artwork's appearance. Always consider keeping a backup of your original layer with its layer styles intact before moving forward with this process.

For all the benefits that a layer style's ability to infinitely edit provides, you may find times where you want to disable just such an ability. For instance, layer effects only affect a layer's contents. An inner glow style does not modify a drop shadow style applied to a layer's contents. However, by rasterizing the layer styles applied to a layer, you can create new pieces of artwork that can be modified by future layer styles to achieve such an effect.

To try out this conversion, the following steps will have you apply a layer style to a piece of artwork, convert it into an image layer, and allow you to begin applying new layer styles to your flattened artwork.

1. Open an existing document with an image, such as the image in Figure 186-1.



**Figure 186-1:** Sample artwork to be modified with layer styles

2. Select your document's layer containing the image you wish to modify.
3. Choose Layer ⇨ Layer Style ⇨ Drop Shadow, adjust the settings according to your desire, and press the OK button.

4. Choose Layer ⇨ Layer Style ⇨ Color Overlay, adjust the settings according to your desire, and press the OK button. (The resulting document's Layers palette should look similar to Figure 186-2.)

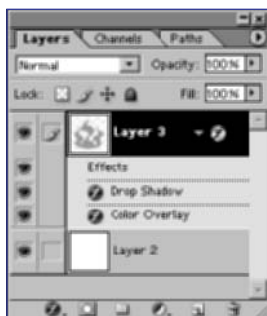


Figure 186-2: Layer effects applied to an artwork layer

5. Choose Layer ⇨ Layer Style ⇨ Inner Glow, adjust the settings according to your desire, and press the OK button.
6. Choose Layer ⇨ Layer Style ⇨ Create Layers to convert the layer effects into rasterized content. (The resulting Layers palette should look similar to Figure 186-3, while the artwork will continue to appear the same as Figure 186-1.)

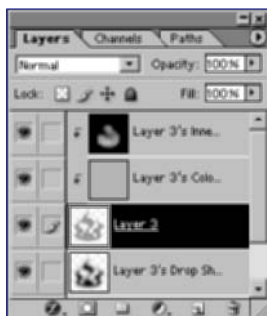


Figure 186-3: Layer effects converted into artwork layers

7. Continue editing your document by applying new layer effects on the newly created layers.

## Task 186

### tips

- Right-clicking (Windows) or Ctrl-clicking (Mac) on a layer effect in the Layers palette will produce a contextual menu in which you can also select Create Layers.
- You can flatten all the layer effects into one layer by merging a layer effects layer into a linked blank layer.

### cross-reference

- Task 172 shows how to flatten a number of different layers together, thus merging their layer styles into one rasterized layer.

# Task 187

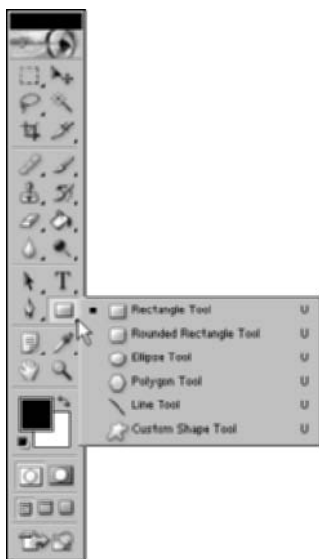
## Using a Shape Tool to Create a Shape Layer

In a version of Photoshop not so long ago, using a shape tool would produce a rasterized object on your canvas. Recently, however, Photoshop has converted all its shape tools into vector-producing agents by default. Drawing a rectangle will still produce a rectangle, filled with the foreground color as before, but the rectangle will be easily editable thanks to its vector path data. Further, the tools can produce layers that use the shapes as masks, rather than artwork objects.

### notes

- You can use the Direct Selection tool to edit the Bezier path information of your Shape Layer's shape.
- You can use the Path Selection tool to move a Shape Layer shape around the document once it's created.

1. Create a new 300-pixel square RGB document with a white background.
2. Choose the Rectangle tool from the ninth row and second column of the Tools palette (as shown in Figure 187-1). Make sure that the Shape layers button is selected in the tool's Options bar to ensure you are drawing a shape layer.



**Figure 187-1:** The Rectangle and other shape tools

### caution

- Shape Layers can only hold vector path information. If you attempt to draw or paint on a Shape Layer you will receive an error message.

3. Click and hold anywhere within your document to define the corner of the rectangle you will be drawing.
4. Drag the tool's cursor to the opposite corner of your desired rectangle's shape.
5. Release the mouse button to complete the rectangle.
6. Double-click the rectangle artwork layer's layer thumbnail, noted with a little graphic slider at its bottom (as shown in Figure 187-2), to open a color picker.

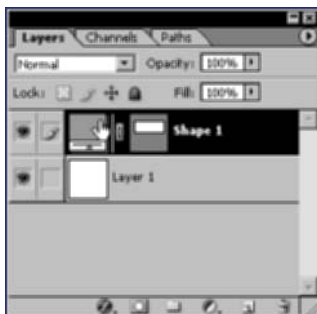


Figure 187-2: The Rectangle tool's default layer

7. Select the color you wish to use as the rectangle's fill color, and press the OK button. The color will update in both the document window and in the Layers palette's layer thumbnail.
8. To change tools so that you can draw different shapes, click and hold on the Rectangle tool's icon until a small menu is displayed (as shown in Figure 187-1), move your cursor on any of the other icons (such as Ellipse, Polygon, or Custom Shape tool), and release your mouse button.

## Task 187

### tips

- Set the foreground color to the color you wish to fill any subsequent shapes. This can save you time if you are creating a series of like-colored shapes.
- Press the U key to switch to the most recently chosen (or default, if you have just opened Photoshop) Shape tool from your current tool.

### cross-reference

- Task 91 shows the Path and Direct Selection tools in action, which is required learning for modifying a Shape Layer object.

# Task 188

## Use the Shape Tool Options to Modify the Shape

### notes

- You can access the Style picker at the end of the Options bar to quickly apply a style to your shape artwork.
- The Options bar will change its options depending on the shape tool you have selected. The Line tool, for instance, will not provide a radius field as the Polygon tool does in the Geometry Options bar; rather, you will be able to choose whether and how arrowheads appear on the line.

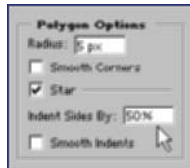
Just as the Marquee tools offered options to determine their size, shape, and how they interact with other selections, the Shape tools provide similar functions. You can specify arrowheads for a line, number of sides for a polygon, the angle of a rounded rectangle corner, and choose a pre-defined shape. You can also choose to draw from the center of a shape, specify dimensions, and even whether you can see the line you're drawing.

1. Create a new document.
2. Choose the Polygon tool from the ninth row and second column of the Tools palette. (Click and hold on the Rectangle tool's icon until a small menu is displayed, move your cursor to the Polygon tool, and release your mouse button.)
3. Press the downwards-pointing Geometry Options button in the Options bar (shown in Figure 188-1) to customize any Shape tool's appearance.



**Figure 188-1:** The Polygon tool's Options bar

4. Specify any of the Geometry Options, as shown in Figure 188-2, in the drop-down palette (such as whether the polygon should appear as a star, have a fixed radius, and/or have curved edges), and press the Return key to confirm your changes.



**Figure 188-2:** The Polygon tool's Geometry Options bar

### caution

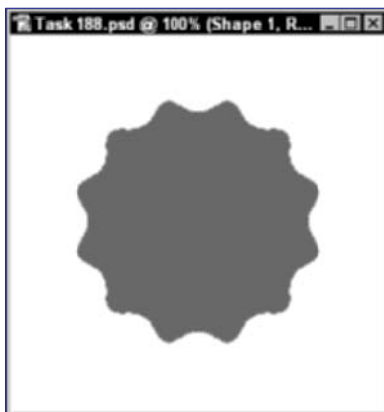
- Once you draw a shape, you cannot modify its Geometry Options. Be sure to make all your modifications before you draw your shapes.

5. Next in the Options bar is the Sides field (or Radius, Weight, or Shape options). Enter a number of sides for any upcoming polygons.
6. Click one of the five shape area buttons towards the end of the tool's Options bar (as shown in Figure 188-3) to determine how future drawings using the shape tool interact with existing shapes. The first button (which is the default selection) will draw the shape so that it is exclusive to its own layer, the second adds future shapes to the existing shape, the third subtracts, the fourth results in artwork only at the intersection of the shapes, and the fifth excludes any artwork within the intersection of the shapes.



**Figure 188-3:** The shape area buttons

7. Click the color swatch at the end of the palette to open a color picker.
8. Select the color you wish to use as the shape's fill color, and press the OK button.
9. Draw a polygon within your document to see all your settings in action, as shown in Figure 188-4.



**Figure 188-4:** An alternate shape

## Task 188

### tips

- Depress the chain link button in the Options bar if you wish for style and color changes to only apply to future shapes, not the current shape.
- You can also use the Options bar to quickly select another Shape or Path tool, rather than returning to the Tools palette.

### cross-reference

- The shape area buttons act similarly to the selection modification buttons described in Tasks 74 and 75.



# Task 189

## Creating a Raster Shape or Path with the Shape Tools

### notes

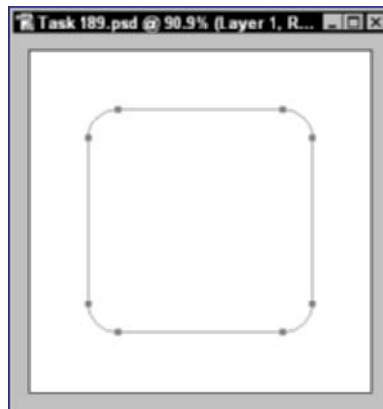
- If you draw a shape as rasterized pixel artwork, you will not be able to edit its boundaries using the Direct Selection tool or any of the other path modification tools.
- You can mix and match shape types in the same document. For instance, you can draw one polygon as a path, and the next as rasterized pixel art.

### caution

- Once you draw a shape, you cannot change its type through the shape type buttons.

One of the major features of the Shape tool's Options bar is the ability to switch the function of the tools between the production of shape layers, path data, and rasterized, filled artwork. While the Shape tools draw shape layers by default, changing the output of the tools are no daunting tasks. Drawing shapes as path data will produce editable Bezier curves defining the shape's borders, whereas drawing raster shapes will produce artwork filled with a solid color. (For those unfamiliar with Bezier curves, they are a type of paths used by most drawing programs that are defined by a series of anchor points, each containing angle information to define curvature on either side of the point.) You can switch between drawing modes multiple times in one document, allowing you to create the shapes you want in the format you need.

1. Create a new document and add a new layer.
2. Choose the Rounded Rectangle tool from the ninth row and second column of the Tools palette. (Click and hold on the Rectangle tool's icon until a small menu is displayed, move your cursor to the Rounded Rectangle tool, and release your mouse button.)
3. Click the Paths button in the tool's Options bar (the second of the three shape type buttons) to draw the shape as a path.
4. Click and hold anywhere within your document to define the corner of the rectangle you will be drawing.
5. Drag the tool's cursor to the opposite corner of your desired rectangle's shape.



**Figure 189-1:** The product of a Paths shape type

6. Release the mouse button to complete the path. The path will show up in your Paths palette (as shown in Figure 189-1), not your Layers palette, where you can make further modifications to it.
7. Next, click the Fill Pixels button (the third of the three shape type buttons near the front of the tool's Options bar) to draw your shape as a raster object (similar to a filled marquee selection).
8. Click and hold anywhere within your document to define the corner of the rectangle you will be drawing.
9. Drag the tool's cursor to the opposite corner of your desired rectangle's shape.
10. Release the mouse button to complete the artwork. The image (as shown in Figure 189-2) will show up in your Layers palette and you will be able to edit it with any of the Painting and Erasing tools (just as if you had scanned it into Photoshop).



**Figure 189-2:** The product of a Fill Pixels shape type

## Task 189

### *tips*

- Use the Paths shape tools to create basic path artwork that can be more precisely edited with the path tools, rather than using the Path tool to slowly draw common shapes.
- Check the Anti-aliased option at the end of the Options bar when using a Fill Pixels shape type to smooth the edges on any shape you draw.

### *cross-reference*

- Task 95 shows how to fill and stroke path information.

# Task 190

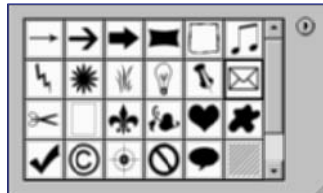
## Fashioning a Unique Image Using only Preset Shapes

### notes

- Photoshop's custom shapes are available for you to use in any of your commercial projects without paying any additional royalty charges. Use the shapes to your heart's content!
- The Custom Shape tool will fill your artwork with whatever color you have chosen as your foreground color.

**S**tashed quietly away under the Custom Shape tool's preset palette is a library of vector-based clip art shapes available for you to freely use. Consisting of images filed in different categories (such as Animals, Arrows, Music, and Talk Bubbles), these shapes can produce a shape, no matter to which drawing function your Custom Shape tool is set (that is, Shape layer, path data, or raster artwork). And while clip art should be avoided as the centerpiece of a professional image, it can be used to create interesting patterns to supplement your image's appearance.

1. Create a new document and add a new layer.
2. Choose the Custom Shape tool from the ninth row and second column of the Tools palette. (Click and hold on the Rectangle tool's icon until a small menu is displayed, move your cursor to the Custom Shape tool, and release your mouse button.)
3. Click the Fill Pixels button (the third of the three shape type buttons near the front of the tool's Options bar) to draw your shape as a raster object (similar to a filled marquee selection).
4. Click on the Custom Shape picker in the Options bar to choose from a library of existing artwork.



**Figure 190-1:** The Custom Shape picker

### caution

- Remember, shapes aren't the same as symbols (a type of reusable art element found in many vector drawing and animation programs). If you begin drawing with a particular custom shape, changing the shape midway through drawing will not convert previous artwork to the new shape.

5. Double-click on a shape thumbnail (such as the paw print) in the Custom Shape picker's drop-down list (shown in Figure 190-1) to select a shape.
6. Click and hold in the top left corner of your document to define the corner of the shape you will be drawing.
7. Drag the tool's cursor to the opposite corner of your desired shape's boundary, preferably creating a small image in the corner (roughly a 30-pixel square).
8. Release the mouse button to lock the shape in place.
9. Repeat steps 4 through 8, creating a border based on several of the tool's shapes, followed by a large instance of another shape in the center of the document. The results can look similar to Figure 190-2.



**Figure 190-2:** Artwork using Photoshop's custom shapes

## Task 190

### *tips*

- Hold the Shift key while drawing to constrain the shape to its original width and height ratio.
- You can apply any and all layer styles to custom shape artwork, allowing you to create even more interesting patterns and imagery.

### *cross-reference*

- Task 96 shows how to convert a selection of raster artwork into a path. Once you have a path defined, you can save the path as a custom shape.

# Task 191

## Creating, Saving, and Loading Custom Shapes

Whereas Photoshop may come stocked with plenty of clip art custom shapes for you to use, you are free to define your own custom shapes. Using the Path tool, you can create ornate vector artwork that you can save as a custom shape. Once saved, you can use this shape in any future Photoshop document on your machine, or you can distribute the custom shape file so that other Photoshop users can load the shape.

### notes

- Not only can you load additional shapes into your Custom Shape picker, you can replace the contents of the picker entirely with a new file by choosing Replace Shapes instead of Load Shapes from the fly-out menu.
- This book's companion Web site ([www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless)) has links to download other custom shapes for you to use freely.

- Create a new document.
- Choose the Pen tool from the ninth row and first column of the Tools palette.
- Draw any shape that you wish to use as a custom shape.
- Right-click (Windows) or Ctrl-click (Mac) within the shape (which should still be selected), and choose Define Custom Shape from the contextual menu that appears (as shown in Figure 191-1). (Alternately, you can also choose Edit ⇌ Define Custom Shape.)

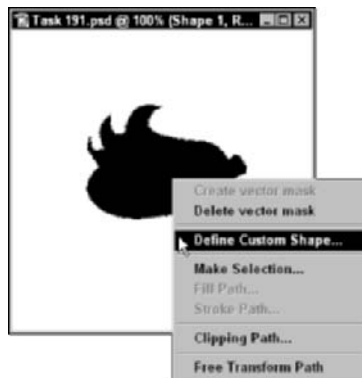


Figure 191-1: Defining a custom shape

### caution

- While you can freely distribute or sell any custom shapes you create, you can't do the same for Photoshop's supplied custom shapes. Make sure you don't have any of Adobe's shapes in your custom shape files before supplying them to outside parties.
- Choose Save Shapes from the fly-out menu of the Custom Shape picker (accessible through the Custom Shape tool's Options bar) to save the newly defined shape, as well as all the other shapes in the current Custom Shape picker palette, into a .CSH file (which is Photoshop's custom shape file format).
  - Name the file in the Save dialog box, and press the Save button.
  - To load another custom shape file, choose Load Shapes from the fly-out menu of the Custom Shape picker.
  - Navigate to the .CSH file you wish to load (such as the Photoshop-supplied Talk Bubbles.csh, as shown in Figure 191-2).



**Figure 191-2:** Photoshop's various custom shape files

9. Press the Load button to include any custom shapes from the selected file into your Custom Shape picker. These shapes will now be available for use in your document.

## Task 191

### *tips*

- You can use any of the Path tools, including the Custom Shape tools, to define path artwork that is valid for creating your own custom shape.
- You can save custom shape files anywhere you wish on your computer, although it is recommended that you keep them in the Custom Shapes folder that comes with Photoshop (Adobe Photoshop CS/Presets/Custom Shapes/).

### *cross-references*

- Task 87 shows how to use the Pen tool, necessary for you to create your own custom shape.
- Task 89 shows how to use the freeform Pen tool to create custom path artwork.

# Task 192

## Using the Line Shape Tool and Creating Arrowhead Lines

### notes

- If you draw a short line with huge arrowheads, the intersecting areas of the arrowheads will knock out, allowing background content to show through.
- You can apply a transformation to any line you draw, allowing you to quickly scale or stretch the line without having to draw any new artwork.

When you create a diagram, you often use arrows to point out specific aspects of the image. Rather than forcing you to draw arrowheads by hand, Photoshop provides you with some settings to quickly generate an arrowhead at either or both ends of a line. Using these settings, you can create simple diagrams within Photoshop (as opposed to specific diagramming software).

1. Create a new document and add a new layer.
2. Choose the Line tool from the ninth row and second column of the Tools palette. (Click and hold on the Rectangle tool's icon until a small menu is displayed, move your cursor to the Line tool, and release your mouse button.)
3. Specify a numerical value (in pixels) for the line's weight in the Options bar's Weight field (shown in Figure 192-1).



Figure 192-1: The Line tool's Options bar

4. Press the downward-pointing Geometry Options button in the Options bar to customize any Shape tool's appearance.
5. Check the Start and End checkboxes in the Geometry Options bar, shown in Figure 192-2, to place arrowheads at both ends of any line to be drawn.

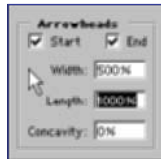
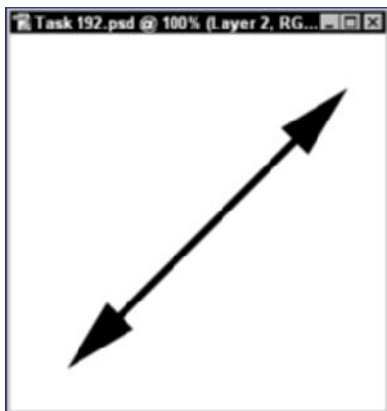


Figure 192-2: The Line tool's Geometry Options bar

### caution

- Arrowhead settings apply only to future lines drawn. There is no way to change the arrowhead settings of an existing line.

6. Specify the width (defined as a percentage of the line width) of the arrowhead in the Width field.
7. Specify the length (defined as a percentage of the line width) of the arrowhead in the Length field. Press the Return key to confirm your changes.
8. Click and hold in the bottom left corner of your document to define the starting point of the line you will be drawing.
9. Drag the tool's cursor to the top right corner of your document.
10. Release the mouse button to complete the line, shown in Figure 192-3.



**Figure 192-3:** A 6-point line with dual arrowheads

## Task 192

### tips

- To make the arrowheads more or less pointy, you can specify a concavity for the arrowhead. Supply a number in the Concavity field using a percentage anywhere between -50% and 50% (based upon the length of the line, not its weight).
- If you draw your line as a Shape Layer, you can manually edit the path information to customize the arrowheads further.

### cross-reference

- Task 189 teaches you how to draw any shape as pixel art instead of as a Shape Layer.



# Task 193

## Creating a Vector Layer Mask with a Shape Tool

### notes

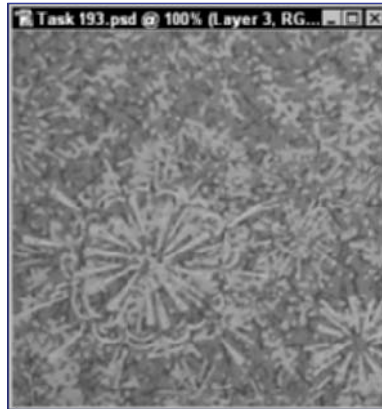
- Applying a layer effect to a layer with a vector mask will constrain the effect's results to the mask, not the original artwork's dimensions.
- Shape layers themselves already use vector masks to create their effects.

### caution

- Make sure that the vector mask thumbnail in the Layers palette is selected when drawing the shapes you wish to comprise your mask. If it is not selected, the shapes you will draw will simply be created as shape layers.

Layer masks are wonderful for hiding parts of an image without physically deleting the to-be-hidden pixels, allowing you more leeway in editing your image at a later date. Earlier in this book, you learned how to create a layer mask and edit it with painting tools. In this task, however, you will learn how to create a custom-shaped, vector-based layer mask. The resulting mask will not only keep the masked content fully editable, but also provide a quick and easy method of adjusting the layer mask at a later point, too.

1. Open an existing document containing image layers, such as the image in Figure 193-1.



**Figure 193-1:** Artwork before a vector mask

2. Select one of the upper layers containing an image.
3. Choose Layer ⇨ Add Vector Mask ⇨ Reveal All (as shown in Figure 193-2).
4. Choose the Ellipse tool from the ninth row and second column of the Tools palette. (Click and hold on the Rectangle tool's icon until a small menu is displayed, move your cursor to the Ellipse tool, and release your mouse button.)

5. Click and hold anywhere within your document to define the corner of the ellipse which will become the layer's mask.
6. Drag the tool's cursor to the opposite corner of your desired ellipse shape.
7. Release the mouse button to complete the ellipse, and thus defining your layer mask. Your Layers palette listing will show the ellipse within the vector mask thumbnail.
8. Continue drawing shapes with the vector mask thumbnail selected to further modify your vector mask.



**Figure 193-2:** Creating a vector mask

## Task 193

### tips

- Right-click (Windows) or Ctrl-click (Mac) on the layer listing containing a vector mask to access a contextual menu. This menu will allow you to quickly rasterize, disable, or delete the vector mask.
- You can disable a vector layer mask at any time by choosing Layer ⇨ Disable Vector Mask. This will simply disable the mask's display, allowing the original artwork to appear as before, while keeping the mask information available for use later.

### cross-reference

- To create a raster layer mask, visit Task 161.

# Task 194

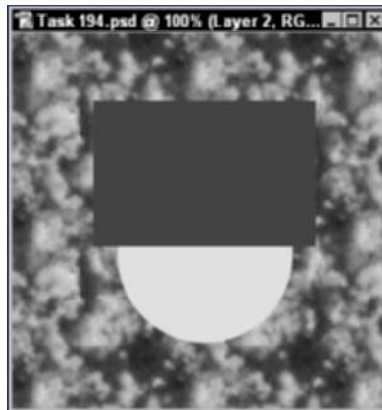
## Creating a Layer Clipping Group

**L**ayer clipping groups are somewhat similar to layer masks: They selectively show and hide portions of an image while retaining all of that image's pixel information. Unlike layer masks, however, another layer, not a separate mask, defines the clipping mask, and layer clipping groups can be applied across several layers simultaneously. Thus, you could easily have fifteen different layers masked by another layer's shape (instead of applying a unique mask to each of those layers via the layer mask route).

### notes

- To ungroup a layer from a clipping group, select the layer and choose Layer ⇨ Release Clipping Mask.
- You can also ungroup a layer by pressing Command+Shift+G (Mac) or Ctrl+Shift+G (Windows) keys after selecting the layer.

1. Create a new document. In the next few steps, you will be creating a series of layers with intersecting artwork to clip.
2. Create a pattern fill layer by choosing Layer ⇨ New Fill Layer ⇨ Pattern to flood the document with a particular repeating image.
3. Create a new layer, and then add a yellow circle near the center of the document on a new layer above the pattern fill layer.
4. Create a new layer, and then add a red rectangle in the middle of the document that overlaps the circle at some point. You will use this rectangle to clip the other two layers momentarily. (Figure 194-1 shows the result of these four steps.)



**Figure 194-1:** The three artwork layers before clipping

5. In the Layers palette, move the red rectangle layer (i.e., the layer whose content you wish to use to mask the other layers) beneath the other two layers you wish to mask.

### caution

- Clipping groups can only mask content on consecutive layers. If you move a clipped layer outside of the clipping group's succession of layers, that layer will no longer be clipped.

6. Link the masking layer (i.e., the red rectangle layer) and the layer directly above it that you wish to mask (the pattern fill layer) by clicking in the second column of its listing in the Layers palette.
7. Choose Layer ⇨ Create Clipping Mask From Linked to create a layer clipping group. After choosing this command, the clipped layer will appear indented in the Layers palette alongside an arrow pointing down towards the clipping layer (as shown in Figure 194-2).

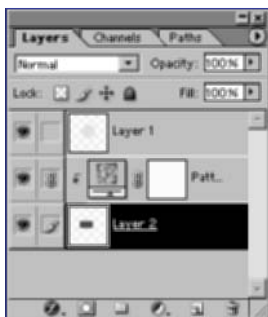


Figure 194-2: A layer clipping group

8. Select the layer above the linked, indented layer. This should be the layer with the yellow circle.
9. Choose Layer ⇨ Create Clipping Mask to add this layer to the clipping group, resulting in an image similar to Figure 194-3.



Figure 194-3: A clipped image

## Task 194

### tips

- You can save some wrist movement by holding Command (Mac) or Ctrl (Windows) and Option (Mac) or Alt (Windows) while clicking in between the layers in the Layers palette to create a clipping group.
- Press Command+G (Mac) or Ctrl+G (Windows) when you have selected a layer to group it with the previous group or with other linked layers.

### cross-reference

- If you merely wish to group several layers together for organizational purposes, consider using a layer set, described in Task 155.



## Part 13: Type

- Task 195: Inserting Point Type into an Image
- Task 196: Specifying and Adjusting Type Parameters
- Task 197: Moving, Aligning, and Justifying Type
- Task 198: Resizing and Transforming Type
- Task 199: Checking and Correcting Spelling; Finding and Replacing Text
- Task 200: Managing and Transforming Paragraph Type
- Task 201: Dressing up an Image with Warped Type
- Task 202: Placing Text on a Path
- Task 203: Customizing a Text Logo with Shape Type
- Task 204: Combining Text with Imagery Using a Selection Mask Type
- Task 205: Using Work Path Type as a Clipping Path
- Task 206: Creating an Eye-Catching Text Effect by Manipulating Layer Styles
- Task 207: Using Layers to Form Text Reflections

# Task 195

## Inserting Point Type into an Image

Adobe recognizes the intrinsic value and provides you with the means of adding text into your documents. While Photoshop is not likely to compete against Microsoft Word in terms of the ability to format and manage text, it does provide the opportunity to blend type and image more seamlessly than many word processors.

### notes

- Photoshop will allow you to choose only fonts available to your system during the application's startup. To use a font that you've just installed, either relaunch the program or use a font management utility like Extensis Suitcase.
- You can adjust nearly any text setting on a layer through the Character palette without selecting any of the text as long as your insertion point is not within the text's body.

To add text to a Photoshop document, perform the following steps:

1. Select the Horizontal Type tool from the eighth row and second column of the Tools palette.
2. In the tool's Options bar, choose a typeface family (such as Helvetica, Times New Roman, or Adobe Garamond) to determine the shapes of your future text's characters.
3. If available for the selected typeface family, choose a style (such as Regular, Bold, or Bold Italic) from the drop-down menu to the right of the typeface family selector, as shown in Figure 195-1.



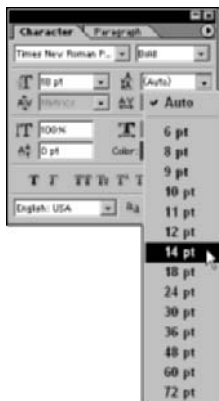
**Figure 195-1:** Choosing a font style

4. Choose a type size in the Font Size selector's drop-down menu (such as 14pt) to determine the height of the text characters.
5. Click within your document to determine the left edge and baseline of the first line of your upcoming text.
6. Enter your text, including the occasional return (with either the Enter or Return key) to create multiple lines of type.
7. Press Command+A (Mac) or Ctrl+A (Windows) to select all the text you have just entered.
8. Press the Character palette button at the far right of the tool's Options bar.

### caution

- Text is handled differently from artwork in Photoshop; its letterforms are considered vector shapes, unlike the artwork's raster makeup. Consequently, you cannot use raster editing tools (such as the Paintbrush or the Eraser) on a type layer unless you first rasterize the layer.

9. Choose a new leading setting (the amount of space between each line of text) from the Leading drop-down selector in the Character palette, as shown in Figure 195-2, if you wish to space out your text lines. This can be helpful if you are creating a poster or display text (such as a quote pulled from an article) and you want to differentiate your text from body text (text that is the main part of any document, such as a magazine story).



**Figure 195-2:** Adjusting the leading

10. Choose a new tracking setting (the amount of spacing between letters) from the Tracking drop-down selector in the Character palette if you wish to get some “air” between the letterforms.

## Task 195

### tips

- You can manually enter a type size into the Type Size field by selecting the current value and typing a new numerical value in its place. Pressing the Return key after entering the number will confirm your setting.
- Always keep the Character palette open for quick and comprehensive editing of your text's settings.

### cross-reference

- If you want your text to wrap automatically according to a bounding box (similar to an InDesign text box), see the instructions on how to create Paragraph Type in Task 202.



# Task 196

## Specifying and Adjusting Type Parameters

### notes

- You can apply any and all of these settings to future type by changing the settings while on any non-type layer.
- You can also choose in which case your text should appear by selecting the options in the Character palette's fly-out menu.

Inserting type and adjusting its size, leading, and tracking are pretty easy tasks in Photoshop. The Text tool's Options and Character palettes can similarly expedite other text changes. Both palettes allow quick changes to type color and anti-aliasing settings. Using the Character palette, you also have the option of stretching your type, whether vertically or horizontally, and changing the case of the letters without having to retype them.

Depending on how large or small the text is, as well as where it is to be used, you may need to specify different anti-aliasing settings. This selection determines how soft and blurry your letterform's edges appear. The None setting will display the type as very hard-edged (i.e., there will be no shades of gray around the corners and curves of the type, and it will appear similar to that of most of your computer's menus), whereas the Crisp, Smooth, Sharp, and Strong settings use different algorithms to determine how subtle the edges should appear.

1. Open a document with a type layer already created.
2. Select the Horizontal Type tool from the eighth row and second column of the Tools palette and select the type layer in the Layers palette.
3. Press the Character palette button at the far right of the tool's Options bar to reveal the Character palette (shown in Figure 196-1), thus revealing all the settings available for you to change.



**Figure 196-1:** The Character palette

### caution

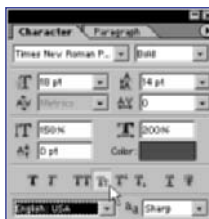
- Be judicious in your use of horizontal and vertical scale, as the results will distort the visual weight of the typeface's letterforms. This distortion is deemed undesirable by most typographers, as the letterforms lose their originally designed balance.

4. Choose your preference for the smoothness of the text's edge from the Anti-Aliasing drop-down selector. The None setting will result in a hard, aliased edge, whereas Strong will result in a heavily smoothed and graded edge. Figure 196-2 shows the different results from the settings.



**Figure 196-2:** The various Anti-Aliasing settings

5. Click the color swatch in the Character palette to pull up a color picker.
6. Choose a color from the color picker to determine the color of the text, and press the OK button to confirm your selection.
7. Enter a new percentage value in the Vertical Scale field to stretch the type vertically.
8. Enter a new percentage value in the Horizontal Scale field to stretch the type horizontally.
9. Press the Small Caps button, shown depressed in Figure 196-3, to convert all lowercase letters into miniature uppercase letterforms.



**Figure 196-3:** Choosing Small Caps

## Task 196

### tips

- Use the Sharp or None Anti-Aliased setting for text 12 points or smaller to ensure the clarity of the letterforms.
- You can also choose your text color from the Horizontal Type tool's Options bar.

### cross-reference

- Task 195 shows you how to create a layer with text.

# Task 197

## Moving, Aligning, and Justifying Type

**W**hen you are typing more than one line of text into your document, you may wish to change its location or alignment. By default, Photoshop will format all newly inserted text so that it aligns with each line's left edge. To change this setting for an existing or upcoming line of text, use the Type tool's Options or Paragraph palettes to modify the alignment settings. You can also use the Move tool to quickly change the location of any text object in your document.

### notes

- If you have simply inserted type in your document by clicking the Type tool once, the text will align according to the insertion point.
- Uncheck the Hyphenate checkbox in the Paragraph palette to disable Photoshop's automatic word hyphenation.

1. Open or create a document with a type layer containing a block of paragraph type.
2. Select the type layer in the Layers palette, and then select the Horizontal Type tool from the eighth row and second column of the Tools palette.
3. Press the Character palette button at the far right of the tool's Options bar to see the settings available for you to change.
4. Click the Paragraph tab in the Character palette to switch to the Paragraph palette (shown in Figure 197-1).

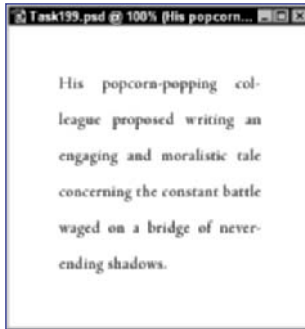


**Figure 197-1:** The Paragraph palette

5. Press the third alignment button (to right-align text) in the top left corner of the palette to align the right edge of each line of text with the right edge of the paragraph type's bounding box.
6. To justify text, press the fourth alignment button, labeled as "Justify last left," in the top middle of the palette. This will justify with the left and right edges of the paragraph type's bounding box all but the last line of text, which will be aligned to the left edge of the box, as shown in Figure 197-2.

### caution

- Justifying short lines of text across a wide bounding box can create very unnatural gaps of space between words. If the box must retain its width, consider increasing the tracking of the short lines of text.



**Figure 197-2:** Text with the Justify last left setting

7. To move text, select the Move tool from the first row and second column of the Tools palette.
8. Click and hold the typographic content to, in effect, pick it up.
9. Drag the text to a different location within your document.
10. Release your mouse button to confirm the text content's new location.

## Task 197

### *tips*

- Choose Window ⇧ Paragraph to directly open the Paragraph palette from the menu rather than through Steps 2, 3, and 4.
- Hold down the Command (Mac) or Ctrl (Windows) key while editing text to change the I-beam cursor to the Move tool, allowing you to quickly pick up and move your content within your document.

### *cross-reference*

- You can create paragraph type by following the steps in Task 200.

# Task 198

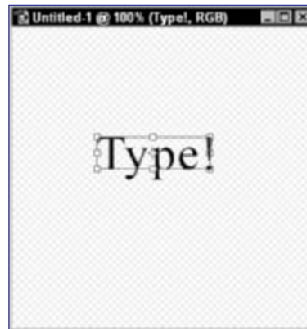
## Resizing and Transforming Type

Several years ago, if you wanted to create interesting text effects like skewing, you needed a special application like TypeStyler. Adobe recognized designers' desire for such text distortion, though, and has been adding such features to Photoshop with every version increment (such as Text on a Path, covered in Task 202, which is new to Photoshop CS). Aside from letting you change the size and scale settings in the Character palette, Photoshop lets you transform your type just as you would any other piece of artwork. Using the Transform command, you can stretch, resize, rotate, and skew your type. By applying this command to your type layers, you can achieve bizarre text effects while retaining the ability to edit your text.

### notes

- Hold the Shift key to constrain the transformation to retain the text's original aspect ratio.
- You can also apply specific transformation settings in the Options bar once the Free Transform command is initiated.

1. Create a new document.
2. Using the Horizontal Type tool, insert a small amount of text (such as the word "Type!") into your document.
3. Choose Edit ⇨ Free Transform to begin transforming and distorting the text. The transformation bounding box will appear, surrounding the text, as shown in Figure 198-1.



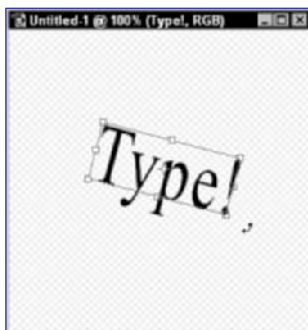
**Figure 198-1:** Text ready to be transformed

4. Click and hold one of the corner handle points to begin scaling the text.
5. Drag the point until the text is stretched to your desired width and height values, then release the mouse button to confirm the new settings.

### caution

- You cannot apply the Perspective or Distort commands to content on a text layer. To distort text as such, you must first rasterize the type layer.

6. Move the cursor roughly 20 pixels outside the bounding box until the cursor changes to a curved line with an arrowhead on each end, and then click and drag to begin rotating the text.
7. Drag the cursor until the text is rotated to your desired angle (as shown in Figure 198-2), then release the mouse button to confirm the new appearance.



**Figure 198-2:** Rotating a block of text

8. While holding Command (Mac) or Ctrl (Windows), click and hold one of the corner handle points to begin skewing the text.
9. Drag the cursor until the text is skewed to your desired angle, then release the mouse button to confirm the new appearance.

## Task 198

### tips

- Hold the Option (Mac) or Alt (Windows) key while transforming your text to calculate the transformation from the center point of your text, rather than from the edge or corner.
- By default, text is rotated from its center point (visible as a round gray crosshair in the center of the transformation matrix). To move this pivot point, click, hold, and drag the cross-hair to another location.

### cross-reference

- Two of the Free Transform transformations, Skew and Distort, are described in greater detail in Task 106.

# Task 199

## Checking and Correcting Spelling; Finding and Replacing Text

Designers have long blamed their tools for not catching the spelling mistakes that sometimes appear in their graphics files. To minimize spelling errors, Photoshop includes a series of tools to better manage text. The Edit menu features two commands, Check Spelling and Find and Replace Text, to expedite text management within your document. Check Spelling can correct the text within all layers of your document, and Find and Replace Text can search for specific words and replace them with others of your choice.

### notes

- If you have a document filled with a word Photoshop believes to be misspelled (such as an uncommon name like Micah) but don't wish to add the word to the dictionary, press the Ignore All button to leave all instances unchanged.
- Both the Find and Replace Text and Check Spelling commands move forward (left to right, top to bottom) through your document to hunt for words. To reverse this direction in the Find and Replace Text command, uncheck its Forward checkbox.

1. Open a document containing a large amount of text that has several misspellings.
2. To check spelling, choose Edit ⇨ Check Spelling, to launch Photoshop's spellchecking feature. Words that Photoshop believes to be misspelled will be listed one at a time in the Check Spelling command's Not in Dictionary field, shown in Figure 199-1.



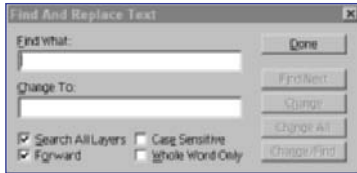
Figure 199-1: The Check Spelling dialog box

3. If more than one option presents itself within the Suggestions listing, choose the word that you intended to type. Clicking a word will insert it into the Change To field.
4. Press the Change button to replace the word displayed in the Not in Dictionary field with the word displayed in the Change To field.
5. If you do not wish to change a word Photoshop believes to be misspelled, press the Ignore button to leave the instance unchanged. Photoshop will then move on to the next suspected word, if any.

### caution

- The Check Spelling dialog box allows you to add its currently selected word to the Photoshop dictionary via its Add button. However, be very careful when adding a word to the dictionary, as you can't easily remove a word once it's been added. This means that if you add a misspelled word, Photoshop will be unable to detect it as problematic.

6. Press the Done button when you are finished.
7. To find and replace text, choose Edit ⇨ Find and Replace Text.
8. Enter a word used repeatedly throughout your document, such as “the,” in the Find What field, shown in Figure 199-2.



**Figure 199-2:** The Find and Replace Text dialog box

9. Press the Find Next button to highlight the first instance of the word in the document. Subsequent presses of the button will cycle through the additional instances of the word.
10. Enter a word in the Change To field and press the Change All button. This will replace all instances of the word in the Find What field with the word in the Change To field.

## Task 199

### tips

- If the word you are looking to spell is both mistyped and not in Photoshop's dictionary, simply overwrite the word in the Change To field and press the Change button.
- Be sure that Search All Layers is checked in both the Check Spelling and Find and Replace Text dialog boxes if you want the commands to search all text within your document.

### cross-reference

- The commonly used keyboard shortcut Command+F (Mac) or Ctrl+F (Windows) doesn't open a Find command in Photoshop. Rather, it repeats the most recent Filter command, such as the Freeze filter discussed in Task 210.



# Task 200

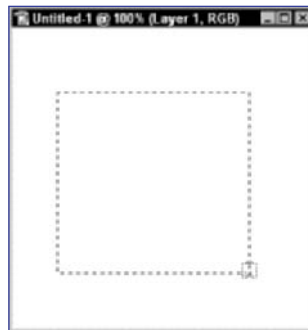
## Managing and Transforming Paragraph Type

### notes

- You can apply different typeface families, styles, and sizes within a Paragraph Type bounding box.
- A Paragraph Type block can be moved in a similar fashion to any other object in Photoshop. Simply select the Move tool, click, and drag your text to its new location.

Layout programs like Adobe InDesign and Quark Xpress have accustomed designers to creating custom text boxes. After you draw a rectangular shape, these programs force any text entered within the box to flow within its boundaries. Photoshop similarly allows you to use the Type tools to draw a boundary box to constrain its contents (which is known as paragraph type). The box's dimensions, however, remain malleable, allowing its width and height to be adjusted according to your needs.

1. Select the Horizontal Type tool from the eighth row and second column of the Tools palette.
2. Set the typeface family, style, and size settings in the Character palette.
3. Click and hold within your document to define one corner of the Paragraph Type bounding box.
4. Drag your cursor to the opposite corner of your desired box's dimensions, as shown in Figure 200-1.

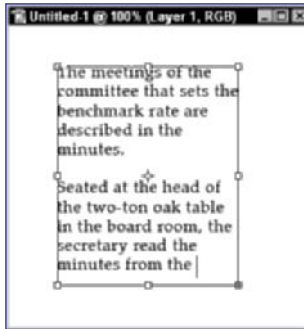


**Figure 200-1:** Drawing a Paragraph Type bounding box

5. Release the cursor to confirm the box's settings.
6. Enter a substantial amount of text to see how the bounding box automatically wraps lines of text to conform to the box's shape. Once you have a good amount of text entered, your document may look similar to the one shown in Figure 200-2.

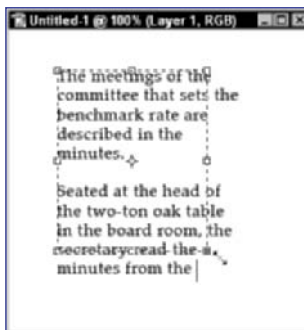
### caution

- If you don't want your text automatically hyphenating in your bounding box, you can disable this feature in the Paragraph palette.



**Figure 200-2:** Text flowed within a Paragraph Type bounding box

7. Click and hold on one of the handles on the Paragraph Type bounding box's corners or edges to reshape the box.
8. Drag your cursor to redefine your box's dimensions, as shown in Figure 200-3.



**Figure 200-3:** Adjusting the bounding box

9. Release the cursor to confirm the box's settings.

## Task 200

### *tips*

- Click within your document while holding the Option key to open a Paragraph Text Size command dialog box to set specific height and width values for your bounding box.
- Hold the Shift key while dragging one of the box's corner handles to constrain the box's aspect ratio to a square.

### *cross-reference*

- Paragraph Type bounding boxes look similar to Photoshop's other bounding boxes (such as that of the Scale command described in Task 105) and can be used in the same manner.

# Task 201

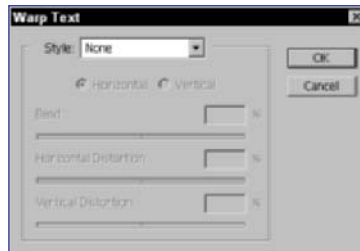
## Dressing up an Image with Warped Type

### notes

- Warped text retains its ability to be edited. Simply insert the Horizontal Type tool's cursor between or over letters and edit the text as needed.
- A Warp Text command can be applied to both single lines of text and Paragraph Text.

As mentioned in Task 198, previous generations of digital artists had to rely on programs like TypeStyler to distort and transform their text. Whether by bloating, stretching, curving, twisting, or any number of various distortions, these programs used the computer's mathematical abilities to quickly generate complex visual transformations to text with a specific font face applied. Frustratingly, though, the programs always produced vector outlines rather than text characters, which left the results unable to be quickly modified. With Photoshop's Warp Text command, however, not only can you achieve similar effects, you can edit the distorted text at any time.

- Create a new document.
- Select the Horizontal Type tool from the eighth row and second column of the Tools palette.
- Set the typeface family, style, and size settings in the Character palette.
- Click within your document to determine the left edge and baseline of the first line of your upcoming text.
- Enter a short chunk of text, such as "Whoa."
- Choose Layer ⇨ Type ⇨ Warp Text to open the Warp Text command's dialog box, shown in Figure 201-1.

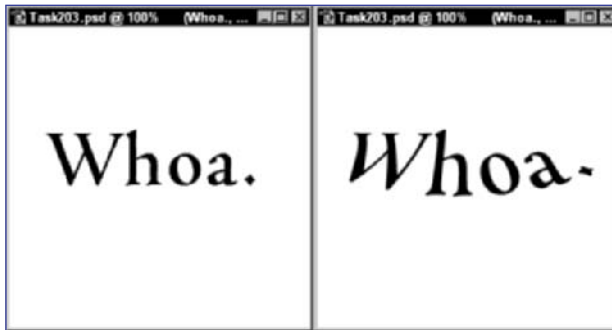


**Figure 201-1:** The Warp Text dialog box

### caution

- You can't disable a text warp from the Layers palette as you can with other effects. Rather, you must return to the Warp Text dialog box and select None from the drop-down menu.

7. Select a shape, such as Fish, from the Style drop-down menu to determine the warp to be applied to your text layer. Any changes you make in this dialog box will be visible in the document window behind the box.
8. Click the Vertical option's radio button to have the distortion applied top to bottom instead of left to right.
9. Adjust the Bend, Horizontal Distortion, and Vertical Distortion sliders to fine-tune the shape distortion. The result should look like Figure 201-2.



**Figure 201-2:** The before (*left*) and after (*right*) of a Warp Text command

10. Press the OK button to confirm your changes and return to your document.

## Task 201

### *tips*

- You can open the Warp Text dialog box quickly via a button near the far right of any Type tool's Options bar.
- Hold Option (Mac) or Alt (Windows) to change the Cancel button into a Reset button. This will allow you to start the warp process from the state it was in when you opened the dialog box.

### *cross-reference*

- Text isn't the only thing in Photoshop that can be bizarrely distorted. Task 211 shows how to apply a Liquify Mesh to your artwork layers.

# Task 202

## Placing Text on a Path

### notes

- Using the Direct Selection tool, you can drag the text insertion point (represented as a circle with cross-hairs) inside or outside of the path to determine what side of the path your text is drawn within. You can also drag the point along the path to determine a new starting point for the text.
- Even after you've entered it inside or on a path, your text retains its ability to be edited. You can continue to use the Horizontal Type tool to select, and subsequently modify, any path text.

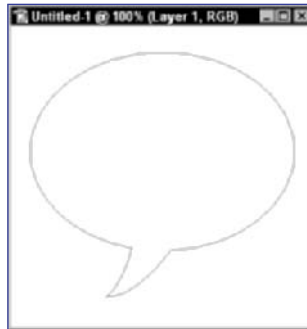
### caution

- Photoshop will allow you to place your text only within another closed object (meaning that the starting and ending points of the path are joined). You can, however, place type along an open path.

The line between Photoshop and Illustrator occasionally becomes a bit blurry, especially where features such as text on (or in) a vector path are concerned. Photoshop CS introduces this new feature that previously required a vector graphics or layout program (such as Illustrator or InDesign). Now, not only can you place your Photoshop text inside a rectangular Paragraph Text box, you can insert your text within or onto any closed path. Thus, your text can now appear along the curved path of a circle or within a freeform shape.

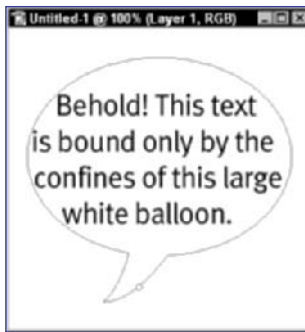
Try out this new feature yourself — the following steps will help you place text within and on a word balloon.

1. Create a new document using the New command.
2. Choose the Custom Shape tool from the ninth row and second column of the Tools palette and specify the Paths drawing mode in the tool's Options bar.
3. Using the Custom Shape Picker in the Custom Shape tool's Options bar, choose the Talk 1 black word balloon.
4. Within your document window, click and drag to draw a giant word balloon filling roughly three-quarters of the document window, as shown in Figure 202-1.



**Figure 202-1:** The giant word balloon path

5. Choose the Horizontal Type tool from the ninth row and second column of the Tools palette.
6. When you move the type tool's cursor directly over the balloon's gray outline, the cursor should switch to an I-beam with a squiggly line passing through it. Click once on the balloon's path to use the path's edges as a baseline for your text.
7. Enter your text. As you type characters, the letterforms will appear along the path's edges.
8. To place text inside the word balloon, revert your document back to Step 5.
9. When you move the type tool's cursor inside the balloon's gray outline, the cursor should switch to parentheses surrounding an I-beam. Click once inside the balloon's path to use the path's edges as a bounding box for your text.
10. Enter your text. As you type characters, the letterforms will appear inside the path's edges, as shown in Figure 202-2.



**Figure 202-2:** Text appearing within a path

## Task 202

### *tips*

- Even when text is within a path, you may continue to edit the shape's boundaries using the Direct Selection tools and the Path tools.
- Beware of sharp angles on a path. Photoshop's text wrap within and alignment along a path can produce odd results (such as type bunching in corners) with sharp-angled corners.

### *cross-reference*

- Task 190 shows you how to draw preset shapes using the Custom Shape Picker.

# Task 203

## Customizing a Text Logo with Shape Type

### notes

- You can modify the fill of the Shape Text layer by double-clicking on the layer thumbnail to launch a color picker.
- A Convert to Shape command can be applied to both single lines of text and to paragraph Text.

If you play around with typography, you more than likely have encountered at least one situation where you wished for the ability to adjust the shape of a certain font's letterform. And while Photoshop will not be replacing programs like Fontographer in the foreseeable future, you can use the program's Path tools to adjust the shape of text within your documents. By applying the Convert to Shape command to a text layer, you can turn your text into a series of editable paths. These paths, in turn, can be distorted to produce your desired effect.

1. Create a new document.
2. Using the Horizontal Type tool, insert your text cursor near the center of the document.
3. Set the typeface family, style, alignment and size settings in the Options bar.
4. Enter the name of the company for which you wish to create a logotype, such as "PA: Photoshoppers Anonymous," as shown in Figure 203-1.



Figure 203-1: A basic text logo

### caution

- Once text has been converted into Shape Type, it can no longer be modified as text. If the text is overly complex, consider converting a duplicate layer rather than the original to ensure quick backtracking if necessary.

5. Choose Layer ⇄ Type ⇄ Convert to Shape to turn the letterforms into shape layers. Your text will suddenly be surrounded by path along its edges.
6. Choose the Direct Selection tool from the eighth row and first column of the Tools palette. (Click and hold on the Path Selection tool's icon until a small menu is displayed, move your cursor onto the Direct Selection tool icon, and release your mouse button.)
7. Click and hold one of the handles on the text's path to begin editing the path.
8. Drag your cursor to redefine the path anchor's location and Bezier arc angles (the standard means of adjusting a point's angles in a vector graphics program).
9. Release the anchor handle at your desired location, resulting in an image similar to Figure 203-2.



**Figure 203-2:** Editing Shape Type

## Task 203

### *tips*

- Customize any and all typeface settings, including tracking and scaling, before converting your text to a shape in order to deal with such changes much more quickly.
- Use the Path Selection tool to quickly move Shape Type around in your document without having to select individual points along the path.

### *cross-reference*

- Shape layers, introduced in Task 187, act as a mask for a solid fill color.



# Task 204

## Combining Text with Imagery Using a Selection Mask Type

### notes

- Type Masks can edit more than just photographs. However, the sharp, crisp edges of large type against the undulating texture of a photograph can produce interesting results.
- Rather than modify the actual photographic artwork layer, consider creating a new layer above the photograph. With this layer, you can fill the contents of your Type Mask selection and adjust the layer's Blend modes (discussed in Task 162) to interact with the photo below it.

### caution

- Once you have confirmed a Type Mask's textual content, it no longer retains its vector text characteristics. Rather, it becomes a raster selection.

In some cases, you may find that you want to make a selection based upon letterforms rather than use Photoshop's standard selection tools. Using one of the Type Mask tools, you can quickly create selections based upon the shapes of the characters you type. As you type, the characters are used to define a Quick Mask; once you finish, the character shapes are converted into an active selection in your document, able to be moved, transformed, filled, stroked, or otherwise edited.

1. Open an existing document that contains a photograph.
2. Choose the Horizontal Type Mask tool from the eighth row and second column of the Tools palette (as shown in Figure 204-1). To find the tool, click and hold the Horizontal Type tool's icon until a small menu is displayed, move your cursor on the Horizontal Type Mask tool icon, and release your mouse button.

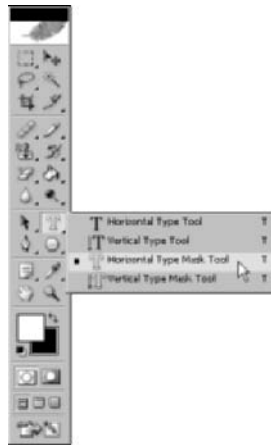


Figure 204-1: The Horizontal Type Mask tool

3. Insert your text cursor on or above the layer with the photograph.
4. Set the typeface family, style, alignment, and size settings in the Options bar.
5. Enter the text, such as “OLD HAT,” that will be used to create the selection.
6. Press Command+Enter (Mac) or Ctrl+Enter (Windows) or press the Commit button in the Options bar to confirm your text entry. Upon confirmation, the text will appear as a selection outline over the photograph.
7. Choose Image ⇨ Adjustments ⇨ Levels (or any other Adjustments command) to open the appropriate dialog box.
8. Change the settings within the Levels dialog box to adjust the appearance of the selection’s contents and press the OK button to confirm the changes.
9. You can proceed to further modify the current selection (shown in Figure 204-2) by applying filters or adjustments, and even by moving the content.



**Figure 204-2:** Modifying a Type Mask’s contents

## Task 204

### *tips*

- You can also make a Type Mask selection based on an existing type layer by holding the Command (Mac) or Ctrl (Windows) key while clicking on a text layer in the Layers palette.
- You can use one of the selection tools, such as the Rectangular Marquee Selection tool, to move your Type Mask selection around without its contents as long as you move the selection before applying any adjustments or modifications.

### *cross-reference*

- Task 145 details how to use a Quick Mask to edit specific parts of your document.

# Task 205

## Using Work Path Type as a Clipping Path

### notes

- Text paths aren't the only paths that can be used to create clipping paths. If you have a named path within your document, you can select it from the Clipping Path dialog box.
- You can modify the flatness value of the work path in the Clipping Path dialog box. Unless you purposely wish the arcs in your selection to be significantly hardened, do not increase this value past its default setting of 1.

### caution

- If you don't name the work path you create, the Clipping Path dialog box will not list it as a path available for selection.

Clipping paths are used by layout programs (such as Adobe InDesign and Quark Xpress) to reveal only certain aspects of an image while hiding others. For instance, if you placed a document filled with a marble texture in a layout program, a clipping path in that document could mask all the texture except for that which appeared within the letters “Tacky” (or any other letters and shapes used to describe the clipping path). By converting your Type Mask tools’ resulting letterform selections into work paths, you can quickly turn the paths into clipping paths available to other programs.

1. Open an existing document that contains a photograph.
2. Choose the Horizontal Type Mask tool from the eighth row and second column of the Tools palette (as shown in Figure 205-1) and insert your text cursor on or above the layer with the photograph. (To find the tool, click and hold the Horizontal Type tool’s icon until a small menu is displayed, move your cursor onto the Horizontal Type Mask tool icon, and release your mouse button.)



**Figure 205-1:** The Horizontal Type Mask tool

3. Set the typeface family, style, alignment, and size settings in the Options bar.
4. Enter the text that will be used as the clipping path.
5. Press Command+Enter (Mac) or Ctrl+Enter (Windows) or press the Commit button in the Options bar to confirm your text entry.
6. Choose Make Work Path from the Paths palette's fly-out menu.
7. Press the OK button in the resulting Make Work Path dialog box to save the work path.
8. With the new work path highlighted in the Paths palette, double-click on the path's name to rename it (as shown in Figure 205-2). Press the OK button after supplying a name in the resulting dialog box.



**Figure 205-2:** Renaming a path for future use

9. Choose Clipping Path from the Paths palette's fly-out menu to launch the Clipping Path dialog box.
10. Choose the newly named path from the Path drop-down menu and press the OK button to activate a mask for the document's contents in certain layout programs.

## Task 205

### tips

- Use one of the selection tools, such as the Rectangular Marquee Selection tool, to move your type mask selection around the document before converting it.
- Right-click (Windows) or Ctrl-click (Mac) within your type mask selection to quickly choose Make Work Path from a pop-up contextual menu.

### cross-reference

- Task 161 shows you how to mask the contents of your file *within* the Photoshop document.

# Task 206

## Creating an Eye-Catching Text Effect by Manipulating Layer Styles

**L**ayer styles can be applied to text layers in the same manner as artwork layers. Thus, drop shadows, embossings, color manipulations, pattern fills, and glows can alter the appearance of your textual content without requiring a rasterization of the layer. And, by combining several layer styles together, you can produce some attention-grabbing effects for your headline texts (or any other text that you want to pop off the page).

### notes

- If you are running Photoshop on an older, slower machine, consider unchecking the Preview checkbox in the Layer Style dialog box to reduce the amount of rendering your machine will need to execute.
- Try to mute the effects of your drop shadow so that the shadow doesn't fill in the gaps between your letters' counterforms (such as the hole in the letter "a").

### caution

- While layer effects can be applied with ease to text layers, filters cannot. Until Adobe adds this functionality to Photoshop, you'll need to rasterize your text layer first.

1. Create a new document.
2. Using the Horizontal Type tool, insert your text cursor near the center of the document.
3. Set the typeface family, style, alignment, and size settings in the Options bar.
4. Enter a small bit of text, such as "Pole Cat," as shown in Figure 206-1.



**Figure 206-1:** Unadorned text

5. Choose Layer ⇨ Layer Style ⇨ Drop Shadow to open the Drop Shadow dialog box.
6. Modify the Drop Shadow settings according to your desire, and press the OK button.

7. Choose Layer ⇨ Layer Style ⇨ Bevel and Emboss to open the Bevel and Emboss dialog box.
8. Modify the Bevel and Emboss settings as needed and press the OK button.
9. Choose Layer ⇨ Layer Style ⇨ Color Overlay to open the Color Overlay dialog box.
10. Modify the Color Overlay settings as needed and press the OK button. The results, shown in Figure 206-2, are considerably glossier than the original text, but the text retains its ability to be edited using the Type tools.



**Figure 206-2:** Layer effects applied to text

## Task 206

### *tips*

- Be selective in determining what text to adorn with layer effects. Try to apply a series of layer effects only to those layers with large, headline-style text where legibility won't be an issue.
- Turn off the visibility on the text layer's Effects layer in the Layers palette at any time to see the text as it was originally created without discarding the layer effects.

### *cross-reference*

- The Bevel and Emboss effect, one of the more complicated layer effects, is described in Task 180.

# Task 207

## Using Layers to Form Text Reflections

The fascination we all seem to have for our own reflections often transcends into our artwork. Luckily, Photoshop provides a means of producing this vanity exercise, even if the object is simply to display one's name. By using both layers and the Transform command, you can create a reflection effect for your text. This technique is rather versatile, too, as the process can produce perspective shadows as well.

### notes

- Even though the transformed text becomes distorted and flipped, it retains its ability to be edited with the Type tools.
- You can also choose Layer ⇨ Duplicate Layer to launch a dialog box with more options concerning the duplicate layer's name and location.

1. Open an image of a lake or body of water and, using the Horizontal Type tool, insert your text cursor near the center of the document.
2. After setting the typeface family, style, alignment, and size settings in the Options bar, enter a small, one-line bit of text, such as "Brother," somewhere on the water's surface.
3. Duplicate this text layer in your Layers palette by dragging the layer onto the New Layer icon at the bottom of the palette, as shown in Figure 207-1.



Figure 207-1: Duplicating a text layer

4. Choose Edit ⇨ Free Transform to apply the transformation bounding box to the newly duplicated layer.
5. Click and hold the top center handle of the transformation bounding box to stretch the height of the text.
6. Drag the handle below the baseline of the text so that the text mirrors its upright appearance as shown in Figure 207-2, and click the Commit button in the Options bar to commit the stretch changes.

### caution

- Creating a realistic mirror effect is largely dependent on imagery with a reflective surface. If you don't have a picture of a metal or glass object or a body of water, consider using an online search engine to find an image that may work for your experiments.



**Figure 207-2:** Creating a mirrored copy

7. Choose Filter ⇨ Distort ⇨ Ocean Ripple to apply a water-like effect to the mirrored text. (Since this is a type layer, you will be presented with a dialog box warning that the type will be rasterized before proceeding to apply the filter. Click OK.)
8. Drag the Ripple Size and Ripple Magnitude sliders (to values such as 2 and 5, respectively) to distort the text minimally and press the OK button to apply the filter.
9. Reduce the layer's opacity in the Layers palette to 70% to soften the effect of the mirrored type, similar to the result in Figure 207-3.



**Figure 207-3:** The final mirrored text

## Task 207

### *tips*

- Grab the handle of any of the other sides of the duplicate layer to reflect the text according to its axis.
- You can apply layer effects and Blend modes on this layer as well as to generate a more realistic mirror effect, depending on the reflective surface you are trying to emulate.

### *cross-reference*

- Task 106 shows how to operate the Skew command's bounding box.





## Part 14: Filters

- Task 208: Extracting an Object from the Surrounding Background
- Task 209: Using the Liquify Command to Contort an Image
- Task 210: Using the Freeze and Thaw Functions in Liquify
- Task 211: Creating and Saving a Liquify Mesh
- Task 212: Creating Patterns Using the Pattern Maker
- Task 213: Using the Filter Gallery to Combine Filter Effects
- Task 214: Replicate a Painterly Effect with an Artistic Filter
- Task 215: Use a Blur Filter with a Blend Mode to Get a Sketch Effect
- Task 216: Creating a Unique Blur Effect Using Zoom in the Radial Blur Filter
- Task 217: Adding Stylish Texture to an Image with a Brush Strokes Filter
- Task 218: Creating a Unique Photo Effect with the Glass Filter
- Task 219: Using a Distortion Filter to Create an Edge Mask
- Task 220: Creating a Displacement Map to Distort an Image
- Task 221: Using a Noise Filter to Create a Pattern
- Task 222: Generating and Manipulating Digital Clouds
- Task 223: Illuminating Image Areas with Lighting Effects
- Task 224: Applying a Specialized Lighting Effect Using a Texture Channel
- Task 225: Adding an Unusual Color Effect Using the Plaster Filter
- Task 226: Using the Fade Command on Filter Effects
- Task 227: Setting Up an Additional Plug-ins Directory

# Task 208

## Extracting an Object from the Surrounding Background

### notes

- For getting simple shaped objects from the background, you might find the Background Eraser tool easier to use.
- If there is an active selection in a layer when you bring up the Extract dialog box, only the image in the selection will be available in the dialog box.

One nice thing about working with Photoshop is that you can use part of an image in another digital work. For example, you can copy Uncle Danny from a photo you took of him at the beach and put him on the surface of the moon next to Neil Armstrong.

One way to grab Uncle Danny (or any object) off an image is to paint a selection using the Quick Mask feature; another way is to draw a very tight outline around him using the Lasso tool. Unfortunately, both methods are time-intensive and quite nerve-wracking as you try to make the perfect selection of the object.

Photoshop has come to the rescue with the Extract filter. This filter previews your image in a dialog box, where you first highlight and then fill in a simple, fast mask of the object. Photoshop determines the edge of the object from the surrounding image and presents you with the image on a layer — sparing you the headache of doing it yourself.

1. To extract an object from the surrounding background of an image, open an image (see Figure 208-1) or select a layer you want to work on.



**Figure 208-1:** The original image

2. Select Filter ⇨ Extract to bring up the Extract dialog box. Alternatively, press Alt+Ctrl+X (Windows) or Command+Option+X (Mac OS).
3. Select the Edge Highlighter tool at the top of the vertical tool bar on the left side of the dialog box. Draw a complete, closed outline around the object you want to bring out. You can adjust the size of the brush in the Tool Options fieldset. Pick a large brush size for objects that are thin, like flowing hair or tree branches.

4. Select the Fill tool underneath the Edge Highlighter tool and click inside the highlighted area.
5. To see how Photoshop interprets your mask in extracting the image, click Preview.
6. If you do not like the extracted image, go to the Preview fieldset at the bottom right of the Extract dialog box and select Original from the Show drop-down menu. This brings back the full image in the dialog box.
7. Once you create your mask, click OK. The image appears on a layer with just your masked portion (or portions, depending on what you are extracting) (see Figure 208-2). Easy, isn't it? The object is now freed from the background.



**Figure 208-2:** Original image showing just the masked portion

8. Even though the Extract filter makes things easier, it's by no means push-button perfect. After you select Preview, two tools appear so you can clean up the extraction mask if you need to. The Cleanup Tool removes portions of the extraction mask and the Edge Touchup Tool reinstates it. You can find both tools on the left side of the Extract dialog box.

## Task 208

### tip

- If you are bringing out images with sharp edges, click the Smart Highlighting check box in the Tool Options fieldset to speed the extraction process.

### cross-reference

- The History Brush is the perfect complement to this tool for pulling objects easily out of the background (see Task 130).

# Task 209

## Using the Liquify Command to Contort an Image

### notes

- In case you feel you've manipulated the image too drastically, look at the Reconstruction Options fieldset. There you'll find options to revert your Salvador Dalí imitation back to something more recognizable.
- Even if other layers are visible, only the active layer in an image will be affected by the Liquify filter.

The Liquify filter maps your image to a grid or mesh. You then select several custom brushes to distort the mesh that your image rests on. Since the image manipulation is based on the grid, rather than the color components of the image, you can quickly turn an image into a mass of goo. Using some restraint, you can make people's eyes bulge out.

1. To contort an image using the Liquify command, open an image or select a layer you want to work on.
2. Select Filter ⇨ Liquify or press Ctrl+Shift+X (Windows) or Command+Shift+X (Mac OS) to open the Liquify dialog box (see Figure 209-1). The Liquify dialog box contains on the left side of the preview window the tools for manipulating the image.

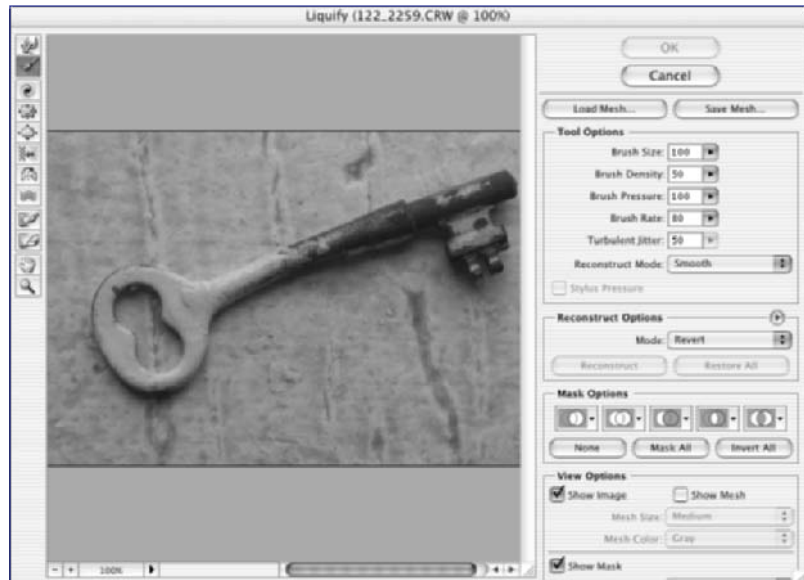
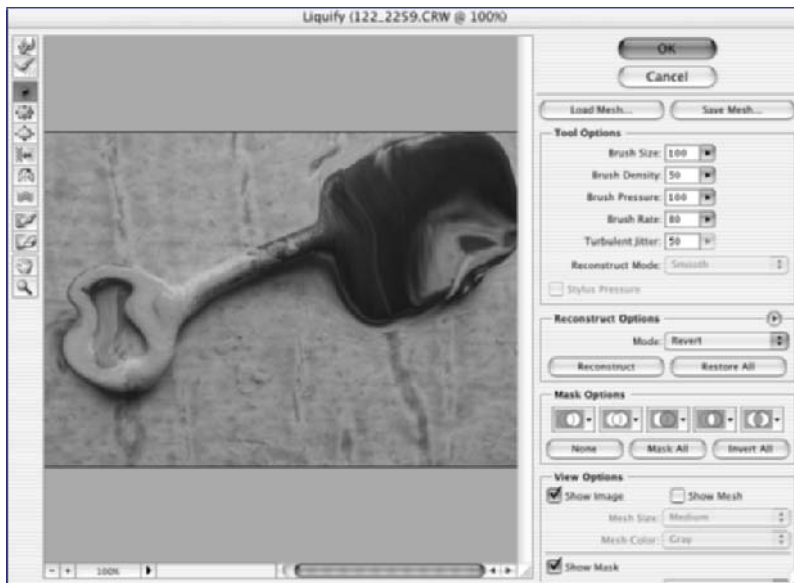


Figure 209-1: The Liquify dialog box

3. To smudge the image, pick the top tool, called the Forward Warp tool, to begin manipulating the image and then paint in the preview area. The image moves the colors around the brush as if you were smudging paint with your fingers.
4. To create ripples while smudging the image, pick the Turbulence tool and paint in the preview area. Unlike the Forward Warp tool, which works best if you pretend you're finger-painting, the Turbulence tool

and other distortion tools work by simply clicking an image area to achieve the effect within the brush size area.

5. To move the image's pixels clockwise, click the Twirl Clockwise tool. To move the pixels counterclockwise, click the Twirl Counterclockwise tool and hold down the Alt key as you move the brush.
6. To pinch the pixels of the image towards the brush, use the Pucker tool. If you want to move pixels away from the brush, use the Bloat tool.
7. The Push Left Tool pixels moves pixels away from the brushstroke at 90-degree angles to the left. To move pixels to the right of the brushstroke, press Alt (Windows) or Option (Mac OS) while dragging the brush across the image.
8. Use the Mirror tool to copy pixels from the area that is 90 degrees to the left of the brushstroke. Press Alt (Windows) or Option (Mac OS) while dragging the brush across the image to copy pixels from the right side.
9. To adjust the size and pressure of the brush, change the values in the Tool Options fieldset.
10. Click OK when you are done. Your original image will now look distinctly different (see Figure 209-2).



**Figure 209-2:** An image resulting from using the Liquify filter

## Task 209

### tips

- To view the mesh over the image, click the Show Mesh check box in the View Options fieldset. You can also place a copy of the original image over or behind the current gooey image (or blend it with it) by clicking the Show Backdrop check box, choosing a mode, and setting a percentage of opacity.
- To help restore an image, use the Reconstruct tool located right below the Forward Warp tool.

### cross-reference

- To keep areas of the image from being distorted while using the Liquify filter, see Task 211.

# Task 210

## Using the Freeze and Thaw Functions in Liquify

With the Liquify filter at your command, the entire image is fair game for turning into a mass of quivering goo. If you want some areas of an image to be off-limits to gooification, you can freeze them. Freezing parts of an image is like creating a mask. To remove parts of the frozen areas, you can thaw or delete parts of the mask.

### note

- To erase the mask, click None in the Mask Options fieldset.

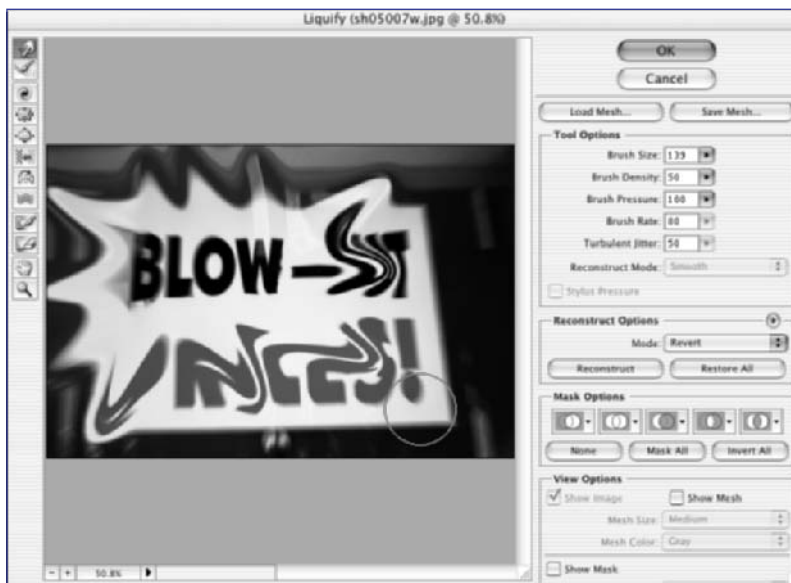
1. Open an image or select a layer you want to work on.
2. Select Filter ⇨ Liquify or press Ctrl+Shift+X (Windows) or Command+Shift+X (Mac OS) to open the Liquify dialog box.
3. To freeze an area of an image from manipulation, select the Freeze Mask tool from the tool set on the left side of the Liquify dialog box. Brush the areas of the image you want to remain untouched (see Figure 210-1).



**Figure 210-1:** Freezing the word “blow” so it remains unaffected by Liquify’s brushes (notice the selected Freeze Mask tool to the left of the preview window)

4. To thaw or delete the mask on the image, select the Thaw Mask tool. Paint away the frozen or masked portions of the image.

5. To hide the mask while manipulating the image, uncheck Show Mask in the View Options fieldset.
6. To invert the masked portions of the image, click Invert All in the Mask Options fieldset.
7. Manipulate the unmasked portions of the image with the Liquify brush tools (see Figure 210-2).



**Figure 210-2:** The word “blow” is still normal while the area around it has been affected by the Liquify tools

8. When you are done, click OK.

## Task 210

### tip

- To start with a mask and then brush part of it away, click Mask All in the Mask Options fieldset when the Liquify dialog box appears. The entire image will be frozen so you can edit the mask.

### cross-reference

- To learn more about making a mask, see Task 145.



# Task 211

## Creating and Saving a Liquify Mesh

You can easily save a manipulated grid or mesh for use in other images. This is great for fixing a series of photos that just need just a little tweaking. It's also handy for applying the same Liquify effect to various images.

1. Open an image you want to work on.
2. Manipulate the image with the Liquify tools (see Figure 211-1).

### note

- Save your mesh files in a place where you can find them easily again. Perhaps create a Mesh folder in your Photoshop application folder or, if you have a set of meshes for a particular project, save them along with your other project files in the same folder.

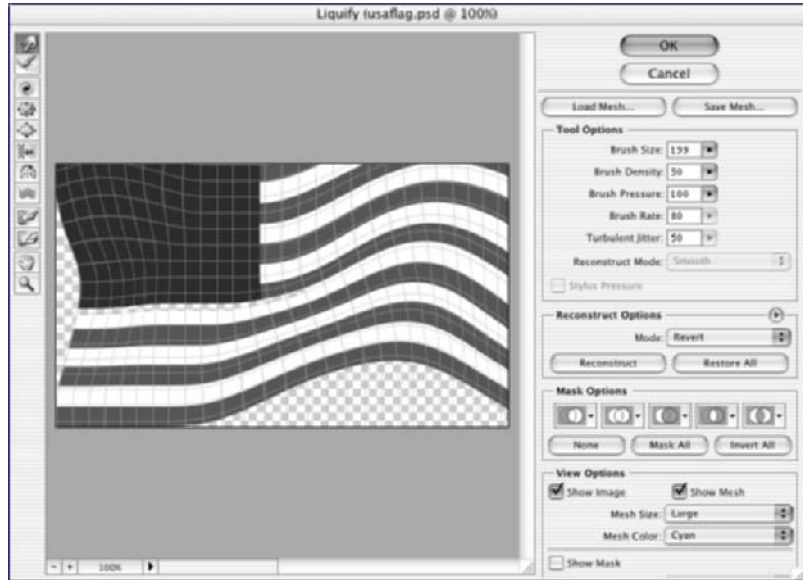


Figure 211-1: Modifying the mesh over an image

3. To view the Mesh, make sure you click the Show Mesh check box in the View Options fieldset.
4. To save a mesh, click Save Mesh (below OK and Cancel). This opens the Save: Liquify dialog box (see Figure 211-2). Name the file and choose a location in which to save it.

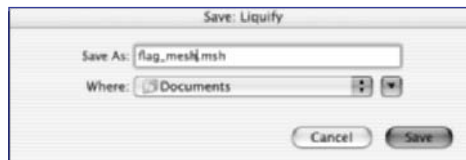
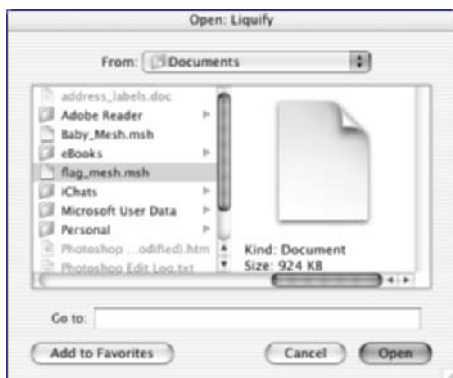


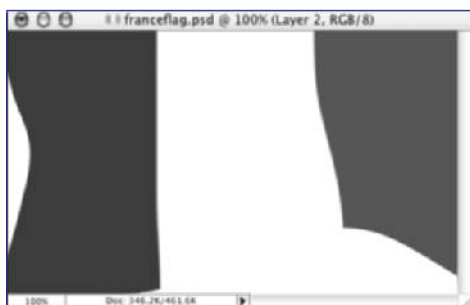
Figure 211-2: The Save Mesh dialog box

5. To load a mesh, click Load Mesh (below OK and Cancel). This opens the Open: Liquify dialog box (see Figure 211-3).



**Figure 211-3:** The Open: Liquify dialog box

6. Locate the appropriate mesh file you want to apply to the image and click OK.
7. The mesh file automatically maps to the new image (see Figure 211-4) recreating the distortion.



**Figure 211-4:** The image with a saved mesh file applied

## Task 211

### tip

- If you haven't tried it yet, "liquefy" a photo of a friend or loved one and present it as a gift. Be sure to save the mesh and apply it to an image of yourself just in case they get upset.

### cross-reference

- To learn more about the Liquify filter, see Task 209.

**Task 212**

## Creating Patterns Using the Pattern Maker

**note**

- You cannot make a pattern out of anything but a rectangular selection.

The Pattern Maker filter creates a pattern based on a rectangular selection you make. It doesn't just tile your selection; it manipulates the pixels in the selection to create an interesting tiled effect. The result looks close to what you selected but it isn't a true representation. This effect is great for filling areas of an image with a similar texture or creating textures for use elsewhere.

1. To create a pattern using the Pattern Maker filter, open an image (see Figure 212-1) or select a layer you want to work on.



**Figure 212-1:** The original image

2. Select Filter ⇨ Pattern Maker or press Ctrl+Shift+Alt+X (Windows) or Command+Shift+Option+X (Mac OS) to open the Pattern Maker dialog box (see Figure 212-2).
3. Select the portion of the image out of which you want to create a pattern by first selecting the Rectangular Marquee tool at the upper left corner of the Pattern Maker dialog box.
4. Create a selection in the image. The portion of the image that you select will form the basis of the resulting pattern.
5. To generate a pattern, click Generate (just below Cancel). A random pattern from the original image is manipulated and tiled across the screen (see Figure 212-3). To generate a different pattern, click Generate Again.
6. Adjust the pattern size of the initial tile by altering the values in the Tile Generation fieldset. Editable options include setting the width and height of the tile, setting the offset direction and amount of the tile, and determining the smoothness and sample detail of the tile.



Figure 212-2: The Pattern Maker dialog box

7. After changing the Tile Generation options and generating more patterns in one setting, you can review the patterns in the Tile History fieldset, which contains options for clicking through previous and current patterns, and saving and deleting a pattern.

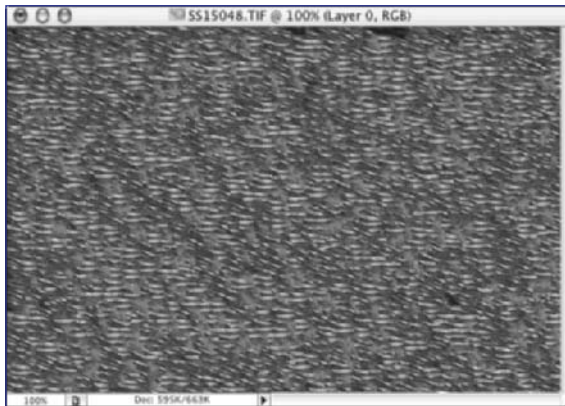


Figure 212-3: A pattern generated from the original image

8. When you are satisfied with the pattern, click OK.

## Task 212

### tip

- If you create a pattern with the Pattern Maker filter, the active layer will be redrawn. Therefore it's best to duplicate the layer or work off a copy of an image so you still have the original to fall back on.

### cross-reference

- To learn more about making a simple, straightforward tile pattern, see Task 136.

# Task 213

## Using the Filter Gallery to Combine Filter Effects

### note

- You can hide an effect layer by clicking the eyeball to the left of the effect layer, just as with a layer.

The Filter Gallery is the central editing environment where Photoshop's older gallery effects are located. Instead of reapplying filters manually, you can apply a set of filter effects on top of one another and see how they affect the image. The Filter Gallery also offers a large preview pane that makes it possible to see filter effects over the image.

1. To apply a filter using the Filter Gallery, open an image (see Figure 213-1) or select a layer you want to work on.



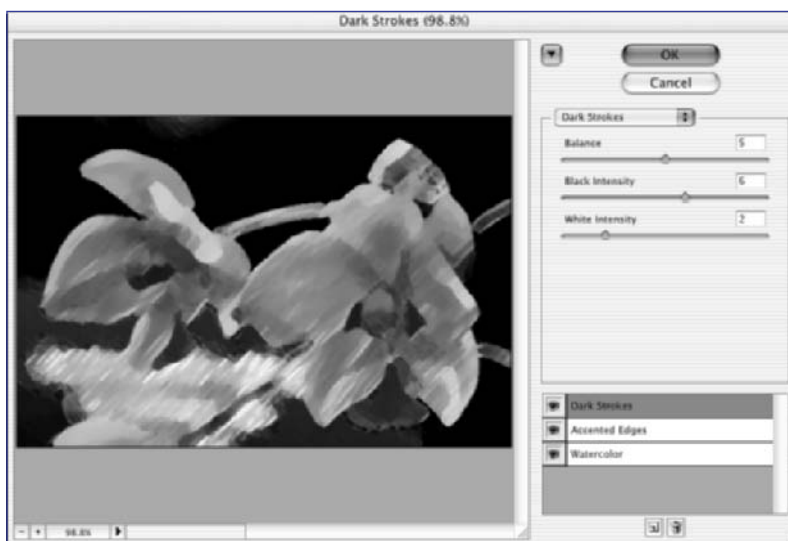
**Figure 213-1:** The original image

2. Select Filter ⇨ Filter Gallery to open the Filter Gallery dialog box (see Figure 213-2). See the image preview pane at left and the zooming tools at the bottom left corner. On the right side are settings associated with the currently selected filter. At the lower right corner is something similar to layers, called a filter stack.
3. To adjust the settings of the currently selecting filter, change the settings in the right column. The settings will, of course, be different for each gallery filter that's part of the Filter Gallery dialog box.
4. If you just want to apply one filter and you've adjusted the filter settings to your liking, click OK.
5. To apply a different filter, first click the triangle icon left of the OK button. This opens another pane between the preview pane and the filter settings column. This new pane allows you to apply another gallery filter to the image.
6. To pick another filter besides the one that's currently applied, select the filter thumbnail in the Filter pane. The new filter takes effect automatically. The preview changes, the settings change in the right column, and the filter name changes in the filter stack.
7. If you want to apply more than one filter (see Figure 213-3), click the New Effect Layer icon at the bottom right corner of the Filter Gallery dialog box. Click a new filter in the middle pane.

Task **213**

**Figure 213-2:** The Filter Gallery dialog box with the Graphic Pen filter applied

8. If you have more than two filters selected, you can change the order in which they are applied by dragging the effect layer up or down, just as you do with layers in the Layer palette.



**Figure 213-3:** Applying more than one filter effect to an image

9. To delete a filter effect, select the effect layer and hit the Delete Layer Effect icon below the filter stack.
10. When you are done adjusting the filters, click OK.

*tip*

- Experiment! The Filter Gallery makes it easy to come up with digital imaging effects that otherwise would have taken you hours to come up with — if at all.

*cross-reference*

- To learn more about working with layers, see Task 152.

# Task 214

## Replicate a Painterly Effect with an Artistic Filter

### note

- A good way to make your images look less artificial and more artistic is to apply a filter more than once at different settings, or even apply different filters to the same image.

**P**hotoshop has numerous filters that let you manipulate images in a jiffy. The Artistic filter set in Photoshop contains 15 filters, including Watercolor, Fresco, Palette Knife, and Colored Pencil. Unfortunately, many filters tend to make images look as though they were manipulated by a series of mathematical algorithms instead of an inherently aesthetic process. To create a more natural, beautiful look, do what we do: blend a filtered image against an original image. This allows more image detail to show through the “artistic” filter so that the final image doesn’t look too processed.

1. To replicate a painterly effect with an artistic filter, first open an image (see Figure 214-1) or select a layer you want to work on.



**Figure 214-1:** The original image

2. Duplicate the image on a new layer in front of the original layer. The copied layer should be the working, active layer.
3. Select a filter from the Artistic filter set. For this example, we use the Cutout filter.
4. Once you select the filter, the filter’s dialog box opens. The options depend on the filter you choose. The Cutout dialog box (see Figure 214-2) shows numerous options.
5. To zoom in and out of the preview window, click the plus and minus signs underneath the preview pane.
6. To adjust the number of colors in the image, drag the slider or enter a value from 2 to 8 in the Number of Levels field.
7. Adjust the Edge Simplicity value by dragging the slider or enter a value from 1 to 10. The higher the number, the less detail appears in the image, resulting in an increasingly abstract representation of your image.

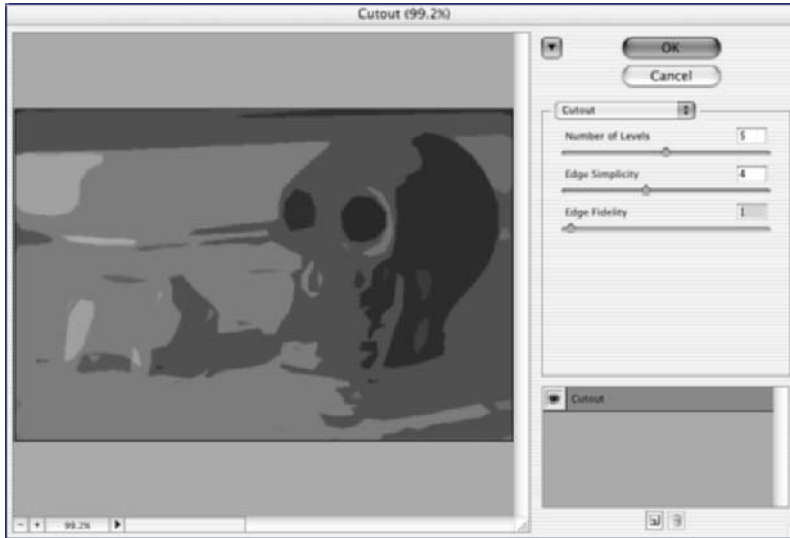


Figure 214-2: The Cutout dialog box

8. Changing the Edge Fidelity option affects how accurately color is placed in the color areas. The higher the value (the highest is 3), the looser the placement of the edges.
9. When you are done editing the values for the filter, click OK. The changes to the image by the filter take effect immediately.
10. To bring more detail into the image, change the blending mode of the image that was changed by the filter. In this example, we changed the blend mode to Multiply while also setting the Opacity to 90% (see Figure 214-3).

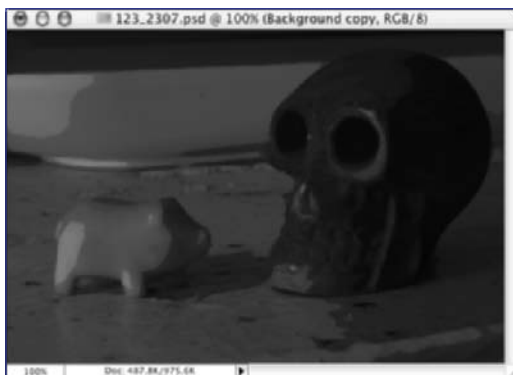


Figure 214-3: Original image with painterly effects

## Task 214

### tips

- To apply a quick abstract painterly effect, slide the Edge Simplicity scale all the way to 10.
- Images used in the book can be downloaded from the companion Web site, [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).

### cross-reference

- The Cutout filter creates a similar effect to that of the Posterize color adjustment (see Task 64).



# Task 215

## note

- In this task, to create a sketch effect we set the filter variables to produce the most extreme “low-fi” look possible.

## Use a Blur Filter with a Blend Mode to Get a Sketch Effect

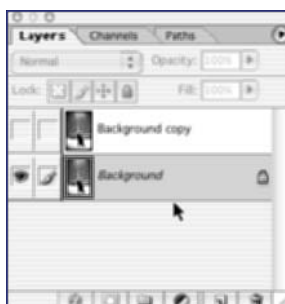
The Smart Blur filter is great for creating a sketch effect. It doesn't blur the entire image, as the Gaussian Blur filter does; it focuses instead on groups of pixels with similar coloration and saves them from being blurred. Pixels with drastically different colors are at the mercy of the blur effect, which causes an interesting, moody effect when used by itself. Use the Smart Blur filter to create a sketch effect that looks as though it was done with charcoal and paper.

1. Open an image (see Figure 215-1) or select a layer you want to work on.



**Figure 215-1:** The original image

2. Copy the target layer on a new layer in front of the original layer. Hide the visibility of the new layer at the top of the layer stack (you'll go back to it in a minute) and click the original image layer (see Figure 215-2).
3. With the original layer visible and selected in the Layers palette, select Filter ⇨ Blur ⇨ Smart Blur to open the Smart Blur dialog box. For this example, we set Radius to 7.2, Threshold to 96.9, Quality to Low, and Mode to Normal. Feel free to experiment with these values to get the look you want.
4. When you are done setting the values for the filter, click OK.



**Figure 215-2:** The original layer copied

5. Go back to the layer you copied in Step 2 and make it visible. Click the layer name itself so that you can apply changes to it.
6. Change the blending mode for the image to Color Dodge and change the Opacity value of the layer to 90%.
7. Flatten the layers using the Layer ⇨ Flatten Image command.
8. Give the image more definition by increasing the intensity of the highlights and shadows. Press Ctrl+ L (Windows) or Command+ L (Mac OS) to open the Levels dialog box or select Images ⇨ Adjustments ⇨ Levels.
9. Adjust the values of the image to suit your taste. When you are done, click OK and view the resulting image (see Figure 215-3).



**Figure 215-3:** The resulting image

## Task 215

### tip

- After you are done with the levels, create a simple duotone. Bring up the Hue/Saturation dialog box and click Colorize. Adjust the Hue, Lightness, and Saturation levels to your taste.

### cross-references

- The contrast and rich black colors in this image give the image an illusion of charcoal on paper. To learn more about changing the contrast of an image, see Task 55.
- Take a closer look at the screenshots used in this task by going to the book's Web site at [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).

# Task 216

## note

- Another use for the zoom part of the radial filter is to create a kaleidoscopic effect. Split a blank canvas into fourths. Copy and paste a part of the image into the four areas, rotating and flipping each image so it's a reflection of the other. Finally, flatten the image and apply the zoom effect from the Radial filter.

## Creating a Unique Blur Effect Using Zoom in the Radial Blur Filter

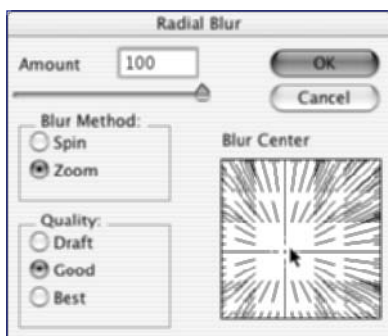
A blur filter can do more than just make an image look hazy. Using the right combination of blending modes, you can create an atmospheric piece of digital art. Use the Radial Blur filter to create beams of light that radiate from an image's focal point. Let's see if Gaussian Blur can top that!

1. To create a unique blur effect using zoom in the Radial Blur filter, open an image (see Figure 216-1) or select a layer you want to work on.



**Figure 216-1:** The original image

2. Copy the layer and make it the working layer by clicking the copied layer's title in the Layer palette.
3. Select Filter ⇨ Blur ⇨ Radial Blur to open the Radial Blur dialog box (see Figure 216-2).



**Figure 216-2:** The Radial Blur dialog box

4. Click Zoom in the Blur Method fieldset and click Good in the Quality fieldset. Enter 100 in the Amount field. In the Blur Center area, drag the cross-hair to the approximate position of the blur center's origin. For this image, the focus is over the model's face, which is located down and to the left of the image's center.
5. Click OK. The filter takes effect on the layer.
6. In the Layer palette, set the Blending mode to Linear Light and leave Opacity at 100%.
7. Copy that layer so that it rests at the top of the layer stack.
8. In the top layer, set the Blending mode to Color Dodge and Opacity to 45% (see Figure 216-3).



**Figure 216-3:** The image after the Zoom filter and blending modes have been used

## Task 216

### tip

- The zoom feature of the Radial filter is a nice tool for creating unusual effects. To create a sense of aloofness or a sense of mystery in your photographs, apply a small amount of blur in the zoom effect, instead of the value (100) we did here.

### cross-reference

- To learn more about how blur filters can create a sketch effect, see Task 215.

# Task 217

## note

- Although this particular effect uses the Accented Edges filter, you could use the other filters in the Brush Strokes filter set as well.

## Adding Stylish Texture to an Image with a Brush Strokes Filter

**B**rush Strokes filters are a subset of eight filters that come with Photoshop: Angled Strokes, Crosshatch, Dark Strokes, Ink Outlines, Spatter, Sprayed Strokes, Sumi-e, and Accented Edges (used in this task). Brush Strokes filters are like Artistic filters, in that they recreate images in painterly styles — and, just like the Artistic filters, they make images look like a computer rather than a painter made them.

When you apply any filters, experiment. Don't just apply one filter and be done with it. Select portion(s) of your image and apply several filters to see what you get. Above all, have fun!

1. To add a stylish texture to an image with a Brush Strokes filter, open an image (see Figure 217-1) or select a layer you want to work on.



**Figure 217-1:** The original image

2. Duplicate the image layer once on top of the original layer.
3. Hide the visibility of the topmost layer in the layer stack.
4. To work on the original layer, select it.
5. Choose a Brush Strokes filter from the filter menu. For this exercise, choose the Accented Edges filter by choosing Filter ⇨ Accented Edges.

6. Click OK to apply the filter to the layer.
7. Unhide the visibility of the top layer and select it in order to work on it.
8. In the Accented Edges dialog box, adjust the settings to your liking. Set Edge Width to 8, Edge Brightness to 36 and Smoothness to 10.
9. To blend a portion between the two layers, first choose Select ⇧ All. Switch to Quick Mask mode by pressing Q. Select the Gradient tool. In the Options bar, set the gradient to Radial and use the Gradient picker to choose a black-to-white gradient. Set the option to Reverse in the Options bar. Click in the focal point of the image (in this case, the center of the model's face) and drag the radial gradient outward to surround only the area you wish to focus on (see Figure 217-2).
10. Switch from Quick Mask mode to normal edit mode. This turns the Quick Mask into a selection. Press Delete and click an area of the image to turn off the selection. Now the focal part of the original image blends into the copy of the image to which you applied the filter (see Figure 217-3). Notice that you've preserved the quality of the face while the rest of the image shows the filter effect.



**Figure 217-2:** The Quick Mask around the focal point of the image



**Figure 217-3:** The resulting image

## Task 217

### tip

- To create a smooth transition from an image section to another that is visually different, use the Quick Mask or Alpha channels to create gradients that allow for blending between the areas.

### cross-reference

- This task uses the Quick Mask filter to bring back the focal point of the image. To learn more about Quick Mask, see Tasks 145 and 146.

# Task 218

## Creating a Unique Photo Effect with the Glass Filter

**A**lthough Photoshop comes with a stained glass filter, it doesn't create stained glass well. What it does well is create unique photo effects that you won't see from any other filter in Photoshop's digital imaging arsenal.

### note

- By using the cutout filter, we achieve the effect of using solid areas of color to represent the large areas of glass found in stained glass windows.

1. To create a unique photo filter effect with the Glass filter, first open an image (see Figure 218-1) or select a layer you want to work on.



**Figure 218-1:** The original image

2. Duplicate the image layer.
3. On the copy of the image, choose Filter ⇨ Artistic Filter ⇨ Cutout to open the Cutout dialog box. Set the values of the Cutout filter as follows: Number of Levels is 3, Edge Simplicity is 5, and Edge Fidelity is 1.
4. Click OK to apply the filter.
5. Duplicate the layer to which you just applied the Cutout filter.
6. Select Filter ⇨ Distort ⇨ Glass to open the Glass dialog box. Set the values for the Glass filter as follows: Distortion is 5, Smoothness is 4, and Texture is Canvas with a Scaling of 200%.
7. Click OK to apply the Glass filter (see Figure 218-2).

# Task 218



**Figure 218-2:** The image with the Glass filter applied

8. Create a new layer and make sure it is on top of all the other layers.
9. Put the smoke part of the stained glass into the image. Choose Filter ⇨ Render ⇨ Clouds, and then select Filter ⇨ Render ⇨ Difference Clouds and press Ctrl+I (Windows) or Command+I (Mac OS) to invert the clouds.
10. In the “clouds” layer, set the Blending mode to Color Burn and Opacity to 47% to see a slightly textured look (see Figure 218-3). This texture might be hard to see in the book, so feel free to visit the book’s Web site ([www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless)) and compare both images.



**Figure 218-3:** The resulting image

## tip

- Don’t forget to check out the Stained Glass filter under the Texture subset of filters.

## cross-reference

- To learn more about the Clouds filter, see Task 222.



# Task 219

## Using a Distortion Filter to Create an Edge Mask

**W**hat do you do with the perfect photo? You frame it, of course. With Photoshop, you can create fantastic frame images to go with your digital images. With help from the Distort filter, you can create a custom funky digital picture frame.

### note

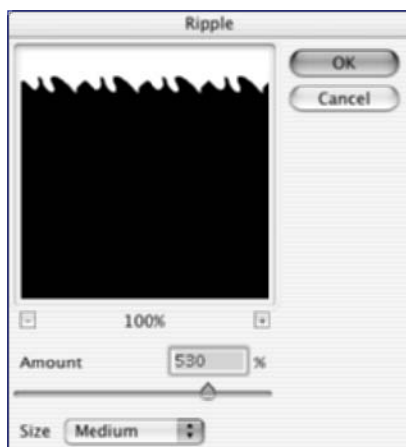
- You can create more complex edge selections by applying multiple filter effects in Quick Mask mode.

1. To use a Distortion filter to create an edge mask, first open an image (see Figure 219-1).



**Figure 219-1:** The original image

2. Add a new layer by clicking on the Create New Layer icon at the bottom of the Layer palette. (Select Window ⇨ Layers, if necessary, to open the Layer palette.)
3. Select the rectangular marquee tool to select the desired region around the objects in the image.
4. With the selection set, switch to Quick Mask mode by pressing Q.
5. Select Filter ⇨ Distort ⇨ Ripple to open the Ripple dialog box. Adjust the settings to your taste, or even try a different filter altogether. For this effect, set the Ripple filter as follows: Amount is 530% and Size is Medium (see Figure 219-2).
6. Show the selection by stepping out of Quick Mask mode by pressing Q again.



**Figure 219-2:** Applying the filter to the Quick Mask

7. Invert the selection by choosing **Select ⇨ Inverse**.
8. To fill the edge with a pattern or color, select **Edit ⇨ Fill** to open the Fill dialog box. Make your custom fill settings (see Figure 219-3) and click **OK**.



**Figure 219-3:** The results of a pattern fill around the edges of the picture

9. Deselect the active selection by pressing **Ctrl+D** (Windows) or **Command+D** (Mac OS).

## Task 219

### *tip*

- Add a drop shadow to make the image look as though it's underneath the edge.

### *cross-reference*

- To learn more about Quick Mask, see Tasks 145 and 146.

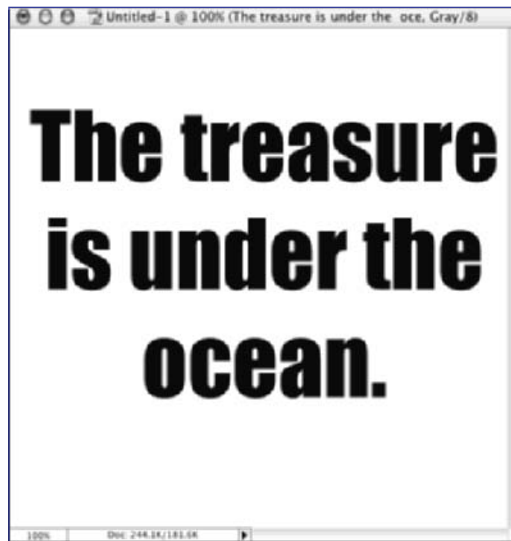
**Task 220**

## Creating a Displacement Map to Distort an Image

A *displacement map* is a grayscale image you apply to a target image. The grayscale values in the map determine the degree of distortion. When you apply areas of white or black to a target image, the curves of the grid get displaced up or down, respectively. Grayscale values of 50 percent do not distort the image.

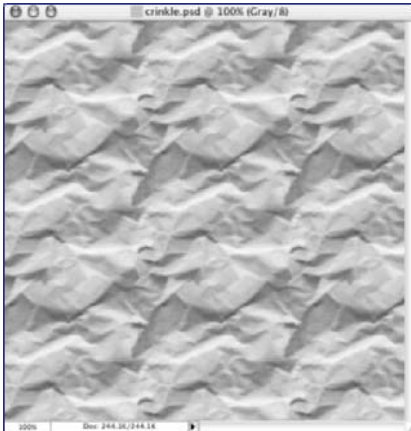
Using a distortion map is a good way to make a portion of text or an image look as though it's underwater. It's a little involved but the effect is absolute perfection that would take forever and a day to accomplish by hand. The image used in the map comes from All Free Backgrounds ([www.allfreebackgrounds.com](http://www.allfreebackgrounds.com)), a Web site that gives away free background images.

1. To create a displacement map to distort an image, open an image or select a layer you want to work on. In this case, work with a 600 x 600-pixel image and choose a large sans-serif typeface (see Figure 220-1).



**Figure 220-1:** The original image

2. After placing the text, rasterize the type layer by selecting the type layer and choosing Layer ⇄ Type ⇄ Rasterize.
3. Open a new image with the same dimensions as the original in Step 1.
4. Bring in a texture and fill the second, blank image with the pattern. Here we use a texture from [www.allfreebackgrounds.com](http://www.allfreebackgrounds.com). Define a paper background texture as a pattern (see Figure 220-2) and then fill the entire image with it.



**Figure 220-2:** The displacement map

5. Set the color mode for the image to Grayscale mode, save the image in .psd format, and keep it handy. This newly saved image acts as your displacement map. Select **Filter** ⇨ **Distort** ⇨ **Displace** to bring up the Displace dialog box.
6. Adjust the settings to your liking. Normally they deal with images that don't match the exact dimensions of your image. Because we are using a channel color component that does match the image, you can just click **OK**.
7. When you are prompted to pick the displacement map that Photoshop should use to distort the target image, find the displacement map file and click **OK**. The result is a distorted image based on the displacement map (see Figure 220-3).



**Figure 220-3:** The resulting image

## Task 220

### *tips*

- If you don't rasterize the type and select the Displace filter, Photoshop will prompt you to rasterize the text before displaying the filter's dialog box.
- Name the displacement map file something meaningful so that you'll know what it does later on.

### *cross-references*

- For more information about channels, see Task 141-144.
- For more information about defining patterns, see Task 136.

# Task 221

## Using a Noise Filter to Create a Pattern

Just as the greatest authors encounter writer's block when they sit in front of their notepads, typewriters, or computer screens, you will undoubtedly find occasions when you stare at the blank screen of your computer without any goal or objective in mind. Perhaps you just want to experiment in Photoshop but you don't have any source images to start with. The solution: create a pattern out of thin air — with the help of maybe a filter or two.

### note

- The Add Noise filter is an easy way to create a star field behind landscape photos. Just apply it on a separate layer from the photo layer and then pick the Multiply Layer Blend and adjust the opacity of the layer to meet your tastes.

1. To use the Noise Filter to create a textured pattern, select File ⇨ New.
2. In the New dialog box (see Figure 221-1) create an image whose (equal) width and height are larger than what you need. In the Background Contents field, select White.

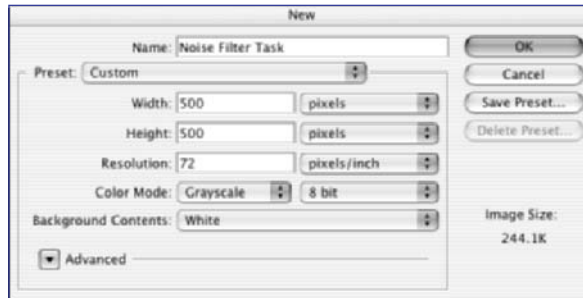


Figure 221-1: The New dialog box

3. Click OK.
4. Select Filter ⇨ Noise ⇨ Add Noise to open the Add Noise dialog box (see Figure 221-2).

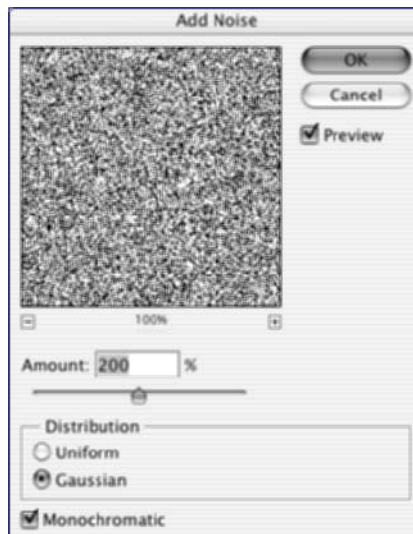


Figure 221-2: The Add Noise dialog box

5. Set the options for the Add Noise filter. In this example, the settings are as follows: Amount is 200%, Distribution is Gaussian, and Monochromatic is clicked. The Gaussian distribution setting generates noise that falls into the midtone range more than highlights or shadows. In a histogram, this would look like a bell curve. If you were to click Uniform, you would get a random noise distribution. With Monochromatic selected, the values for red, green, and blue are the same.
6. Select Filter ⇨ Blur ⇨ Motion Blur to open the Motion Blur dialog box. Set the Distance for the filter to 200 pixels at 0 degrees.
7. To accommodate those parts of the image along the edges which have no consistent pattern, use the Rectangular Marquee tool to create a selection around the portions of the image you want to keep.
8. Cut away the portions you no longer want by selecting Image ⇨ Crop (see Figure 221-3).
9. With the steel mesh pattern in place, you now have a filled canvas to being your work. Have fun!



**Figure 221-3:** The resulting steel mesh pattern

## Task 221

### tips

- While this task shows you how to do a gray steel mesh pattern, you can colorize it. Change the color mode to RGB, open the Hue/Saturation dialog box, and check the Colorize option.
- Duplicate the steel mesh layer, rotate it 90 degrees clockwise, and set the blend mode to Multiply to create a rough woven fabric texture.

### cross-reference

- To learn more about making precise selections, see the Polygonal Lasso Tool in Task 70. To learn about making seamless tiling patterns, see Task 253.

# Task 222

## Generating and Manipulating Digital Clouds

One of the easiest things to do in Photoshop is generate cloud effects. They don't always look natural, however. The trick is to blend the cloud effects with your image so that it looks natural.

### notes

- The Clouds filter uses the foreground and background colors to determine the cloud colors.
- Because one pass makes it look like the image was manufactured by a computer algorithm, apply the Difference Clouds filter twice to get another variation of clouds. Applying the Difference Clouds filter yields a darker-than-desired cloud effect.

1. To generate and manipulate digital clouds, first open an image containing a sky area (see Figure 222-1) or select a layer you want to work on.



Figure 222-1: The original image

2. Select **Select** ⇨ **Color Range** to open the Color Range dialog box.
3. Using the color picker tool in the Color Range dialog box, select the colors in the skyline (see Figure 222-2).

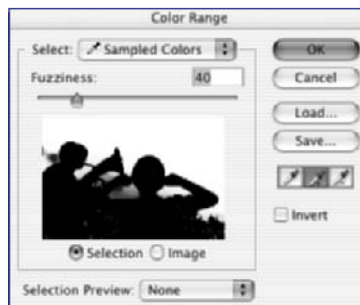


Figure 222-2: Selecting the sky color in the image

4. Click OK to select the sky portion of the image in the layer.
5. Create a new layer by clicking the Create New Layer icon at the bottom of the Layers palette.
6. Apply the Clouds filter by selecting Filter ⇨ Render ⇨ Clouds.
7. Adjust the shadows and highlights of the image by adjusting the Levels command. Press Ctrl+L (Windows) or Command+L (Mac OS) to open the Levels dialog box and begin editing the clouds (see Figure 222-3).

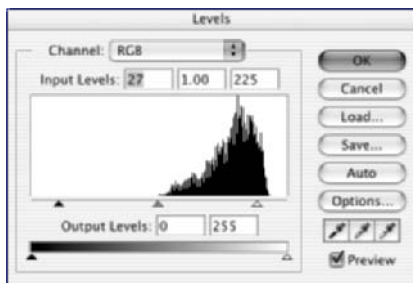


Figure 222-3: The Levels dialog box

8. Set the Blending mode for the cloud layer to Color Burn (see Figure 222-4) to create more defined clouds.



Figure 222-4: The resulting image

## Task 222

### tips

- Apply the Clouds filter to a tall, thin rectangular selection, then scale the selection wider and drag the sides out to manipulate the clouds into thin wisps.
- The reason we create a new layer here is just in case the clouds aren't to your liking and you want to manipulate them separately from the image.

### cross-reference

- To learn more about the basics of layers, see Tasks 150-152.



# Task 223

## Illuminating Image Areas with Lighting Effects

### note

- You can save your custom lighting styles by first adjusting a predefined lighting style and then saving it for later use. Press the Save button in the Style fieldset at the top of the Lighting Effects dialog box

**L**ighting Effects is candy, pure and simple. With a couple clicks of the mouse or pen you can add spotlights to an image, or an omnidirectional light. Applying Lighting Effects once in a while is a treat, but doing it all the time is not a great idea. Even so, there's no denying the ease with which Lighting Effects allows you to create some very interesting visuals.

- To illuminate image areas with lighting effects, open an image (see Figure 223-1) or select a layer you want to work on.



**Figure 223-1:** The original image

- Make sure the image is set to RGB color mode. Choose Image ⇨ Mode to view the selected mode.
- Select Filter ⇨ Render ⇨ Lighting Effects to open the Lighting Effects dialog box.
- In the Style fieldset, select from a predefined list of lighting effects, including Triple Spotlight, Flood Light, Circle of Light, and Blue Omni (one of our favorites).
- Adjust the size and shape of the light source area by dragging the anchor points in the preview box on the left side of the dialog box.
- Each small white circle in the preview represents the location of a light. To add a new light to the image, drag the light bulb icon

(located below the preview box) to the desired location within the preview (see Figure 223-2). Release the mouse to place the light bulb where you dragged it.



**Figure 223-2:** Adding a new light source

7. With the light source selected in the preview window, edit the light in the Light Type fieldset. Change the light source to Directional, Omni, or Spotlight; also set the intensity and focus of the light source itself.
8. Edit the properties of the light by adjusting the values in the Properties fieldset. Characteristics you can adjust include Gloss, Material, Exposure, and Ambience.
9. When you are done editing the light source (see Figure 223-3), click OK.



**Figure 223-3:** The resulting image

## Task 223

### tip

- Adjust the anchor points on the circle or oval surrounding the central point of a light source to manipulate how large an area the light source affects.

### cross-reference

- To learn more about the Lighting Effects filter, see Task 227.

**Task 224****note**

- Steps 5 and 6 create a texture out of thin air using only two Photoshop filters.

## Applying a Specialized Lighting Effect Using a Texture Channel

**W**ith the Lighting Effects filter, not only can you apply custom lighting to a filter but you can apply texture to an image. After creating a separate texture in a channel (or using one of the color channels), you can make the Lighting Effects filter create shadows based on the whites, grays, and black areas of a channel texture.

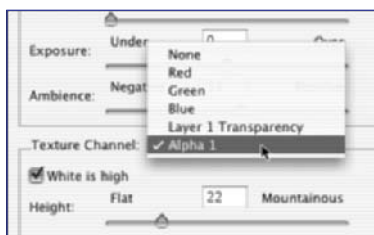
1. To apply a specialized lighting effect using a texture channel, open an image (see Figure 224-1) or select a layer you want to work on.



**Figure 224-1:** The original image

2. Set the image to RGB color mode by selecting Image ⇨ Mode to view the selected mode.
3. Select Windows ⇨ Channels to open the Channels palette.
4. Create a new channel by clicking on the Create New Channel icon at the bottom of the Channels palette.
5. Target the new channel and select Filter ⇨ Noise ⇨ Add Noise to open the Add Noise dialog box. Apply the settings as follows: Amount is 30%, Distribution is Gaussian, and Monochromatic is selected. Click OK.

6. Select Filter ⇨ Brush Strokes ⇨ Ink Outlines to open the Ink Outlines dialog box. Apply the settings as follows: Stroke Length is 100%, Dark Intensity is 20%, and Light Intensity is 10%. Click OK.
7. Click the composite color channel by pressing Ctrl+tilde (~) (Windows) Control or Command+tilde (~) (Mac OS).
8. Select Filter ⇨ Render ⇨ Lighting Effects to open the Lighting Effects dialog box.
9. After applying or customizing your lighting, select the name of the channel (see Figure 224-2) that you created in Steps 4–6.



**Figure 224-2:** Picking the name of the channel

10. Adjust the height of the texture and click OK when you are done (see Figure 224-3).



**Figure 224-3:** The resulting image

## Task 224

### tip

- We use textures in this example but feel free to explore alternatives to textures and patterns. For example, what would happen if the channel contained large block letters instead? What if the channel contained an unrelated black-and-white photo?

### cross-reference

- To learn more about the Lighting Effects filter, see Task 226.

**Task 225**

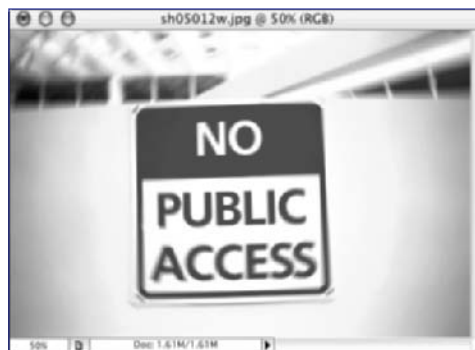
## Adding an Unusual Color Effect Using the Plaster Filter

**S**hagadelic, baby! This filter doesn't look all that great here because this book isn't in color, but it does make a great color effect reminiscent of the psychedelic '70s. By applying the filter in a color channel rather than the composite color channel, you get a far-out image. To see these images in color, view them at the companion Web site for the book ([www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless)).

### note

- Although it's not readily visible when you apply the filter to a channel, the Plaster filter uses the foreground and background colors when it's applied.

1. To add an unusual color effect using the Plaster filter, open an image (see Figure 225-1) or select a layer you want to work on.



**Figure 225-1:** The original image

2. Select Image ⇨ Mode to view the image in RGB color mode.
3. Select Window ⇨ Channels to open the Channels palette.
4. Click the green channel in order to work on it.
5. Select Filter ⇨ Sketch ⇨ Plaster to open the Plaster dialog box. Here you adjust the Image Balance and Smoothness values of the plaster effect as well as the Light Direction value, which determines the direction of the light source.
6. Adjust the settings to your taste, but be sure to set the filter to achieve a beveled look that is evident in the preview window. Apply

the settings as follows: Image Balance is 6, Smoothness is 2, and Light Direction is Right.

7. Click OK to apply the filter effect to the channel (see Figure 225-2).



**Figure 225-2:** Plastering the channel

8. In the Channels palette click the composite color channel to view the colorful results (see Figure 225-3 or better yet go to [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless)).



**Figure 225-3:** The resulting image

## Task 225

### *tips*

- For added color, apply the Plaster filter to other color channels. Adjust the settings from the previous application to get more colorful creations.
- See what other filters can be applied directly to the color channels.

### *cross-reference*

- To learn more about working with channels, see Task 141.

# Task 226

## Using the Fade Command on Filter Effects

### note

- If you don't like the initial settings of the Fade command, open the Fade dialog box again and readjust the settings.

Sometimes after you apply a filter you realize “that’s way too much!” Don’t feel bad about it. We all do it from time to time. Thanks to Photoshop, you can adjust the amount of filter that touches your image. You can lessen the impact of a filter by using the Fade command or adjust the blending mode for the filter effect.

1. To use the Fade Command on filter effects, open an image (see Figure 226-1) or select a layer you want to work on.



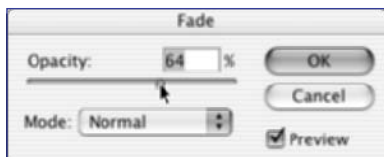
Figure 226-1: The original image

2. Apply a filter to the image. In this example, select Filter ⇨ Stylize ⇨ Glowing Edges to apply the Glowing Edges filter (see Figure 226-2).



Figure 226-2: The image after applying Glowing Edges

3. Select Edit ⇨ Fade [Name of the Filter] to open the Fade Command dialog box for that filter (see Figure 226-3). In this case, it's the Flowing Edges filter. However, if you use a different filter, that filter's name will be seen in the drop-down menu.



**Figure 226-3:** The Fade dialog box for the filter

4. Adjust the Opacity value of the filter in the image.
5. Set the Blending mode for the filter effect as well.
6. Once you are done editing the options, click OK (see Figure 226-4).



**Figure 226-4:** The resulting image

## Task 226

### tip

- Use the Fade command to lessen the impact of the filters.

### cross-reference

- Another way to reduce the dramatic impact of a filter is to use the layers and their blending modes. For more information on layers, see Task 159.



**Task 227**

## Setting Up an Additional Plug-ins Directory

In Photoshop you can set up additional folders to hold all your plug-ins. This is ideal for storing third-party filters separately from those that come with Photoshop.

### notes

- If you buy filters from a third-party vendor, read their instructions on how to incorporate them into Photoshop.
- If you want a plug-in to work only in Photoshop (instead of Photoshop and ImageReady), put it in the Adobe Photoshop Only folder inside the Photoshop application folder.

1. To add an additional plug-ins directory, select Edit ⇨ Preferences ⇨ Plug-Ins & Scratch Disks (Windows and Mac OS 9) or Photoshop ⇨ Preferences ⇨ Plug-Ins & Scratch Disks (Mac OS X) to open the Plug-Ins & Scratch Disks preferences dialog box (see Figure 227-1).



**Figure 227-1:** The Plug-Ins & Scratch Disk preferences dialog box

2. Click the Additional Plug-ins Folder checkbox and then click Choose.

3. The Choose an Additional Plug-ins Folder dialog box appears (see Figure 227-2).



**Figure 227-2:** Choosing an additional plug-ins folder

4. Select the folder you want Photoshop to look at when it looks for additional filters when it starts up.
5. Once you pick the folder, click OK (Windows) or Choose (Mac OS).
6. Quit and start Photoshop again so that the program recognizes and loads the filters in the new filter folder.

## Task 227

### tip

- If you don't want Photoshop to load a particular filter or filter folder, rename the filter or folder by putting a tilde (~) at the start of the name.

### cross-reference

- To learn more about setting Photoshop preferences, see Task 7.



## Part 15: Automations

Task 228: Loading and Playing Preset Actions

Task 229: Creating an Action from Scratch for a Common Task

Task 230: Editing and Customizing Existing Actions

Task 231: Creating Droplets from Actions

Task 232: Using the Batch Command to Batch Process Files

Task 233: Creating and Organizing a Picture Package

Task 234: Creating a Contact Sheet for Cataloging Images

Task 235: Creating a Basic Web Photo Gallery

Task 236: Customizing Web Photo Gallery Styles

Task 237: Cropping and Straightening Photos Automatically

Task 238: Creating Seamless Panoramas with Photomerge

Task 239: Using Scripts

# Task 228

## Loading and Playing Preset Actions

One of the benefits a computer offers is the ability to simplify the repetition of certain tasks. In Microsoft Word, for example, complex operations can be captured as “macros,” which the computer can then replay at any time you desire. Photoshop provides a similar capability, dubbing the process of recorded events Actions. Using the Actions palette, you can load, select, and play back any set of operations saved as an Action (such as cropping the open document to a preset size and subsequently saving the results).

### notes

- Photoshop's Actions file format uses an .atn extension at the end of the filename.
- Visit this book's Web site at [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless) to download various actions you can use free of charge.

1. Open an existing document with photographic imagery.
2. Choose Window ⇨ Actions to open the Actions palette, shown in Figure 228-1.

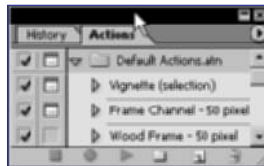


Figure 228-1: The Actions palette

3. Select Load Actions from the Actions palette's fly-out menu.
4. Select the Frames.atn file in the Load dialog window. (If Photoshop does not automatically open the default Actions folder, you can find the preset actions by navigating to your Applications (Mac) or Program Files (Windows) directory and then continuing inside Adobe Photoshop CS\Presets\Photoshop Actions\.)

### caution

- Be sure to inspect an action before playing it back. Some actions will contain commands to save and close your file, effectively ruining your document if you did not want some of the action's steps to be applied.

5. Press the Load button to bring the external actions into the Actions palette. The palette will now load the group of actions, listed under a bolded title and folder icon.
6. Click once on the Photo Corners listing in the Actions palette to select it. (This action is used to create an effect similar to the sticky corners used to hold photographs into scrapbooks.)
7. Press the Play Selection button at the bottom of the Actions palette to play back each step of the selected action. Photoshop will begin running through a series of steps without prompting you, resulting in an image similar in appearance to Figure 228-2.



**Figure 228-2:** The Photo Corners Action applied

## Task 228

### *tips*

- Click once on the arrow next to an action's listing to inspect each of its steps.
- Press the Stop button (at the bottom of the Actions palette) while an action is playing back to stop it from proceeding through its remaining steps.

### *cross-reference*

- Task 23 goes into detail on how Photoshop's palette space works.

# Task 229

## Creating an Action from Scratch for a Common Task

### note

- You won't need to have any documents open to play back the action you create in this task. Simply play the action from the Actions palette, and you will have your default document available to work within.

The good folks at Adobe don't fancy themselves to know every single task (or series of tasks) you might ever want to use as an Action. Therefore, they provided you with the ability to record almost any operation within the application as an Action. Working in a similar fashion to audio and video tape recording, the Actions palette can be set up to record your every operation (such as making a selection) and settings change (for example, changing the document's resolution) until you tell it to stop recording. The result is your own custom-created Action ready to be run within any document.

To try this functionality out, you will build an action to quickly produce a new document with specific attributes and a text label.

1. Choose Window ⇨ Actions to open the Actions palette.
2. Select New Action from the Actions palette's fly-out menu.
3. In the Name field (as shown in Figure 229-1), enter a name to be used for the action's listing in the Actions palette.

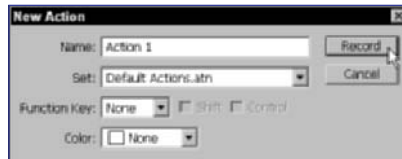


Figure 229-1: The New Action dialog box

4. Select within which action set you wish to store this recorded action via the Set drop-down menu.

### caution

- Many actions are dependent on the document's color type. For instance, you cannot apply a Hue/Saturation command within a Grayscale document. If such an action attempts to play, you'll see a warning message.

5. If you wish to execute the action via a “hot key” combination, choose a key (and modifier keys, if desired) from the Function Key drop-down menu.
6. Press the Record button at the bottom of the Actions palette to begin recording nearly every one of your moves in Photoshop.
7. Choose File ⇨ New to create a new document, and in the New window, specify that the document’s dimensions be 300 pixels × 300 pixels, 72dpi, RGB, transparent, and named “Labeled Art.”
8. Select the Rectangle tool, set it to create pixel art, and draw a light gray box from the top right corner across the document entirely and then down 50 pixels.
9. Select the Horizontal Type tool, choose your typeface settings, click within the gray box you just created, and type “Label:” to create a uniform text label for the future instances of this file. Your document should now look similar to Figure 229-2.



**Figure 229-2:** Making a new document action

10. Choose Stop Recording from the Actions palette’s fly-out menu. The action will now be listed under whatever action set you targeted in Step 4, ready for selection and playback. Try it!

## Task 229

### *tips*

- Choose Save Actions from the Actions palette’s fly-out menu to store newly created actions in a file that can be loaded by any other Photoshop user.
- Try to name your action so that it is indicative of what major operations will be performed. For instance, a title like “New 300x300 web-ready labeled document” would be appropriate for this task’s example.
- You can delete any action by selecting it in the Actions palette and pressing the Delete icon (symbolized as a trash can) at the bottom of the palette.

### *cross-reference*

- Task 32 shows you how to create a new document based upon your document’s current state.



# Task 230

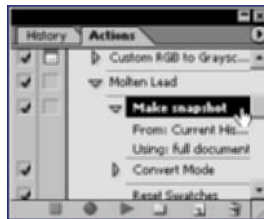
## Editing and Customizing Existing Actions

**A**n Action you record one day may need to be modified on another day. Using the Actions palette, you can edit an existing Action in a number of ways. You can insert a menu item or pause between any steps within an Action, as well as rearrange those same steps. You can also rename an Action, provide it with a different hot-key combination, and change its color coding to distinguish it within the Actions palette.

### note

- The ordering of the steps within an action can be very important. Be sure to check whether a step you are considering moving will impede the action's ability to execute the remaining steps.

1. Choose Window ⇨ Actions to open the Actions palette.
2. Click on the arrow next to Molten Lead beneath the Default Actions listing header to see each step making up the action. (You may, in fact, wish to double-click the action first to see how the action was originally designed to operate before you proceed to modify it.)
3. Click once on the first item under Molten Lead, Make snapshot, as shown in Figure 230-1.



**Figure 230-1:** The Make snapshot command

4. Select Insert Menu Item from the Actions palette's fly-out menu to insert an additional operation at the beginning of the existing action. Once the Insert Menu Item dialog box appears, any menu item you access will be inserted into your action file.

### caution

- Don't double-click an action listing. If you do, the command will not be selected but played back.

5. Choose File ⇨ New to insert a new document command, resulting in New being listed in the Insert Menu Item dialog box as shown in Figure 230-2.



**Figure 230-2:** The Insert Menu Item dialog box

6. Press the OK button to insert the command. An item listed as Make will now appear in the list following Make snapshot.
7. Click and drag the new Make listing above the Make snapshot listing. When a thick black line appears above the existing listing, release the cursor to insert the Make command above the Make snapshot command.
8. Click once on the sixth item under Molten Lead, Fill, and select Insert Stop from the Actions palette's fly-out menu to insert a pop-up message with Continue or Stop buttons.
9. Specify the text to appear in the Stop box's text area (shown in Figure 230-3), check the Allow Continue checkbox (allowing users to press a Continue button), and press the OK button.



**Figure 230-3:** The Insert Stop dialog box

10. Select the Molten Lead listing again, and press the play button to see your new changes added to the action.

## Task 230

### tips

- Choose the Action Options command under the Actions palette's fly-out menu to rename, color code, and assign hot keys to an existing action.
- The Actions palette is grouped by default with the History palette. Check to see if the palette is already open but hidden behind the History palette.
- If your editing actions are useful, consider saving them to an external file using the Save Actions command under the Actions palette's fly-out menu.

### cross-reference

- Task 17 shows you how to add notes inside your Photoshop document, similar to the Insert Stop's ability to put a message in the document.

# Task 231

## Creating Droplets from Actions

To expedite the application of an Action to a large group of files, Photoshop allows you to create a “Droplet.” A Droplet is a little self-contained application that can be saved to your hard drive based upon an Action that you choose within the program. After having a file (or group of files) dropped onto it, the Droplet launches Photoshop and passes the file(s) through an operations and settings-changes gauntlet (as defined in the Droplet’s Action). By saving your Actions as Droplet files, you can distribute your Actions to your colleagues or customers without requiring them to load and apply an Action file through the Actions palette.

### notes

- If you have additional action sets loaded in the Actions palette, you can choose a different set from the Set drop-down menu.
- Once a Droplet is launched, Photoshop will open to execute the embedded action. Unless the action has a Quit/Exit command embedded, however, Photoshop will remain open after the action has completed playing.

1. Choose File ⇨ Automate ⇨ Create Droplet to open the Create Droplet dialog box, shown in Figure 231-1.

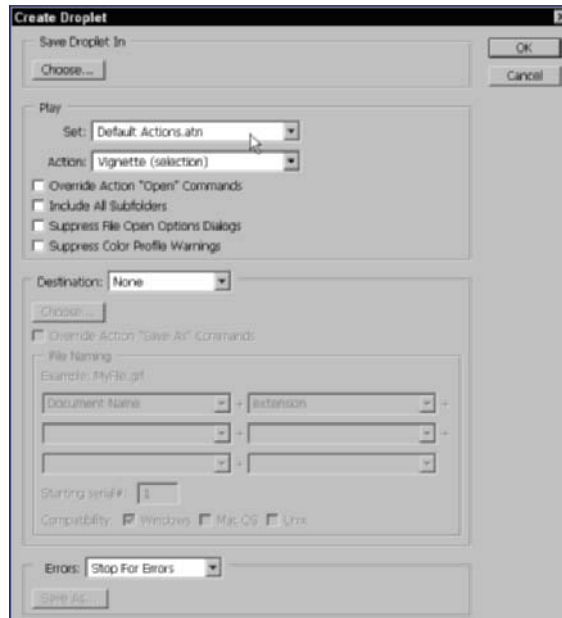


Figure 231-1: The Create Droplet command

### caution

- Be sure to create a unique destination for your processed files so that you don’t alter the originals. If you choose Save and Close from the Destination drop-down menu, the files you dragged onto the Droplet will be irrevocably changed.

2. Press the Choose button near the top of the box.
3. Enter a name for the Droplet in the Save As field, select a directory (such as your Desktop) where you wish to save the Droplet, and press the Save button.
4. Choose Wood Frame — 50 pixel (or any other action) from the Action drop-down menu under the Play section to determine which action will be initiated via the Droplet.
5. Choose Folder from the Destination drop-down menu to have the results of the action be saved as new files in a specific location.
6. Press the subsequently activated Choose button below the Destination drop-down menu.
7. Select a directory (or create a new folder and select it) where you wish to save the Droplet's results other than the location of all your existing files you wish to process in the Droplet, and press the Choose/OK button.
8. Choose any number of variables from the File Naming section to determine the filenames that will be saved in your destination directory upon processing of your documents. Make sure that the name has an extension (a three-letter suffix) to ensure that both Macs and PCs understand the file type (such as .gif).
9. Press the OK button to save the Droplet.
10. Back in your Desktop, drag files or folders with files onto the Droplet (as shown in Figure 231-2) to watch Photoshop perform its magic.



**Figure 231-2:** Dragging files onto a Droplet

## Task 231

### *tips*

- Check the Include All Subfolders checkbox in the Play section to include the files within any folders you may drag onto the Droplet.
- Check the Windows checkbox in the Destination section if your files will be used in a cross-platform setting. This will ensure that the naming convention used will produce filenames that an older Windows PC can read.

### *cross-reference*

- Task 18 explains how the Save and Save As dialog boxes operate.

# Task 232

## Using the Batch Command to Batch Process Files

In many cases, an Action is recorded so that you can apply it to more than one file. Rather than opening each file, applying the desired Action, saving, and closing the file, you can use Photoshop's Batch command to quickly apply an Action across many files. Further, by setting a destination for modified files and determining how Photoshop deals with any errors or questions that may pop up during the Action playback process, you can fully automate the process. The benefits are simple to understand; you can take your coffee break while Photoshop does all the heavy lifting.

### notes

- If you have additional action sets loaded in the Actions palette, you can choose a different set from the Set drop-down menu.
- Select Save and Close from the Destination drop-down if you want the images to overwrite their original files with the post-processed images.

1. Choose File ⇨ Automate ⇨ Batch (shown in Figure 232-1) to open the Batch dialog box.



**Figure 232-1:** The Batch command in the File menu

2. Choose Sepia Toning (layer) or any other Action from the Action drop-down menu under the Play section to determine which Action will be applied to your batch of files.
3. Choose Folder from the Source drop-down menu (if it is not already chosen) to determine what group of images should be processed.

### caution

- If you check the Override Action "Save As" checkbox, the batch-processed files will not be saved in your destination folder unless your action contains a Save or Save As command.

4. Press the Choose button below the Source drop-down menu.
5. Select a directory containing the existing files you wish to process, and press the Choose/OK button.
6. Choose Folder from the Destination drop-down menu to have the results of the action saved as new files in a specific location.
7. Press the newly activated Choose button below the Destination drop-down menu, shown in Figure 232-2.



**Figure 232-2:** The Batch command's dialog box

8. Select a directory (or create a new folder and select it) where you wish to save the Batch command's results — other than the location of the existing files you wish to process — and press the Choose/OK button.
9. Choose any number of variables from the File Naming section to determine the filenames that will be saved in your destination directory upon processing of your documents. Make sure that the filename has an extension (a three-letter suffix) to ensure that both Macs and PCs understand the file type (such as .gif).
10. Press the OK button to process the graphics in the source folder.

## Task 232

### tips

- Check the Include All Subfolders checkbox in the Play section to include the files within any folders of your selected folder.
- Check the Windows checkbox in the Destination section if your files will be used in a cross-platform setting. This will ensure that the naming convention used will produce filenames that an older Windows PC can read.

### cross-reference

- Saving graphics in a Web-ready format, discussed in Task 248, can be automated using Actions and the Batch command.

# Task 233

## Creating and Organizing a Picture Package

### notes

- Clicking on a thumbnail image in the Picture Package's preview box will allow you to selectively replace that particular image slot with another image.
- Choose Custom Text from the Content drop-down menu to be able to add your own captions to the pictures.

### caution

- Selecting the Folder option from the Use drop-down menu will create a unique Picture Package file for each image in the folder rather than one large file with each image included.

If you remember going to the photo studio as a child to sit for family portraits, you likely will remember seeing the package contact sheets: a photo presented in different sizes on a contact sheet to demonstrate different package prices. Photoshop allows you to re-create this effect using the Picture Package command. After choosing either a document or a folder, you can determine the arrangement of how a photo will be replicated and resized across a single document. Once your selections have been made, Photoshop handles the rest, opening, resizing, and placing the same image over and over again within a new document.

1. Choose File ⇨ Automate ⇨ Picture Package to open the Picture Package dialog box (shown in Figure 233-1).



Figure 233-1: The Picture Package dialog box

2. Under the Source section, choose File from the Use drop-down menu if it is not already chosen.
3. Press the Browse button to find the file you wish to display.
4. Select a file you wish to use from the Select an Image File dialog box, and press the Open button.
5. Choose (2)4x5 (8)2x2.5 or another option from the Layout drop-down menu to determine how many images will be displayed on one page.
6. Specify a resolution for the file to be created.
7. Choose Filename from the Content drop-down menu to put a text label beneath each instance of the image.
8. Specify a typeface, size, and color for the text label.
9. Choose Centered from the Position drop-down menu to determine the alignment of the text label.
10. Press the OK button to let Photoshop resize the file, add the text label, and create the new document (similar to Figure 233-2).



**Figure 233-2:** A Picture Package-generated file

## Task 233

### tips

- Be sure to keep Flatten Layers checked. If you uncheck this option, Photoshop will replicate a document's unique layers for each instance of the file, creating a large, unwieldy document.
- Press the Command (Mac) or Ctrl (Windows) and period keys to abort the Picture Package command.

### cross-reference

- The Picture Package command will rotate your images, as discussed in Task 102, when necessary to fit as many instances of the image as possible.



# Task 234

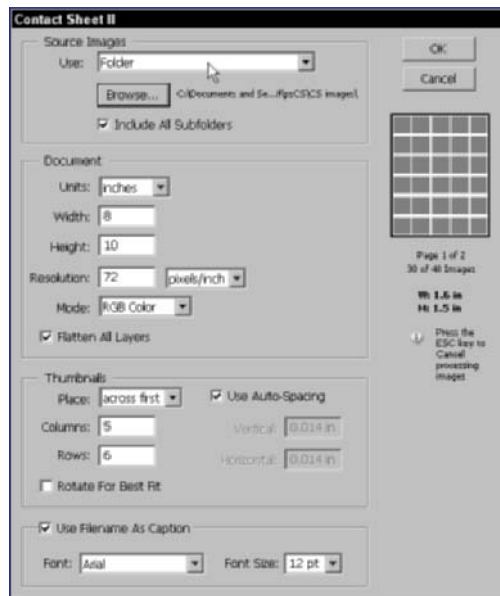
## Creating a Contact Sheet for Cataloging Images

### notes

- Check the Include All Subfolders checkbox in the Play section to include the files within any folders of your selected folder.
- Depending on the size of the files you are processing, as well as your computer's processor and RAM, the Contact Sheet II command may take several minutes (or even hours) to complete its task.

If you are one of those photographers who still use traditional film, you are likely familiar with the contact sheet provided by your film developer. This sheet provides thumbnails of all the images on your roll of film, along with a number corresponding to the sequence of the shot. Photoshop lets you quickly produce a similar contact sheet based upon a folder of images. The Contact Sheet II command provides the means for specifying how many images will appear on one page, whether to caption the images with their filenames, and at what resolution the contact sheet document should be created.

1. Choose File ⇨ Automate ⇨ Contact Sheet II (shown in Figure 234-1) to open the Batch dialog box.



**Figure 234-1:** The Batch command in the File menu

### caution

- Be sure to keep Flatten Layers checked. If you uncheck this option, Photoshop will replicate a document's unique layers for each instance of the file, creating a large, unwieldy document.

2. Press the Browse button in the Source section.
3. Select a directory containing the existing files you wish to catalog, and press the Choose/OK button.
4. Specify in the Document section the dimensions of the document that will contain your thumbnails.
5. Specify in the Thumbnails section the number of photos to display horizontally and vertically.
6. To determine the appearance of the captions underneath the images, specify which typeface and size you wish to use.
7. Press the OK button to let Photoshop create the catalog document as shown in Figure 234-2.



Figure 234-2: An example contact sheet

## Task 234

### tips

- If the Include All Subfolders checkbox is checked, select your hard drive as the source to catalog every single graphic file on your computer.
- Be sure to pay attention to the preview box in the dialog box's right column. As you change the number of columns and rows, the preview updates to give you a thumbnail of your choices.

### cross-reference

- You can manually create a contact sheet by scaling each image, as demonstrated in Task 105, copying, and pasting it inside a new document.

# Task 235

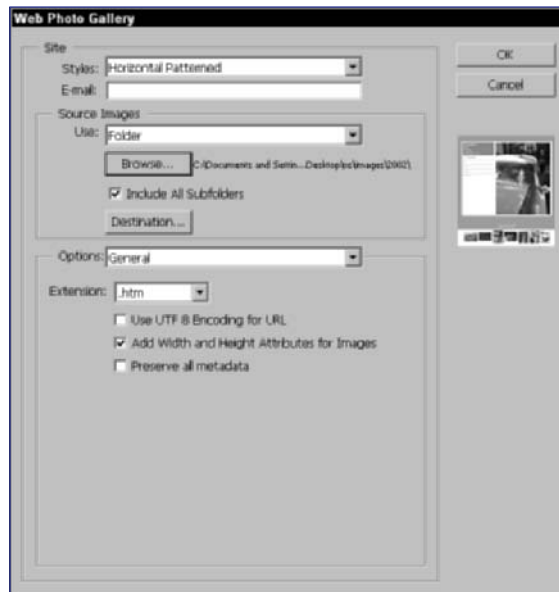
## Creating a Basic Web Photo Gallery

If you've taken the time to capture, edit, and crop your photographs, you'll likely want to share them with the rest of the world. And while numerous Web sites like Shutterfly and Ofoto exist to help you publish your images on the Internet, Photoshop provides a quick-and-dirty means of creating a series of Web pages containing an image gallery. Using the Web Photo Gallery command, you can create a Web site based upon a folder of your photographs by choosing one of several layout templates. Once you've chosen all the settings you desire for the gallery, Photoshop creates both a large image and a thumbnail image (which serves as the link to the large photo) for each piece of artwork in your chosen directory, as well as all the HTML files that make the Web site work.

### notes

- Services like Shutterfly and Ofoto have Web-based interfaces to allow you to upload your images, making it easy to post the files. However, these services do not let you control the Web page's layout.
- If you don't like Internet Explorer, you can open the gallery's home page (index.html) in any Web browser on your computer.

1. Choose File ⇨ Automate ⇨ Web Photo Gallery (shown in Figure 235-1) to open the Web Photo Gallery dialog box.



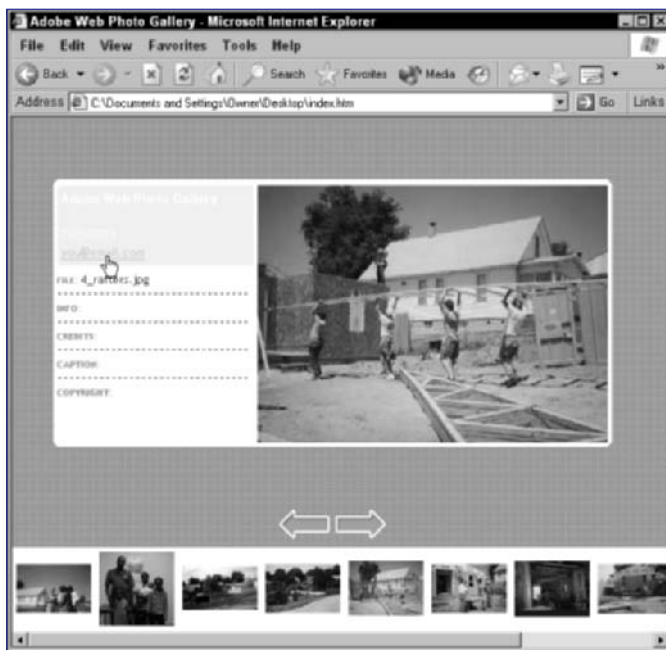
**Figure 235-1:** The Web Photo Gallery command's dialog box

2. Choose from the Styles drop-down menu to determine which template your gallery will use for its appearance. A thumbnail of the selected template will be shown beneath the Cancel button.

### caution

- Your e-mail address won't be published *until* you FTP your gallery to a Web site. Before publishing, you should balance how important it is for others to be able to contact you with your desire for privacy online to determine whether you should include your e-mail address.

3. Enter your e-mail address in the Email field so that the gallery can be published with a contact link.
4. Choose .html from the Extension drop-down menu.
5. Press the Browse button in the Source Images section.
6. Select a directory containing the existing files you wish to catalog and press the OK button.
7. Press the Destination button in the Folders section.
8. Select a directory where you wish to save your HTML and Web-ready image files.
9. Press the OK button to produce the HTML and image files. Your default Web browser will pop up when the operation is complete with the gallery's index page open (as shown in Figure 235-2).



**Figure 235-2:** The final Web gallery displayed in a Web browser

10. Click any of the thumbnail images in the browser window's bottom frame to see a larger image in the top frame.

## Task 235

### tips

- Using Photoshop's Web Photo Gallery command is one of the quickest ways of getting your images Web-ready quickly. If you do not wish to use one of Photoshop's HTML templates, simply delete the HTML files and grab the Images and Thumbnails folders the command produces to use with your own HTML.
- Be sure to choose a destination folder different from your source folder. Doing so will make it easier when you upload your files to the Internet, as you won't be copying over your original, larger images.

### cross-reference

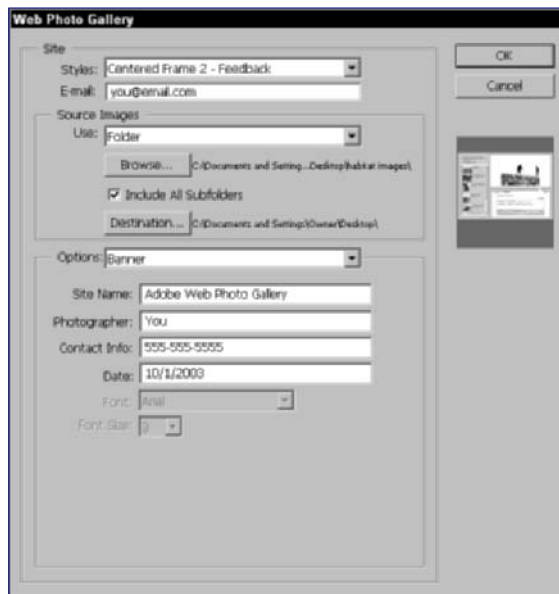
- Task 236 shows how to further customize your gallery's appearance.

# Task 236

## Customizing Web Photo Gallery Styles

Photoshop provides several templates for quickly producing a Web site gallery. You can customize the templates to your liking. Using the Options section of the Web Photo Gallery command, you can change aspects of the templates such as colors (for text, links, backgrounds, and more), number of thumbnails per page, and what titles appear on the pages. You can also choose what format and compression scheme is used to save your large images, as well as whether to add copyright and security information to your Web-ready images.

1. Choose File ⇨ Automate ⇨ Web Photo Gallery (shown in Figure 236-1) to open the Web Photo Gallery dialog box.



**Figure 236-1:** The Web Photo Gallery command's dialog box

2. Repeat Steps 2 through 8 in Task 235 to begin producing a Web Photo Gallery.
3. In the Options section, choose Banner from the drop-down menu if it is not already selected.
4. Enter a title for the site (which will appear in the Web browser's title bar) in the Site Name field, your name in the Photographer field, and a phone number or other contact information in the Contact field.
5. Choose Large Images from the Options drop-down menu.

### notes

- Choose Thumbnails from the Options bar to specify the dimensions of the small, thumbnail images that users will click to see the large-sized images.
- Check any number of the items listed in the Titles Use section under the Options heading. These items will determine the information used in the final Web site.

### caution

- The Security listing in the Options drop-down menu does not help you produce license-restricted content. Rather, it allows you to embed personal information inside the Web-ready files.

6. Leaving Resize Images checked, choose Custom from the Resize Images drop-down menu.
7. Enter a numerical value (in pixels) in the Custom field next to the drop-down menu to determine the dimensions of one or the other side of the full-sized images.
8. Choose Custom Colors from the Options drop-down menu to choose colors for the background, text, linked text, visited links, banners, and active links.
9. Click any of the color status indicators to launch a color picker, allowing you to select a new color for that option, and then press the OK button after you've made your selection (as shown in Figure 236-2).



**Figure 236-2:** The Web Photo Gallery's Color options

10. Press the OK button to produce the HTML and image files. When the operation is complete, your default Web browser will pop up with the gallery's index page open (as shown in Figure 236-3).



**Figure 236-3:** The Web Photo Gallery's output

## Task 236

### *tips*

- Consider using a WYSIWYG code editor like Dreamweaver or GoLive to edit the final code, as Photoshop's HTML code output sometimes introduces more code than is necessary for simple documents.
- Select Width or Height from the Constrain drop-down menu to scale the selected images to match the pixel value in terms of only one axis.

### *cross-reference*

- Task 249 shows you how to produce Web-ready JPEG files.

# Task 237

## Cropping and Straightening Photos Automatically

### notes

- If you already have an image that is slightly askew, skip Steps 2 through 6 and proceed directly with the Crop and Straighten Photos command.
- Because this automation results in a transformation, your image will be resampled during the rotation, thus producing an image that loses a bit of image quality.

### caution

- The Crop and Straighten Photos command may not produce your expected results on every image. The command is dependent on finding straight edges to perform its rotation correctly. If Photoshop can't detect straight edges, it will make an educated guess, resulting in an image that may not parallel *your* educated guess.

Depending on how you use Photoshop, certain commands or steps in the program tend to get more use than others. One very common task is the process of straightening a crooked image and subsequently cropping the document to match its new dimensions. For being a relatively large software company, Adobe has done a commendable job of listening to its users; Photoshop CS has introduced a way to expedite this very common task through the Automate menu.

To see this automation in action, quickly rotate an existing image using the following steps.

1. Open a document containing a photograph or image, similar to that in Figure 237-1.



**Figure 237-1:** A photograph to be rotated

2. Using the Rectangular Marquee tool, make a selection that closely fits the edges of your photograph and choose Edit ⇨ Copy to copy the image to the Clipboard.

3. Create a new document (by choosing File ⇨ New) that is taller and wider than the image you just copied.
4. Choose Edit ⇨ Paste to paste the image from the Clipboard into your document.
5. Choose Edit ⇨ Transform ⇨ Rotate to begin rotating your image for this example. A transformation bounding box will appear around the edges of your selection.
6. Click and drag a short distance one of the four corner point anchors to rotate your image by just a few degrees. Once you have the image only slightly rotated, press Enter to finalize the rotation, producing an image similar to Figure 237-2.



**Figure 237-2:** The results of the Copy, Paste, and Rotate commands

7. Choose File ⇨ Automate ⇨ Crop and Straighten Photos to initiate the automation. Photoshop will instantly begin a series of actions to first straighten and then crop your titled image.
8. Photoshop's output pops up in a new window, displaying an image that should look virtually identical to Figure 237-1.

## Task 237

### *tips*

- The Crop and Straighten Photos command is a helpful assistant when dealing with large numbers of scanned images, which often are slightly askew when scanned.
- Be sure not to rotate your image beyond 45°, as Photoshop will straighten the image on its sides or upside down, depending on the severity of your angle.

### *cross-reference*

- Task 103 shows you how to use the Crop tool to produce similar results while providing a greater level of control over the results.



# Task 238

## Creating Seamless Panoramas with Photomerge

### notes

- Use Photomerge's Navigator panel's sliding scale bar to zoom in and out of your panorama for more or less detail while arranging the photographs.
- Check the Advance Blending checkbox to get a smoother transition between your photographs. To see the results before pressing the OK button, click the Preview button and the composition window will update to show how the panorama would appear.

### caution

- Photomerge can do only so much. It is used to blend photos that have similar content in certain areas of the image. If you select two dissimilar images that don't depict the same scene, Photomerge will take a shot at fusing the two images, but the results will not appear realistic.

It is not hard to imagine our ancestors looking at a photograph and wondering what lay just beyond the borders of the image. Because we perceive the world in a “frame” much wider than what a 5" × 4" image can depict, there seems to be a natural desire among photographers and those who view the resulting images to see a wider “panoramic” view. Before Photoshop CS, digital image manipulators could cobble together a series of photographs in Photoshop, carefully blending the edges and intersections, or they could use another software package devoted entirely to such a process. Now with CS, however, you can quickly stitch together several photographs of a continuing subject by using the Automate menu's Photomerge command.

The following steps will guide you through the process.

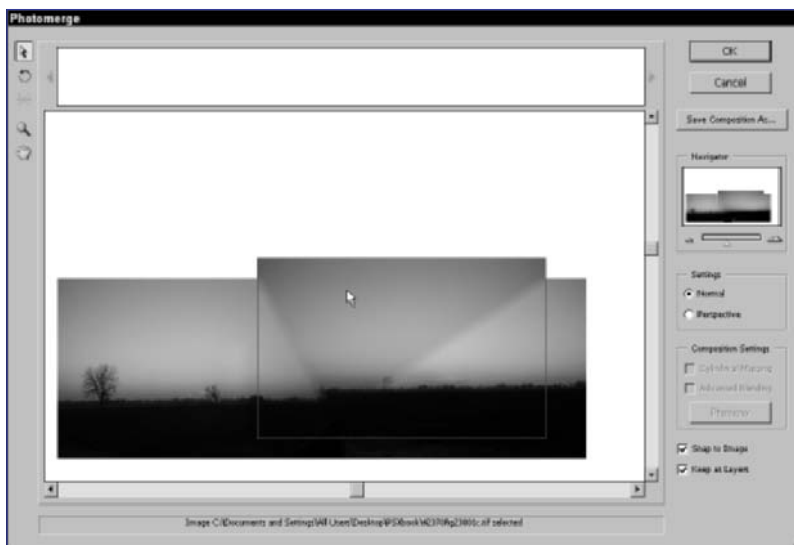
1. Choose File ⇨ Automate ⇨ Photomerge to open the Photomerge dialog box (as shown in Figure 238-1).



**Figure 238-1:** Photographs to be blended together with the Photomerge command

2. If it is not already selected, choose Files from the drop-down menu in the middle of the dialog box so that you may choose documents (similar to those shown in Figure 238-1) on your computer for the Photomerge command, and press the Browse button near the Files drop-down menu to select files that you wish to merge.
3. Select at least two images that are pieces of a larger image “puzzle,” such as multiple photos of the same skyline taken from different views, and press the Open button. Your selected files will appear in the Source Files document list.

4. Press the OK button to launch the Photomerge command's composition editor. A window will pop up showing Photoshop CS's best assumption of how your photos should be arranged.
5. If it is not already checked, check the Snap to Image checkbox near the bottom of the controls column to have Photoshop automatically align similar aspects of your images (such as a horizon line).
6. By default, the Select Image tool is active, allowing you to select and move the individual images in the composition. Click and drag one of the images to change the arrangement and alignment of the photographs in the composition, as shown in Figure 238-2.



**Figure 238-2:** Arranging photographs with the Photomerge command

7. If you need to apply a vanishing-point perspective to your images, first select the Perspective radio button in the Settings section of the controls column on the right side of the Photomerge dialog box.
8. Next, select the Set Vanishing Point tool from the Photomerge tool palette in the top left corner of the Photomerge dialog box and click anywhere inside your composition to set the point to which Photoshop will calculate the perspective of all the photographs' contents.
9. Check the Keep as Layers checkbox near the bottom of the controls column to have your document remain editable.
10. Press the OK button to have Photoshop create a new document blending your three images into a contiguous panoramic image.

## Task 238

### tips

- If you decide not to use a particular image in your series of photographs while inside the Photomerge dialog box, drag the image (using the Select Image tool) into the horizontal scroll panel above the composition window. You will be able to drag photos in and out of that panel should you decide later you do wish to use the image after all.
- Once you've got all your settings and arrangement as you desire, press the Save Composition button in the Photomerge dialog box. This step will let you save these aspects for later modification, saving you a couple of steps down the road should you need to play with the panorama.

### cross-reference

- Task 169 shows you how to arrange dissimilar images to create a collage.

# Task 239

## Using Scripts

**H**ard to believe as it may be, Photoshop CS isn't quite perfect. The application is now in its eighth major stage of growth, having code bugs squashed, new features added, and its user interface tweaked. Knowing that there just might be some feature you can't live without *and* can't wait for the next update, Adobe has opened the application to scripting. Using the Scripts menu, you can access a series of files that can perform myriad tasks, such as exporting layers to files or publishing layer comps to cell phone graphics formats.

Knowing that many of its users won't have the time or the technical savvy to code their own scripts, Adobe has created a free Web site, known as Adobe Studio Exchange, where users can upload and download their own files (including filters, brushes, droplets, and more). The following steps explain how to download a script file from the Adobe Studio Exchange and install it on your machine.

1. Visit <http://www.adobexchange.com/> in your favorite Web browser.
2. Choose Scripts from the Adobe Photoshop drop-down menu (as shown in Figure 239-1) and press the Go button to see a list of script names, their descriptions, file sizes, user ratings (a ranking system allowing users to rate files), and download links

### notes

- Because Adobe Studio Exchange is based upon user contributions, files may appear and disappear at a whim. If the FilenameAsTextlayer script isn't available when you read this task, try to find a script that is of interest to you instead.
- If you already have an Adobe ID, you can have the Adobe Studio Exchange Web site remember your username by checking the Remember checkbox under the Adobe ID field. This can speed up future logins by installing a "cookie," a snippet of code on your computer storing your information that Adobe Web sites can access whenever you visit.

### caution

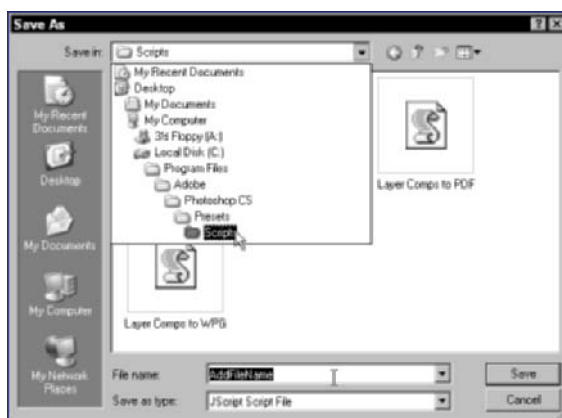
- Scripts and other files that you download from Adobe Studio Exchange are not necessarily sanctioned by Adobe. As such, the files aren't guaranteed to work on your computer. Be sure to read user reviews of any file you are considering before installing, as well as checking the file's Details page (accessible by clicking the file's name in most listings on the site) to see if it works in your version of Photoshop and on your platform.



**Figure 239-1:** Finding Photoshop scripts on Adobe Studio Exchange

3. Click the Download link under the FilenameAsTextlayer listing to initiate a file transfer request for a free script that will create a text layer with the name of the active document when the script is selected. After clicking the link, you will be taken to a login/registration page.

4. If you do not already have an Adobe ID and password, press the Register Now button at the bottom of the left column to get them for free. To register, you will be taken to the Adobe Store in a new window.
5. You will be asked to choose your country of residence. Choose your country and press the Continue button.
6. Next, you will be asked for your account information. Simply supply your first and last names, an e-mail address, a username and password that you will use to log in to the Web site later, and a password hint, to be used to prompt you if you lose or forget your password at some point. When the form is completed, press the Continue button. If your registration is complete, you will be returned to your original Adobe Studio Exchange window.
7. Enter your username in the Adobe ID field and your password in the Password field, and then press the Log In button. A Download 'FilenameAsTextlayer' page will appear with two large download buttons.
8. Right-click (Windows) or Ctrl-click (Mac) the downward-pointing arrow and choose Download Link Target/Save This Link As from the resulting contextual menu to choose a location on your computer to save the download. A Save dialog box will appear.
9. Navigate to the Adobe Photoshop CS\Presets\Scripts\ folder in your Applications (Mac)/Program Files (PC) directory (as shown in Figure 239-2) and press the Save button. (If your browser offers the option, choose Source as the format.) The script is now installed for any subsequent times you open the Photoshop CS application.



**Figure 239-2:** Photoshop CS's Scripts folder

10. Open a document in Photoshop, choose File ⇨ Scripts ⇨ AddFileName to apply the script to your file, and watch as Photoshop runs through a series of steps automatically to insert a line of text with the name of your file in the top left corner.

## Task 239

### tips

- **Feel adventurous?**  
Photoshop's scripts are written in common scripting languages, such as JavaScript. If you've got the technical acumen, check out the PDF documentation in the Scripting Guides folder (found directly inside the Adobe Photoshop CS application folder).
- Each browser names its download contextual menu item differently for some reason. If your browser uses different wording, try to find the option that will let you choose where to download a file on your computer.

### cross-reference

- For those who don't want to learn JavaScript or another scripting language, Task 229 shows you how to record your steps in Photoshop to create a repeatable action.



## Part 16: Print Essentials

Task 240: Setting Printer and Page Setup Options

Task 241: Using the Print with Preview Command

Task 242: Printing Using Color Management

Task 243: Using the Proof Setups

Task 244: Identifying and Correcting Out-of-Gamut Colors

Task 245: Creating a Duotone Image

Task 246: Converting an Image to Halftone

Task 247: Adding a Spot Color Using a Spot Channel

# Task 240

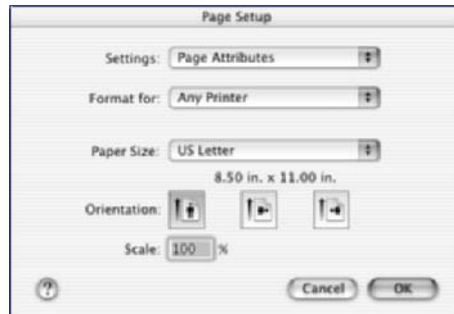
## Setting Printer and Page Setup Options

Whether you want to frame a digital photo you took while on vacation or just want to create a proof for a client project, eventually you will want to print the photos you have been working with on Photoshop. To control the output when printing from Photoshop, you must adjust the settings for both the page and printer. Perform the following steps to get your image out from the digital world and into the physical one.

### notes

- You can't print from ImageReady. ImageReady is designed for the creation and editing of images for Web delivery. If you need to print images from ImageReady, press Shift+Ctrl+M (Windows) or Shift+Cmd+M (Mac OS) or click the button at the bottom of the toolbox to switch to Photoshop. Then you can print your files.
- Photoshop prints what you see on the monitor. If you want to print a certain layer rather than the layers used to create the image, make all the images invisible except for the one layer you want to print. Then go to print.

1. Select File ⇨ Page Setup to open the Page Setup dialog box (see Figure 240-1).



**Figure 240-1:** The Page Setup dialog box for Mac OS

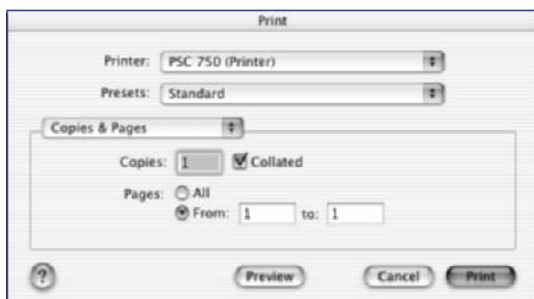
2. Select the orientation for your printed image.
3. Select the paper size to which you are printing from the Paper Size popup list.
4. In Mac OS, select the type of printer for which you want Photoshop to format the printout from the Format For popup list. If you want, you can also change the size of the printed image by entering a different value in the Scale text box. A value smaller than 100% will shrink the image proportionally; a value larger than 100% will increase the image in size.
5. In Windows, select the paper tray that is feeding paper to your printer from the Source list box if you want to force your printer to use a particular tray, or use Auto to leave it up to the printer which source to use (see Figure 240-2).



**Figure 240-2:** The Page Setup dialog box for Windows

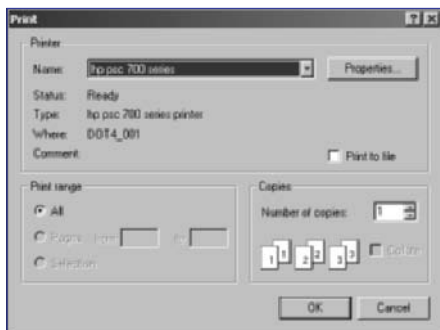
## Task 240

6. Select File ⇨ Print to open the Print dialog box (see Figure 241-3), which enables you to adjust your print options.



**Figure 240-3:** The Print dialog box for Mac OS

7. Select the printer you want from the Name list box (Windows), see Figure 240-4, or the Printer popup list (Mac OS).



**Figure 240-4:** The Print dialog box for Windows

8. When you are ready to print, click OK (Windows) or Print (Mac OS).

### *cross-reference*

- To prepare your image for printing, you may want to create a soft proof. For more information see Task 46.



**Task 241**

## Using the Print with Preview Command

Another great feature is the Print with Preview option. In previous versions of Photoshop you had to be careful to check whether the size of your printout was large enough to show your image in its entirety, or whether the resolution of your image was big enough to result in a larger than thumbnail size when printed. Using the Print with Preview command, you check your worries at the door (and probably save reams of paper of “test prints”), because you can gauge the size and position of your image on paper before you click to print.

### note

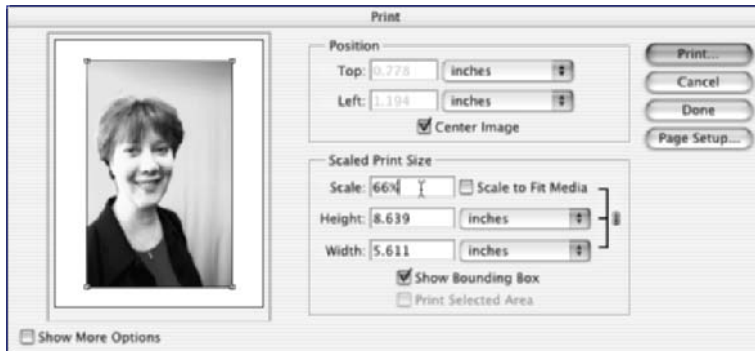
- The Scale, Height, and Width text boxes are linked, which means if you change a value in one text box, Photoshop updates the other text boxes dynamically so you don't end up with a stretched image in print.

1. Open an image you want to print.
2. Select File ⇨ Print with Preview or press Alt+Ctrl+P (Windows) or Command+Option+P (Mac OS) to open the Print with Preview dialog box (see Figure 241-1).



**Figure 241-1:** The Print with Preview dialog box

3. To specify the position of the image on your printed page with numeric precision, clear the Center Image checkbox under Position, and then enter a value in the Top and Left text boxes.
4. To shrink or enlarge an image, enter the values you want in the text boxes under Scaled Print Size.
5. To fit an image on the paper, select the Scale To Fit Media checkbox. Note: If you select this checkbox, you will no longer be able to modify the Scale, Height, and Width values (see Figure 241-2).



**Figure 241-2:** Editing the settings for Scale

6. When you are ready to print, click Print to output the image according to your specifications.

## Task 241

### tip

- If you have adjusted the printing settings already and simply want to print out your image, select File ⇨ Print One Copy or press Ctrl+Alt+Shft+P (Windows) or Command+Alt+Shft+P (Mac OS).

### cross-reference

- Before you print, make sure the resolution for your image is set correctly. A low resolution can result in poor image quality for print projects. To learn more about setting the resolution for your image, see Task 10.

# Task 242

## Printing Using Color Management

Your monitor presents colors in a different way than your printer does. Your color monitor will use the additive primary colors of red, green, and blue (RGB) to display colors. A color inkjet printer, by contrast, uses cyan, yellow, magenta, and black to display the same image on a piece of paper.

To handle the conversion between these two media, Photoshop has a built-in color management component. Using a set of default color profiles as well as custom color profiles, you can prepare your image for almost any output device. Just follow these steps.

### notes

- If you select Same As Source from the Profile popup list under Print Space, Photoshop will use the same color profile that's attached to the image.
- If you select Postscript Color Management from the Profile popup list, you are instructing your PostScript printer to handle the color management of your image. Make sure your printer supports Postscript Level 2 or higher before you select this option.

1. Select Print ⇨ Print with Preview or press Alt+Ctrl+P (Windows) or Command+Option+P (Mac OS) to open the Print dialog box.
2. Select the Show More Options checkbox.
3. Select Color Management from the popup list (see Figure 242-1).



**Figure 242-1:** The Print dialog box showing the Color Management options

4. Under Source Space, select the Document option. This option instructs Photoshop to use the profile that is being used to display the image.

5. Under Print Space, select the profile that closely matches the output that comes from your printer.
6. To adjust your image so that the colors look more natural, select Perceptual from the Intent popup list (see Figure 242-2).



**Figure 242-2:** Picking Perceptual from the Intent drop-down menu.

7. To get more visual impact from your colors, select Saturation from the Intent popup list.
8. To adjust only the colors that fall outside the gamut of the output leaving the others as is, select Absolute Colorimetric from the Intent popup list.
9. To adjust all the colors in your image to the white point, select Relative Colorimetric from the Intent popup list. This option is similar to Absolute, but instead of mapping only the colors that fall outside of the gamut, Photoshop adjusts all colors to the white point of the image.
10. If you are printing images based in the RGB color mode, select the Use Black Point Compensation checkbox at the bottom of the Options menu. Since there isn't a standard way for images with color profiles to ensure Photoshop makes the necessary changes between the color profiles for a pure black, Photoshop will examine the color profiles to determine if there's any additional work on its part in assigning a black point for printing.

## Task 242

### tip

- If you use Photoshop to adjust and manage your digital family and vacation photos, you might prefer to use the Perceptual option. However, Relative Colorimetric will do the trick just as well.

### cross-reference

- To learn more about creating or converting to a color profile, see Task 47.

# Task 243

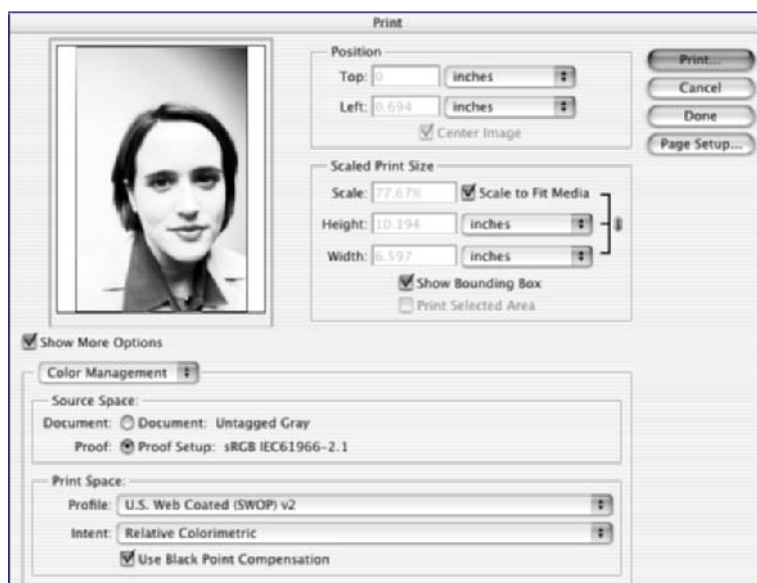
## Using the Proof Setups

In order to see how your image will come out on another printer — for example, a printer used at the office or at a printing press — you would want to create a proof of that image. To that end, you want to create a color profile that matches the setting of the target printer. Then you want to instruct Photoshop to create a proof using that color profile following these steps.

### notes

- For help on making a proof for your image, you might want to contact a friendly printing service bureau and ask for help about your specific needs.
- To make sure your proof is just right, you might have to print a few test runs of your image. And when you think you have the proof right, make sure to tell the individual(s) in charge of your project any particulars in your project you want taken care of. For example, you might want a shade of red to be brighter than other colors, but it might not show up exactly as you had wanted even though the proof you have is your best representation of what you want.

1. Select Print ⇧ Print with Preview or press Alt+Ctrl+P (Windows) or Command+Option+P (Mac OS) to open the Print dialog box.
2. Select the Show More Options checkbox.
3. Select Color Management from the popup list (see Figure 243-1).

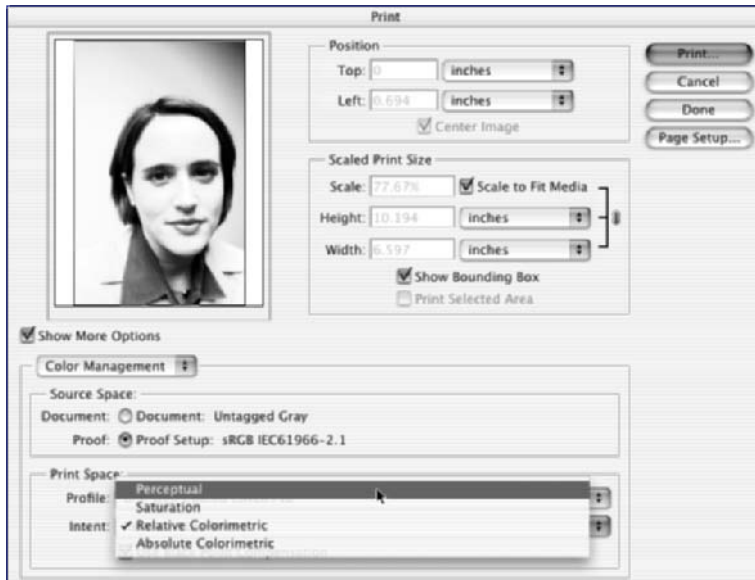


**Figure 243-1:** The Print dialog box showing the Color Management options

4. Under Source Space, select the Proof option. This option instructs Photoshop to use the profile that is set for viewing soft proofs.
5. Under Print Space, select the profile that closely matches the output that comes from your printer.

Task **243**

6. To adjust the intent of the output of your image so that the colors look natural, select Perceptual from the Intent popup list (see Figure 243-2).



**Figure 243-2:** Selecting Perceptual from the Intent popup list

7. To get more visual impact from your colors, select Saturation from the Intent popup list.
8. To adjust only the colors that fall outside the gamut of the output leaving the others as is, select Absolute Colorimetric.
9. To adjust all the colors in your image to the white point, select Relative Colorimetric from the Intent popup list. This option is similar to Absolute, but instead of mapping only the colors that fall outside of the gamut, Photoshop adjusts all colors to the white point of the image.
10. If you are printing images based in the RGB color mode, select the Use Black Point Compensation check box. Selecting this option ensures that Photoshop converts an image's RGB black points to grayscale black points.

**cross-reference**

- To learn more about setting up a Soft Proof, see Task 46.

# Task 244

## Identifying and Correcting Out-of-Gamut Colors

### notes

- You can access the color images of this task on the book's companion Web site at [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).
- If the option to view the Gamut Warning is disabled, you have selected a proof profile that does not allow Photoshop to showcase gamut warnings.
- When you convert an image to the CMYK mode, Photoshop will move colors into gamut. However, you might want to take care of any colors that are out of gamut on your own.

**A** gamut is a set of colors that can be displayed on a monitor or printed on a page. Just like every printer can't print every color imaginable, every monitor can't display every color imaginable. To be sure an image can be displayed or printed accurately in the medium in which you want it displayed, you should check to see if there are any colors that fall out of gamut. Follow these steps to isolate areas of your image that are out of gamut:

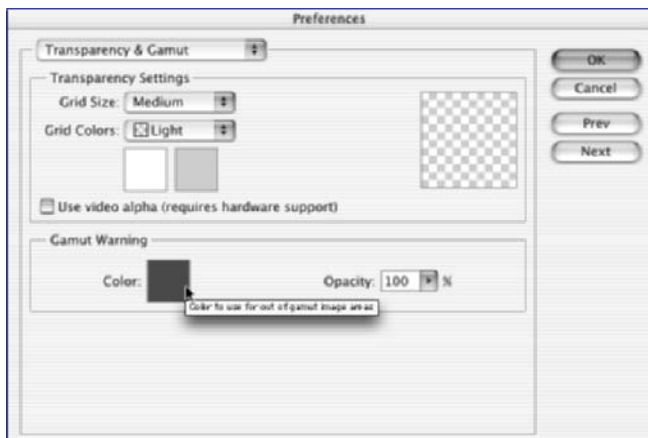
1. To identify and correct out-of-gamut colors, first select View ⇨ Proof Setup.
2. Then pick the proof profile that will be used to identify colors that are out of gamut.
3. To turn on the gamut warning, select View ⇨ Gamut Warning as shown. Any areas of your image that are out of gamut will be highlighted, as shown in Figure 244-1.



**Figure 244-1:** Areas of colors out of gamut are highlighted

Task **244**

4. To change the highlight color for the gamut warning in Windows or Mac OS 9, select Edit ⇨ Preferences ⇨ Transparency & Gamut. In Mac OS X, select Photoshop ⇨ Preferences ⇨ Transparency & Gamut (see Figure 244-2).



**Figure 244-2:** The Preferences dialog box for Transparency & Gamut

5. Under Gamut Warning, click the color swatch to open the Color Picker.
6. Select the color you want to use for the out-of-gamut color highlight.
7. To change the opacity of the highlight color, enter a value from 0 to 100 in the Opacity text box.
8. Click OK.
9. If you notice your image needs a slight color adjustment in one of the color channels, use the Curves command (Image ⇨ Adjustments ⇨ Curves) to make the corrections. For example, if you have too much red in an RGB image, adjust the red channel curve.
10. If there are specific areas of colors in an image that need adjustment, first use the Color Range command (Select ⇨ Color Range) to select those colors and then modify those colors with the Hue/Saturation command (Image ⇨ Adjustments ⇨ Hue/Saturation) to make those modifications.

**cross-reference**

- To learn more about preparing an image for printing, see Task 242.



# Task 245

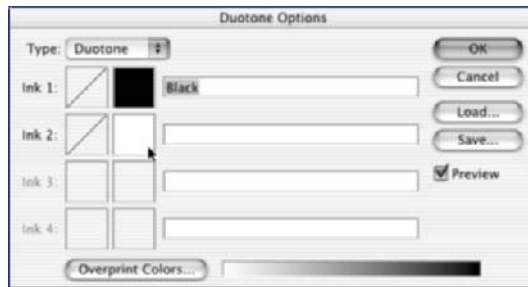
## Creating a Duotone Image

**D**uotones enable you to make your images more vibrant by adding two colors. In Photoshop, you can both select which two colors you want in the duotone and determine how the colors are distributed in the image. In other words, the color distribution throughout the image does not necessarily have to be equal, allowing for unusual images. The Duotone command also enables you to set up tritone and quadtone (three- and four-ink) images. Perform the following steps to set up a duotone image.

### notes

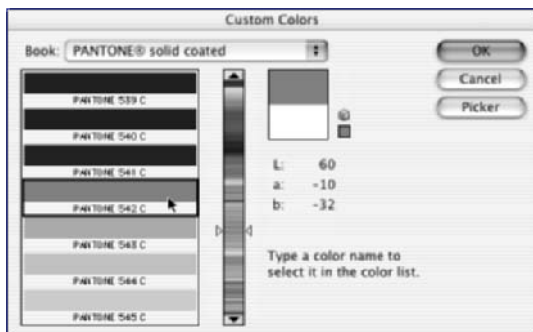
- Duotones are a great way to print exciting visuals on a budget. Another way to “add” another color to your image without paying for a third ink at a service bureau is to select a colored paper that will go with the colors you selected in your duotone.
- If you want to see some before and after examples of converting images to duotone, check out the book’s companion Web site at <http://www.wiley.com/compbooks/10simplestepsorless>.

1. Convert the image into grayscale mode by selecting Image ⇨ Mode ⇨ Grayscale.
2. Select Image ⇨ Mode ⇨ Duotone to open the Duotone Options dialog box (see Figure 245-1).



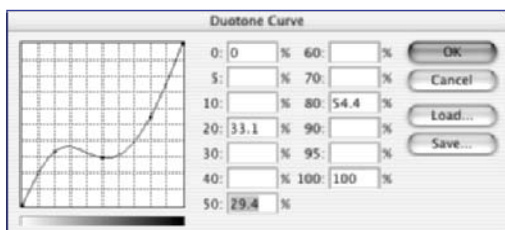
**Figure 245-1:** The Duotone Options dialog box

3. Select the Preview check box if it isn’t selected already so you can see the changes you make in real time.
4. Select Duotone from the Type popup list.
5. Click the right Ink 2 square (below the black square) to open the Custom Colors dialog box (see Figure 246-2). Using this dialog box, you can select color systems from different companies like Pantone.

Task **245**

**Figure 245-2:** The Custom Colors dialog box

6. To pick a color using the color picker, click the Picker button, select the color you want from the Color Picker dialog box, and click OK to accept your choice of color.
7. To adjust how the color in the second ink is spread out over the duotone, click the left Ink 2 square to open the Duotone Curve dialog box (see Figure 245-3).



**Figure 245-3:** The Duotone Curve dialog box

8. To adjust the curve, click anywhere in the grid to place points in the grid. When you are satisfied with your new settings, click OK.
9. Click OK to close the Duotone Options dialog box.

### *cross-reference*

- Adjusting the curve is similar to manipulating the line in the Curves dialog box. For more information on the Curves command, see Task 53.

# Task 246

## Converting an Image to Halftone

The photos you see in a newspaper are put there by creating halftones, little dots that vary in size and placement on the page, out of either CYMK or blank ink, depending on whether it's a color or black-and-white photo respectively. In Photoshop, you can prepare an image for this type of printing by creating your own halftones. Or you can adjust the frequency and angles of the halftone to create exaggerated or abstract images.

### notes

- Selecting Use Printer's Default Screens instructs Photoshop not to take into account any settings that are in the Halftone Screens dialog box.
- If you want Photoshop to determine the best frequency and angle setting for your image, click the Auto button. In the Auto Screens dialog box, enter the printer resolution and the frequency you want to use in the Screen text box.

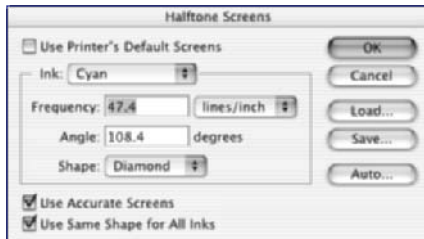
1. Select Print ⇧ Print with Preview or press Alt+Ctrl+P (Windows) or Command+Opt+P (Mac OS) to open the Print dialog box.
2. Select the Show More Options checkbox if it isn't already selected.
3. Select Output from the popup menu (see Figure 246-1).



**Figure 246-1:** The Print dialog box showing the Output options.

Task **246**

4. Click Screen to open the Halftone Screens dialog box (see Figure 246-2).



**Figure 246-2:** The Halftone Screens dialog box

5. To create your own custom halftones, make sure the Use Printer's Default Screens is cleared, otherwise leave this checkbox selected and click OK.
6. Under Ink, click the popup menu to select the ink's halftone settings you want to adjust.
7. Enter a numeric value for the ink in the Frequency and Angle text boxes. Then select another ink from the Ink popup menu and specify that ink's frequency and angle settings.
8. To change the shape of the dots, select the shape you want from the Shape popup list.
9. Select the Use Accurate Screens checkbox to instruct Photoshop to let a Postscript Level 2 or higher printer print the best screens for the image.
10. Press OK to accept your settings and close the Halftone Screens dialog box.

### *cross-reference*

- Another pop art-like effect is to posterize your image. See Task 67 for more information.

**Task 247**

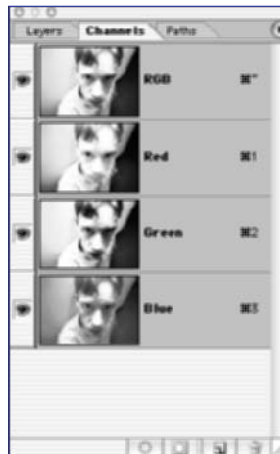
## Adding a Spot Color Using a Spot Channel

To add another color to the printing process of an image, you can add a Spot Color. By using the spot channel, you can specify what color and how much of it will appear on top of the other colors in an image.

### *note*

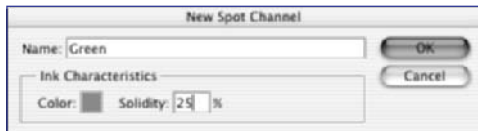
- Contact your local printing service bureau for advice on the type of color to choose, the characteristics and to any questions you might have with the printing process.

1. Open an image.
2. Select Window ⇨ Channels to open the Channels palette (see Figure 247-1).



**Figure 247-1:** The Channels palette

3. Either make a selection or load a selection that you want to indicate where you want a spot color.
4. Ctrl-click (Windows) or Command-click (Mac OS) the New Channel button at the bottom of the Channels palette to open the New Spot Channel dialog box (see Figure 247-2). You can also select New Spot Channels from the Channels palette flyout menu.



**Figure 247-2:** The New Spot Channel dialog box

5. Click the color swatch under Ink Characteristics to open the Color Picker.
6. Select the color you want and click OK.
7. Enter a value from 0 to 100 in the Solidity text box. The lower the value, the more transparent the color effect.
8. Enter a descriptive name for your spot color channel in the Name text box.
9. Press OK to accept your changes.

## Task 247

### *tip*

- If you want to adjust the color or the solidity of your spot channel, double-click the thumbnail of the channel in the Channels palette, then edit your spot channels settings in the resulting dialog box.

### *cross-reference*

- Task 246 explains how to create a duotone image (the use of two colors in an image).



## Part 17: For the Web: ImageReady

- Task 248: Optimizing GIFs for Web Use
- Task 249: Optimizing JPEGs for Web Use
- Task 250: Optimize PNGs for Web Use
- Task 251: Exporting to SWF
- Task 252: Using and Customizing the Preview in Browser Command
- Task 253: Creating a Seamless Tiling Background
- Task 254: Using Layer Styles to Design Matching Web Elements
- Task 255: Working with the Object-Based User Interface
- Task 256: Using the Web Page Template Action to Create a Basic Site Look
- Task 257: Using ImageReady Tables
- Task 258: Slicing an Image into Separate Parts with the Slice Tool
- Task 259: Identifying Slice Characteristics, Moving, Resizing, and Locking Slices
- Task 260: Selecting, Saving, Loading, and Deleting Slices
- Task 261: Dividing, Combining, and Duplicating Slices
- Task 262: Specifying Slice Background Color
- Task 263: Assigning URLs to Slices
- Task 264: Linking and Unlinking Slices
- Task 265: Applying Different Optimizations to User Slices
- Task 266: Creating a Layer-based Image Map
- Task 267: Creating a Tool-Based Image Map
- Task 268: Modifying Image Map Settings
- Task 269: Creating a Rollover Effect
- Task 270: Creating a Secondary Rollover Effect
- Task 271: Constructing a Simple Animation
- Task 272: Optimizing and Saving Animation Files
- Task 273: Editing an Animation Action to Customize It
- Task 274: Using an Animation in a Rollover
- Task 275: Creating an Animation Using the Tweening Function



# Task 248

## Optimizing GIFs for Web Use

There are only a couple of popularly supported file formats available for presenting images within a Web browser. One of these formats, the Graphic Interchange Format, or GIF, is used to handle three distinct needs: (1) animation (of the popularly supported graphic file formats, only GIF can handle animation); (2) encoding of flat, graphic art such as a large, consistent color field (because of its compression scheme, GIFs are fantastic for this); and (3) designating a color as transparent, which allows imagery or color behind the image to show through in a Web browser. As a GIF's file size is dependent on the number of colors used in the file (as well as how often a color change occurs as moving from left to right, top to bottom), Photoshop provides a means for optimizing a GIF through the Save For Web command.

### notes

- Choosing Show Options from the Optimize palette's fly-out menu will provide you with easier access to the various settings you may wish to apply to your image.
- For a GIF to be transparent, it must sit atop ImageReady's background checkerboard. Once you see the standard checkerboard pattern (signifying transparency), your file is ready to be saved as a transparent image.

1. Open a transparent document with flat, graphic artwork, such as a clip art illustration, within ImageReady.
2. Press the Optimized tab near the document's title bar (as shown in Figure 248-1) to view the document as it will appear when saved as a Web graphic. (If you are feeling adventurous, you can press either the 2-Up or 4-Up tabs, as well. These tabs will allow you to apply different optimization settings on the same image to compare file sizes and quality.)

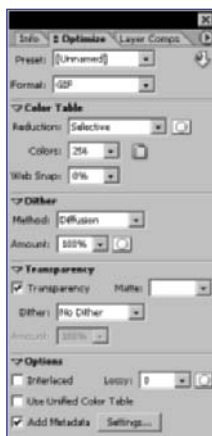


**Figure 248-1:** The document's Optimized tab

### caution

- Because GIFs can contain a maximum of 256 colors, you should avoid using the format for photo-realistic imagery, such as a photograph or painting.
3. If it is not already open, choose Window ⇨ Optimize to launch the Optimize palette. Specify GIF under the Format drop-down menu in the Optimize palette.
  4. Choose a color reduction algorithm, such as Adaptive, from the Reduction drop-down menu under the Color Table section to determine the method used to maintain color consistency between the original file and the final exported graphic.

5. Select the number of colors, such as 64, from the Colors drop-down menu to be used in the final image to attempt to mimic the original document's colors.
6. Within the Dither section, as shown in Figure 248-2, select a dithering method (such as Diffusion) from the Method drop-down menu to determine how color gradations are rendered.



**Figure 248-2:** The Optimize palette

7. If you chose Diffusion, click on the arrow next to the Amount drop-down menu and drag the cursor to determine the amount of dithering required. A mid-range number like 50% is a good start; you can then get a good sense of whether your document needs more or less dithering to replicate its original appearance.
8. Within the Transparency section, check the Transparency checkbox to ensure that any transparent areas within your document in ImageReady appear similarly in the final Web-ready graphic.
9. Click on the Matte drop-down menu within the same Transparency section to determine which color your artwork should blend towards before becoming fully transparent.
10. Choose File ⇨ Save Optimized As to save the Web-ready version of the document you just modified.

## Task 248

### tips

- You can quickly set a number of the Web optimization settings by choosing an option from the Optimize palette's Preset menu.
- Remember, the fewer colors used, the smaller your graphic's file size.

### cross-reference

- The PNG format, discussed in Task 250, shares many of the benefits of the GIF format, but lacks the wide support in Web browsers.

# Task 249

## Optimizing JPEGs for Web Use

The JPEG file format owes its name to the Joint Picture Experts Group, a gathering of ISO members. This group developed what is known as a “lossy” file format: A lossy image will discard pixels from the original image based upon the level of quality you set when saving. The JPEG format is able to reduce an image’s file size by approximating the transitions between pixels that surround the discarded pixels. Not only can JPEGs produce very small image sizes, they can contain millions of colors, unlike the GIF format’s maximum of 256 colors. Because of this color depth, JPEG is the ideal format for encoding photographs for the Internet.

### notes

- If your document was originally configured to save an animated GIF, keep in mind that ImageReady will only save a single image out as a JPEG based upon the animation cell you have selected.
- The JPEG 2000 format, which tends to give smaller file sizes for the same quality as JPEG, is supported in Photoshop CS but not ImageReady CS. To save files in JPEG 2000 format, the optional JPEG 2000 plug-in must be installed to the Adobe Photoshop Only File Formats folder located in the Plug-Ins folder within your system’s Adobe Photoshop CS folder. The format will then be available in the Format drop-down menu after choosing File ⇨ Save As.
- The JPEG format often results in files ending with a “.jpg” extension, due to the old Windows dot-three naming convention.

### caution

- As JPEGs approximate pixels in exchange for file size, you should almost always avoid using the format for any image that contains text, as the edges of the type may appear blurry.

1. Open a document with a photographic, such as an image of a forest, within ImageReady.
2. Press the Optimized tab near the document’s title bar (as shown in Figure 249-1) to view the document as it will appear when saved as a Web graphic. (If you are feeling adventurous, you can press either the 2-Up or 4-Up tabs, as well. These tabs will allow you to apply different optimization settings on the same image to compare file sizes and quality.)



**Figure 249-1:** The document’s Optimized tab

3. If the Optimize palette is not already open, choose Window ⇨ Optimize to launch it.
4. Specify JPEG under the Format drop-down menu in the Optimize palette.

5. Choose a level of image quality, such as Medium, from the Quality drop-down menu in the Quality section of the Optimize palette. As you change this setting, the Amount field's value will change.
6. Further optimize your image's quality by manually changing the Quality Amount selector's percentage value by clicking on the arrow button to its right, as shown in Figure 249-2.

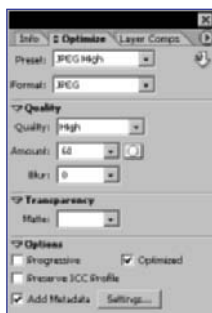


Figure 249-2: The Optimize palette

7. Drag the slider to your desired percentage value (where 100% is a duplicate of the original image and 0% barely retains any original image data), and press the Return key to confirm your new setting.
8. Check the Progressive checkbox in the Options section to allow the final JPEG file to be loaded in several stages, meaning that the Web browser will load a low-resolution version of the image first, then a medium-resolution version, and then finally the full-resolution image. (This option is helpful if your site's visitors are connecting on slower modem Internet connections.)
9. Choose File ⇨ Save Optimized As to save the Web-ready version of the document you just modified.

## Task 249

### tips

- You can quickly set a number of the Web optimization settings by choosing an option from the Optimize palette's Preset menu.
- Remember, the lower the setting for the JPEG's image quality, the smaller your graphic's file size.

### cross-reference

- For all their benefits, JPEGs cannot be animated. Task 272, though, shows how to animate the GIF format.

# Task 250

## Optimize PNGs for Web Use

Remember the battle over videocassette recording technologies, where lower quality VHS won out over Betamax? In some way, the battle between GIF and PNG is similar. While PNG often produces smaller file sizes, definitely has greater color depth, and can even produce alpha channel transparency (resulting in edges much smoother than a GIF's transparency), very few Web browsers fully support the PNG file format. If PNG had been fully adopted years ago, Web pages would load faster and certainly appear to be more attractive than they do now. Nonetheless, Photoshop allows you to create optimized PNGs using the Save For Web command on the off chance that your audience will be lucky enough to view the images as they were intended.

### notes

- If your document was originally configured to save an animated GIF, keep in mind that ImageReady will only save a single image out as a PNG based upon the animation cell you have selected.
- If the Transparency setting is unchecked, you will have the option of choosing a matte color. This color will flood the background of your image, ensuring that the HTML page's background does not show through the transparent edges of your artwork.

### caution

- While the PNG format is superior to GIF in many aspects, it unfortunately is not as widely supported by Web browsers. Be sure to test an HTML page with PNG graphics across a wide variety of possible visitors' Web browsers before using the format exclusively.

1. Open a document with flat, graphic artwork, such as a clip art illustration, that has transparent areas of the image within ImageReady.
2. Press the Optimized tab near the document's title bar (as shown in Figure 250-1) to view the document as it will appear when saved as a Web graphic. (If you are feeling adventurous, you can press either the 2-Up or 4-Up tabs, as well. These tabs will allow you to apply different optimization settings on the same image to compare file sizes and quality.)

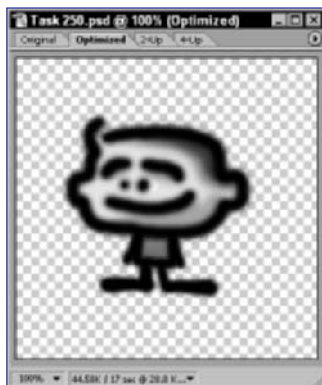
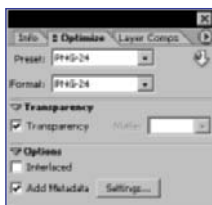


Figure 250-1: The document's Optimized tab

3. If it is not already open, choose Window ⇨ Optimize to launch the Optimize palette.
4. Specify PNG-24 under the file format drop-down menu in the Optimize palette.
5. Check the Interlaced checkbox to allow the final PNG file to be loaded in several stages, meaning that the Web browser will load a low-resolution version of the image first, then a medium-resolution version, and then finally the full-resolution image. (This option is helpful if your site's visitors are connecting on slower modem Internet connections.)
6. Check the Transparency checkbox, as shown in Figure 250-2, to create a smooth alpha channel transparency for viewing over any background you may eventually design for your Web page.



**Figure 250-2:** The Optimize palette

7. Choose File ⇨ Save Optimized As to save the Web-ready version of the document you just modified.

## Task 250

### *tips*

- You can quickly set a number of the Web optimization settings by choosing an option from the Optimize palette's Preset menu.
- If smooth alpha channel transparencies aren't an issue for your graphics, consider switching to the PNG-8 format, which will often create much smaller images.

### *cross-reference*

- For all their benefits, PNGs cannot be animated. Task 272, though, shows how to animate the GIF format.

# Task 251

## Exporting to SWF

### notes

- Since the SWF format supports only solid backgrounds, any multicolored imagery, such as gradients and textures, that make up the background layer of an image will be exported as a bitmap object that will appear behind all the other objects in the file.
- The SWF format is what is known as a streaming format, which means, in the case of an animation, it will play once a certain amount of the file has downloaded.

### caution

- When exporting an entire PSD file to a single SWF file, animation frames are exported as SWF animation frames. URLs in slices and/or image maps will be included, but rollovers will be ignored.

If you produce graphics for the Internet, you are probably familiar with Macromedia's SWF format, commonly known as Flash. Using an application like Macromedia Flash MX, you can create fluid and visually stunning animations at a fraction of the size of a raster format (such as an animated GIF). The SWF format owes its lightweight file size to its vector nature: Instead of defining images with pixels, it can define them with points, lines, strokes, and fills (similar to how Adobe Illustrator produces artwork). As Photoshop CS and ImageReady CS continue to blur the line between raster and vector imagery because of all the path and shape tools, Adobe has offered users a quick and painless way of exporting their ImageReady documents as SWF files.

You can be using the Export menu's command in no time flat. The following steps will introduce you to some of the options available for exporting to this format. Once your SWF files have been exported, you can use them as-is on your Web page or import them into your Macromedia Flash program.

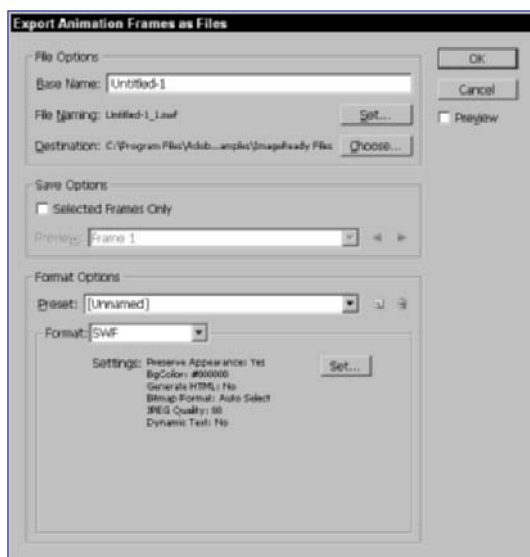
1. Open an existing image or create a new one for practice purposes.
2. Choose File ⇨ Export ⇨ Macromedia Flash SWF to bring up the Macromedia Flash (SWF) Export dialog box, as shown in Figure 251-1.



**Figure 251-1:** The Macromedia Flash (SWF) Export dialog box

3. The Export Options field includes three basic options:
  - Preserve Appearance maintains the appearance of the file and rasterizes any content that cannot be exported natively to the SWF format.
  - SWF bgcolor allows you to choose a background color for the SWF (if your background layer contains transparency, and you want something other than the default white).
  - Generate HTML creates the HTML along with the SWF file.

4. If your image includes text and is going directly to the Web, you can click the Enable Dynamic Text field, which will then give you the ability to embed your font, portions of the font (such as all upper- or lowercase characters), or just specified characters in the file.
5. The Bitmap Options field offers a drop-down menu from which you can choose a file format to be used for bitmap images, along with a JPEG Quality option to specify how much compression to use for JPEGs.
6. Once the options are set as desired, clicking OK will bring up the Save dialog box, where you give your file a name and choose its location.
7. When working with a file containing an animation, you may wish to export the animation frames as individual SWF files. Choosing File ⇨ Export ⇨ Animation Frames as Files will bring up the dialog box shown in Figure 251-2. Set the file options (such as name and destination) and choose SWF in the Format drop-down menu to save each animation frame as a separate SWF file that you can import into your Macromedia Flash program.



**Figure 251-2:** The Export Animation Frames as Files dialog box

## Task 251

### tips

- Since the inclusion of bitmap objects in a SWF file can greatly increase the file size, try to keep them to the bare minimum you need to achieve the look you want.
- You can export each layer in a file to a SWF by choosing File ⇨ Export ⇨ Layers as Files and choosing SWF as the format. If they are imported into Flash at the same time, each one will be a symbol on its own layer there.

### cross-reference

- Task 271 takes you through the process of creating a simple animation.



# Task 252

## Using and Customizing the Preview in Browser Command

### notes

- To get a good idea of the strengths of each file format, run this exercise on different types of images, such as text-based graphics and photography-based graphics.
- You can add as many browsers as you would like to your Preview In list.

### caution

- ImageReady will list any application for which you've created a shortcut/alias, even if the application is not a Web browser. As such, if you choose a non-browser from the menu, the application will kick back an error when trying to load the preview.

In “The Strike” episode of *Seinfeld*, Jerry meets a woman whose attractiveness decreases exponentially once she is outside of his favorite diner. Designing Web graphics can produce similar situations. While an image may look fantastic within Photoshop or ImageReady, it may look very different once it appears in the real world (the Web browser). To ensure that What You See Is What You Get, ImageReady offers the Preview In command, allowing you to quickly load the Web-ready results of your current image in a Web browser on your computer.

1. Open any document within ImageReady.
2. Specify which file format and optimization settings to use for the image in the Optimize palette.
3. Choose File ⇨ Preview In ⇨ System Default Browser to launch a preview of your image in the operating system's default browser. The resulting preview will be followed by text detailing all the settings, as shown in Figure 252-1.

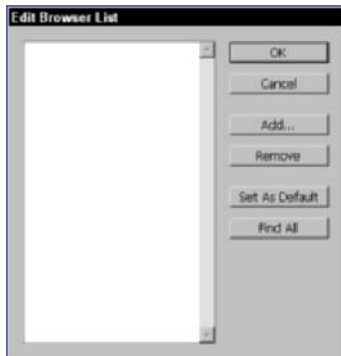


Figure 252-1: A browser preview of an image

4. Switch back to ImageReady.

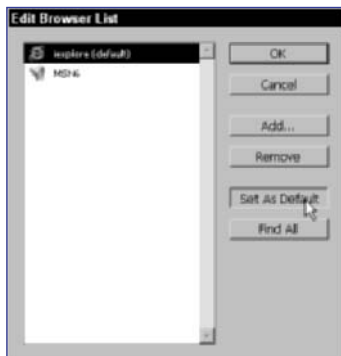
**Task 252**

5. To view the preview in a different browser, choose File ⇨ Preview In ⇨ Other Browser. This will launch a Preview in Other Browser window.
6. Select an alternative Web browser, such as Safari (Mac) or Mozilla (PC), and press the Open button. The resulting preview will be launched within the newly selected browser.
7. To add other Web browsers to the Preview In menu, choose File ⇨ Preview In ⇨ Edit Browser List to launch an Edit Browser List dialog box (shown in Figure 252-2).



**Figure 252-2:** The Edit Browser List dialog box

8. Press the Find All button to have ImageReady search out every Web browser on your computer.
9. Once all the browsers are listed in the window, select the one you wish to become the default and press the Set As Default button. Your selected browser will now be listed with a “(default)” in the browser listing. To complete this process, press the OK button.



**Figure 252-3:** Adding a Web browser to the Preview In menu

10. Choose File ⇨ Preview In ⇨ Include Source on Page to disable the presentation of the HTML code required to display your image when presenting a preview. This option can be restored by simply choosing the item again.

*tips*

- Consider printing copies of your preview pages from the Web browser to keep a record of the different settings you've tried. That way, should you need to consider similar options next time, you can compare image quality and file size side by side.
- Be sure to preview your image in several Web browsers, especially when using less-supported image formats like PNG, to ensure the largest number of users can see your graphics online.

*cross-reference*

- Task 2 shows how to optimize a GIF graphic.

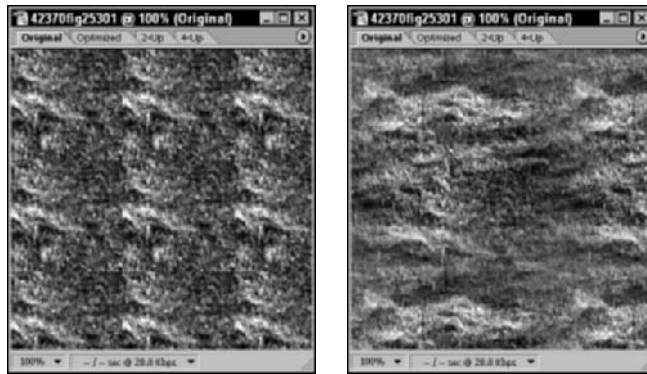
# Task 253

## Creating a Seamless Tiling Background

When a Web browser encounters a background image, it uses the image as a tile, repeating it across and down the page so that the background is entirely filled with instances of that image. By tiling the image as such, though, awkward patterns can be produced (such as those in Figure 253-1), especially when the left and right (and top and bottom) edges of an image don't produce a seamless continuation of the image. To help with this issue, ImageReady provides the Tile Maker filter command. This command automatically blends all four edges of an image to produce a seamless tile, ready for use as a Web page background.

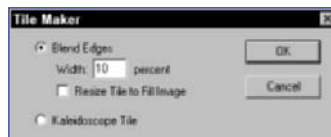
### notes

- The Width value can range anywhere from 1 to 20 percent.
- When producing HTML to accompany your images, you should be sure to check out the Output Settings dialog boxes. Choose File ⇨ Output Settings ⇨ HTML to set some basic settings, including XHTML-compliant code conformance (which you should check unless you have a specific reason you should not).



**Figure 253-1** Non-seamless (left) and seamless (right) background image tiling.

1. Open an existing document in ImageReady.
2. Choose Filter ⇨ Other ⇨ Tile Maker to open the Tile Maker command dialog box, shown in Figure 253-2.

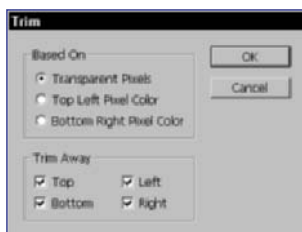


**Figure 253-2:** The Tile Maker dialog box

### caution

- Resizing the image to its original dimensions will result in a degraded image quality, where the amount of degradation depends on the percentage in the Width field. If at all possible, avoid checking this option to ensure your image retains its clarity and sharpness.

3. Enter a numerical value, such as 15, in the Width field to determine what percentage of the image's total height and width the command will shave off each side to create a seamless edge.
4. Check the Resize Tile to Fill Image checkbox if you want to scale the image back up to its original height and width dimensions.
5. Press the OK button to apply the changes to your image.
6. To ensure a smooth blend as the sides come together in your Web page, choose a precise, lossless image format, such as GIF or PNG, from the Optimize palette.
7. If the Resize Tile to Fill Image option was not checked, your tile will be smaller than the original graphic and contain transparent areas along the outer edges. In this case, use the Trim command (Image ⇨ Trim), as shown in Figure 253-3, to reduce the document's dimensions to the tile's new, smaller size.



**Figure 253-3:** Trimming your artwork

8. Choose File ⇨ Save Optimized As to save the Web-ready version of the document you just modified.

## Task 253

### *tips*

- To reduce the eye's ability to detect a pattern, apply the Tile Maker command on a larger image. Keep in mind, however, that the larger the image, the larger the file size; and the larger the file size, the longer the download time.
- Choose Kaleidoscope Tile instead to flip your image horizontally and vertically, similar to the manner in which a kaleidoscope creates its patterns, to create a tile of the same dimensions as your original image.

### *cross-reference*

- Use the Patternmaker filter, described in Task 212, to create an image that will work well as a repeatable tiling image.

# Task 254

## Using Layer Styles to Design Matching Web Elements

### notes

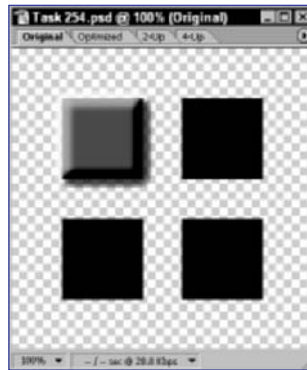
- ImageReady deals with layer styles somewhat differently than Photoshop. Rather than popping up a command dialog box, ImageReady automatically applies a default layer style and then allows modification of the style via a palette.
- If you are using a Mac, you can mimic a right-click command by holding the Control key while clicking.
- To reduce the amount of time needed to apply a series of layer styles to an object, you can use the Styles palette's presets to quickly apply the effects.

### caution

- As your buttons or other Web page elements may consist of several layers apiece, you may need to repeat this process for each aspect of the element (i.e. copying and pasting layer styles for button shapes, button text, and button highlights).

One of the most basic rules of interface design is to use a consistent visual treatment for similar elements throughout the entire interface. Thus, if a button on the home page appears over a red rectangle with a blue drop shadow, it should appear that way on the contact page. Layer Styles can be helpful when trying to adhere to this rule. By applying the same layer style to similar elements, you can ensure that each element will appear consistently throughout your Web site. Using layer styles can also reduce the amount of time it takes to produce elements for your site, as the amount of time it takes to apply individual styles can be significantly reduced.

1. Create a new transparent document in ImageReady.
2. Using the Rectangle tool, create 4 rectangles, each on its own layer, to serve as buttons.
3. Choose Layer ⇨ Layer Style ⇨ Bevel and Emboss to apply a simple three-dimensionality to one of the rectangle artwork layers, as shown in Figure 254-1.

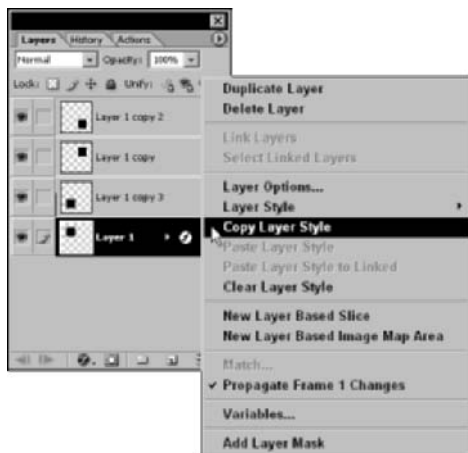


**Figure 254-1:** Applying layer styles to a button

4. Next, choose Layer ⇨ Layer Style ⇨ Color Overlay to apply a color wash across the layer's contents. (By default, the color will be red.)

# Task 254

5. Choose Layer ⇨ Layer Style ⇨ Outer Glow to apply a light yellow glow around the rectangle's edges.
6. Once you've finished stylizing your button, Right-click (Windows) or Ctrl-click (Mac) on the selected layer's listing in the Layers palette.
7. Choose Copy Layer Style from the contextual menu to save the layer style properties in the clipboard, as shown in Figure 254-2.



**Figure 254-2:** Copying a layer style

8. Link the remaining three unstylized rectangle artwork layers to the stylized layer.
9. Right-click (Windows) or Ctrl-click (Mac) on the selected layer's listing in the Layers palette again.
10. Choose Paste Layer Style to Linked from the contextual menu to apply the same layer styles to the linked layers.

## tips

- For more tips on interface design, visit this book's Web site to find links to online resources and other books.
- Once you've applied a universal button style to your artwork, consider organizing these like elements in a layer set to keep your Layers palette clean and easy to manage.

## cross-reference

- Task 156 shows how to link layers together in the Layers palette.

# Task 255

## Working with the Object-Based User Interface

### notes

- In the Photoshop CS folder on your hard drive, you'll find a folder called **Samples**, which contains (in PSD format) various files that are great to use as practice images. Within the **Samples** folder is another folder called **ImageReady Files**, containing several multi-layered images you can use for practice in ImageReady.
- Command- (Mac) or Ctrl- (Windows) click to select multiple layers that are not adjacent in the layer stack within the Layers palette.

### caution

- When a Layer Group is selected, the Filter menu will not be available. However, filters can be used on individually selected layers within the group.

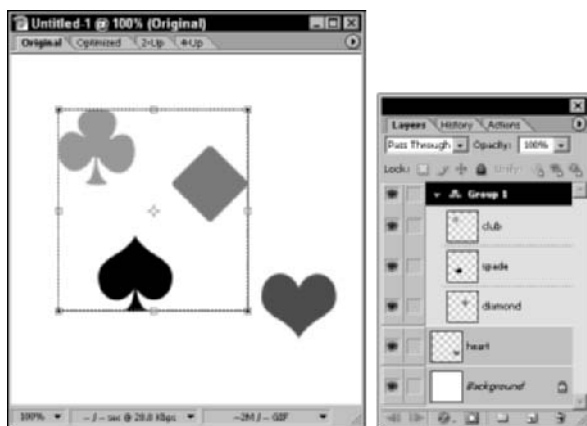
Users of previous versions of ImageReady CS will be somewhat surprised when they open the new version for the first time, while fans of Macromedia Fireworks will enthusiastically welcome the changes the application has undergone. Instead of operating as Photoshop CS does, ImageReady CS now uses an object-based user interface. While still maintaining the use of Photoshop's layers and several of its tools, ImageReady CS also lets you select layer-based content and text as individual pieces of content. Having every object presented as an item, you can quickly select, move, and modify a group of artwork at the same time. By using the convention to which Fireworks users have grown accustomed, ImageReady CS's new interface is designed to speed Web production tasks to be on par with the competition.

1. Open an image, or create a new document to use as a practice image. Add a variety of layers containing text and different shapes.
2. Create a layer group by Shift+clicking on several adjacent layers in the Layers palette to highlight them, then choosing **Layer ⇄ Group Layers**. The layers you included in the group will then appear in the Layers palette under a numbered Group heading (e.g., Group 1).
3. In the toolbox, click on the Move tool to activate it. The ImageReady Move tool can be used to select, align, distribute, transform, and move multiple objects or layers.
4. You'll notice that the Options bar for the Move tool, shown in Figure 255-1, contains some new tool choices. The first three buttons consist of the following:
  - **Layer Move Tool** — used to move an entire layer.
  - **Layer Select Tool** — will move an ungrouped layer as well as a grouped layer as if it were a single object.
  - **Direct Select Tool** — can select one or more layers in a group to move independently.



**Figure 255-1:** The Options bar for the Move tool in ImageReady

5. Choose the Layer Select Tool button and then click on the Layer Group heading in the Layers palette. In your document window, you'll see that a plain bounding box surrounds the content perimeters of the grouped layers. Click and drag within the bounding box to move the grouped layers simultaneously.
6. Check the Show Transform Box option in the Options bar to change the plain bounding box to a transform box (see Figure 255-2), which you can then use to rotate and resize the objects within by dragging the handles. Click the Commit button in the Options bar to accept the changes.



**Figure 255-2:** A Transform Box surrounds all objects in the selected Layer Group.

7. Choose the Direct Select Tool in the Options bar. Uncheck the Show Transform Box option, and then click within your document window on one of the shape objects in the group to select it and move it independently of the group. As you drag the object, you'll see flashing vertical and horizontal lines appear above, below, and on either side of it, which disappear upon releasing the object. These are called Smart Guides; their appearance helps you align your objects in the desired location. You can turn off the Smart Guides by going to View ⇨ Show ⇨ Smart Guides to uncheck the option.

## Task 255

### tips

- If an image contains Layer Sets, double-clicking on the Layer Set icon in the Layers palette will bring up an options dialog box where you can choose to treat the Layer Set as a group.
- Try Option- (Mac) or Alt- (Windows) dragging to quickly duplicate multiple selected layers.
- Change the font settings of multiple selected text objects at once.

### cross-reference

- See Task 156 to learn how to keep your layers organized with the help of Layer Sets.



# Task 256

## Using the Web Page Template Action to Create a Basic Site Look

### notes

- The Make Web Page action requires a document size of at least 800 × 640 pixels. You can, of course, apply the action on a larger document.
- Click within the second column of the action's listing to have ImageReady display all the dialog boxes as it runs through the commands. This will provide you with more control over the action's events.

For those who have never put together a Web site before, the challenge of where to start and what to do can seem crippling. Enough users, however, must have explained this position to Adobe, as Photoshop now comes standard with a Web Page Template action. By using this action in a new document, you can quickly create a very basic-looking Web site. And while ImageReady does not provide you with news or entertainment content to fill in your site, it does provide the graphics for a simple navigation and page titling.

Using the following steps, you can have Photoshop produce the imagery and settings necessary to quickly produce a Web page.

1. Create a new 800- by 600-pixel document in ImageReady.
2. Choose Window ⇨ Actions to open the Actions palette.
3. Select the Make Webpage listing in the Actions palette, as shown in Figure 256-1.



**Figure 256-1:** The Make Web Page action

### caution

- While running through an action, ImageReady will not let you modify your document. Be patient, as most actions take only a couple seconds to execute, depending on the performance of your computer.

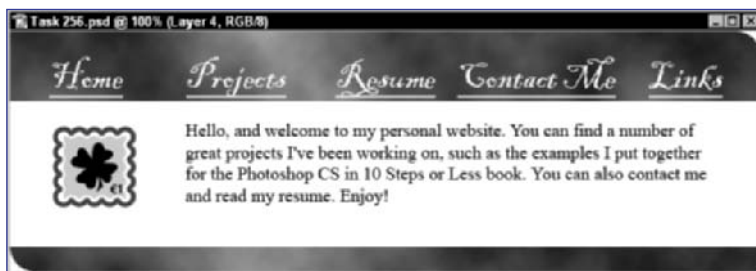
4. Click on the fly-out menu button in the palette's top-right corner.
5. Select Play "Make Webpage" from the fly-out menu.

- Wait for ImageReady to complete the long series of commands. When it is finished, your document will appear similar to Figure 256-2.



**Figure 256-2:** The result of the Make Web Page action

- Modify the text layers and layer styles of the resulting document to personalize your Web page. Such modifications could include placing your company's logo at the top of the page and renaming the buttons to better fit the needs of your site (such as "Home," "Products," and "Contact Us"); these changes will help make the Web site feel more like your own personal creation. Feel free to add other artwork elements in the document as well, such as the image in 256-3. It's your Web page now; do as you like!



**Figure 256-3:** Personalizing the template

- Choose File ⇨ Save Optimized As to save the Web-ready version of the document you just created.

## Task 256

### tips

- For the uninitiated, this book's Web site provides links to a number of online tutorials and references to help you learn quickly how to create Web pages and sites.
- Rather than selecting the Play "Make Webpage" command from the menu, you can press the little Play Selection button at the bottom of the Actions palette.

### cross-reference

- If, after modifying the resulting artwork and text, your content extends beyond the slices ImageReady produces, you can modify the slice shapes. Task 259 will show you how.

# Task 257

## Using ImageReady Tables

### notes

- You can see at a glance if slices have been grouped into a table by looking in the upper right corner of your document window for the table icon. Clicking the table icon with the Slice Select tool will select the table.
- In addition to the document window, you can also see your tables and slices in the Web Content palette. Clicking the table or slice thumbnails will select them.

### caution

- In some instances, you may see a yellow warning icon next to the table name in the Web Content palette. This simply means that your particular slice layout is requiring spacer cells (using `spacer.gif` images) to show the image properly in certain browsers. No need to be alarmed — ImageReady will generate them automatically.

When the World Wide Web first started becoming a public phenomenon in the 1990s, Web page design was a simpler art than it is today. And then somehow, seemingly overnight, some designer changed everything by figuring out how to recreate a visually interesting design by cobbling different graphics together using HTML's table element. Ever since that fateful innovation, Web designers have been producing innovative design that rivals that of some of their print counterparts. And now, with ImageReady CS's improved table support, you, too, can convert beautiful artwork or design into a sophisticated table structure in HTML.

By following the next steps, you'll be on your way to creating some impressive table wizardry with just ImageReady CS. By defining your table cells with ImageReady's Slice tool, you can simplify the table creation process.

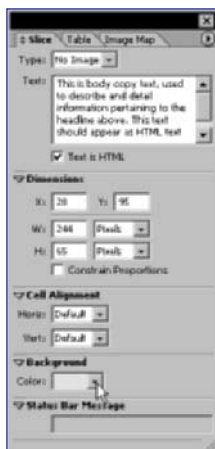
1. Open an existing document containing a Web page design within ImageReady. (If you don't have such a file, download this task's example from the book's Website: [www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless).)
2. Using the Slice tool, draw slices to define the different areas of your design. Figure 257-1 shows a sample design with slices created to define each graphic and text area.



Figure 257-1: A Web page design with slices

3. Using the Slice Select tool, select all the slices in your document. Then, choose **Slices ⇄ Group Slices into Table** to group your slices into a table.
4. Using the Type tool, select text in your document that you wish to appear as HTML text rather than as a graphic. Choose **Edit ⇄ Copy** to store this text in your Clipboard.
5. Using the Slice Select tool, select the slice containing the text that should appear as HTML text instead of as a graphic.

6. Choose Window ⇨ Slice to open the Slice palette.
7. Choose No Image from the Type drop-down menu at the top of the Slice palette to ensure ImageReady CS won't produce a graphic for this slice when saving out Web-ready files, check the Text is HTML checkbox, and choose Edit ⇨ Paste after clicking in the palette's Text field to insert the Clipboard's contents.
8. If the Background section is not open (as shown in Figure 257-2), click on the right-pointing arrow next to the Slice palette's Background header to open the section. Once it's open, click on the Color drop-down menu to select a color to serve as the cell's background color.



**Figure 257-2:** The Slice palette

9. Choose Window ⇨ Table to open the Table palette. You can supply a name for your table in the palette's ID field, as well as define the table's border (how thick a stroke should appear around each cell), cell padding (how large a margin should be used within every table cell), and cell spacing (how large a margin should be used between every table cell) variables.
10. Choose File ⇨ Save Optimized As to save your document as an HTML file and its accompanying Web-ready graphics. Be sure to specify HTML and Images in the Save Optimized As dialog box's Format drop-down menu to ensure ImageReady CS saves everything you'll need to see your content in a Web browser. Then, open the HTML file in your favorite Web browser, such as Apple's Safari or Microsoft's Internet Explorer, to see your handiwork as the rest of the world would see it online.

## Task 257

### tips

- You can resize a selected table via the Dimensions area of the Table palette, or by simply dragging the handles surrounding the table in the document window.
- If either the width or height is specified as a percent, rather than as a pixel size, the exported table will dynamically adjust in size (according to the size of the browser window being used to view it).

### cross-reference

- Task 252 shows how to preview the results of your work in a Web browser to ensure that you have what you want before exporting.

# Task 258

## Slicing an Image into Separate Parts with the Slice Tool

### notes

- Be sure to open a document representing several different elements to gain the benefit of different optimization settings. If you slice up one large photograph, you generally won't see any benefit to the process.
- Press the K key to switch your currently selected tool to the tool most recently selected (most often the Slice tool). Pressing the K key and the Shift key simultaneously will cycle between the Slice tool and the Slice Select tool.

### caution

- Slicing a document results in the creation of multiple files upon using the Save Optimized As command, instead of producing one large image.

A well-designed Web page generally consists of several optimized components, where photographs are saved as JPEGs, graphic artwork is saved as GIFs, and text is produced as HTML text (rather than as a graphic). As many designers mock up the entire Web page in Photoshop before saving the individual graphics, you may find yourself with two very different types of imagery (photographs and graphic artwork) within the same document. Photoshop and ImageReady let you use “slices” to define the boundaries of several graphics within one PSD file.

There are three different types of slices: user-based slices, auto slices, and layer-based slices. User-based slices are those slices you define with the Slice tool (i.e. they are created by the user). Auto slices, on the other hand, are the slices Photoshop or ImageReady must automatically create to form the remainder of the areas outside of a user-based slice; these slices will resize if you adjust a neighboring user-based slice. Layer-based slices, however, are created by the contents of a layer; these slices will resize and reform to fit the height and width of the content contained on the layer.

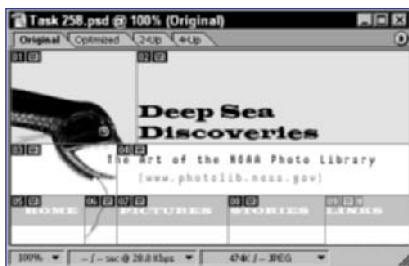
To help you learn how to create user-based slices, the following steps let you define a series of slices.

- In ImageReady, open an image that requires multiple optimization settings for different parts of the document, such as the Web site header shown in Figure 258-1.



Figure 258-1: A Web site header with different elements

2. Select the Slice tool from the third row and second column of the Tools palette.
3. Within your content window, move your mouse cursor to one of the corners of the slice you will be making. Click and hold your mouse button there.
4. While continuing to hold the mouse button down, drag your cursor to the opposite corner of your desired slice. Notice the dotted lines that define your slice area as you move the cursor.
5. Release the mouse button when your cursor arrives at the opposite corner of your intended slice. Once the slice is complete, you will see a series of slice guides intersecting with your slice's corners
6. Repeat this process until each separate element in your document is constrained by a slice, as shown in Figure 258-2.



**Figure 258-2:** Slices surrounding document elements

## Task 258

### *tips*

- If you hold the Shift key while dragging, your slice will conform to a square shape.
- Hold the Option (Mac) or Alt (Windows) key while drawing a slice to draw the slice from its center, rather than from a corner point

### *cross-reference*

- Once a slice's boundaries are defined, you can determine an export and optimization setting for the slice's contents independent of the document's other slices, as discussed in Task 265.

# Task 259

## Identifying Slice Characteristics, Moving, Resizing, and Locking Slices

Once you have a slice defined, you can apply a series of different modifications to it. You can name the slice to determine the filename of its resulting exported image, as well as provide ALT text. Beyond the slice's identity, you can move and resize the slice's boundaries; this is especially useful after you have modified the document's artwork. And, further, in Photoshop, you can lock all slices to prevent any such modifications.

### notes

- Be sure to always include ALT text with your images. ALT text is generally used to describe in plain English what the image is showing. Not only does ALT text help visually impaired readers get an idea of your content, it makes your Web pages easier to be found by search engines.
- Somewhat curiously, ImageReady does not currently allow you to lock slices to prevent editing.

### caution

- Beware when moving a slice. If your slice overlaps another, you can wind up with images that won't piece together in HTML.

1. Open an existing document with slices already drawn.
2. Click within a slice's boundary with the Slice Select tool to select the slice.
3. Choose Window ⇨ Slice to open the Slice palette, as shown in Figure 259-1.

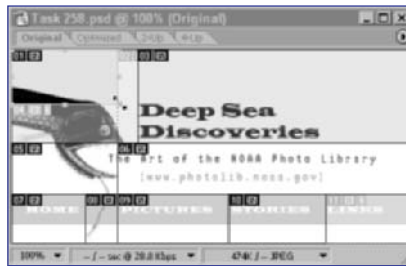


Figure 259-1: The Slice palette

4. Choose Show Options from the Slice palette's fly-out menu.
5. Select the text in the Name field of the Slice palette.
6. Rename the slice to determine the eventual filename of the slice upon exporting.
7. Enter a description of the slice's contents in the ALT field to provide the document's HTML file with alternative text to display while the image is downloading.
8. Drag a slice with the Slice Select tool while clicking and holding within its boundaries to move a slice.

9. Click and drag on one of a slice's side or corner points to resize it, as shown in Figure 259-2. By resizing or moving a slice, ImageReady will do one of two things between your modified slice and its neighboring slices. Either it will adjust the neighboring slices to accommodate for the lack or increase in space (as is the case for neighboring auto slices), or it will require you to resize and move them to fit into position with the just-modified slice (as is the case for neighboring user-based slices).

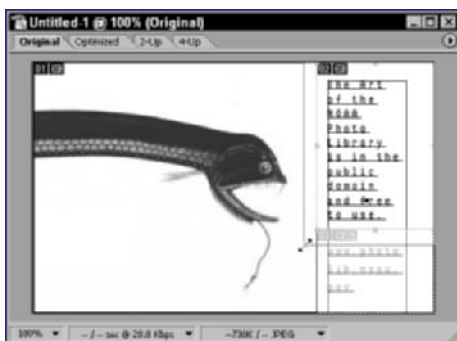


Figure 259-2: Resizing a slice

10. Within Photoshop, you can also choose View ⇄ Lock Slices to prevent any editing to a slice's size, position, or characteristics.

## Task 259

### tips

- Enter text in the Slice palette's Message field to determine what appears in a browser's status bar when a user places her cursor over the image.
- Don't use any spaces or other non-XML-compliant characters for the filename to ensure the name you provide maintains its integrity when used online.

### cross-reference

- Beyond just changing each slice's name, you can also change each one's optimization settings as Task 265 explains.



# Task 260

## Selecting, Saving, Loading, and Deleting Slices

### notes

- The saving and loading slice selection commands will save the most time when used within documents with a large number of slices. If you have less than 7 slices, it may be more expedient to simply select the slice you wish to modify.
- The Load Slice Selection menu may be filled with a number of different selection names. As such, be sure to name your slice selections with titles that you (and others) will quickly understand by referencing the type of content the selections contain.

### caution

- Saving a slice selection will not actually save your slices. As such, once you delete a slice used in a slice selection, trying to load the slice selection will yield an error.

Sometimes you can become mired in slices within a large document. For instance, if you have a Web page template with 15 navigation items, several photographic images, multiple advertisements, and so on, each is likely defined with a slice. You may quickly become tired selecting each of the navigation elements' slices whenever you wish to modify that group of slices. To ease the pain, ImageReady lets you save a slice selection (containing one or many slices) for quick loading later. And when you've grown tired of your slices altogether, you can delete them all and begin anew.

1. Open an existing document with slices already drawn.
2. Select the Slice Select tool from the third row and second column of the Tools palette. (Click and hold on the Slice tool's icon until a small menu is displayed, move your cursor on the Slice Select tool icon, and release your mouse button.)
3. Click within a slice's boundary to select the slice. The boundary lines will change color to show that the slice is selected.
4. Choose Slices ⇨ Save Slice Selection to launch the Save Slice Selection dialog box, as shown in Figure 260-1.



**Figure 260-1:** The Save Slice Selection dialog box

5. Enter a name for your slice in the Selection Name field (such as “My First Slice”), and press the OK button.
6. Choose Select ⇨ Deselect Slices to deselect the slice you just selected (as well as any other slices you may have selected).
7. Choose Slices ⇨ Load Slice Selection ⇨ My First Slice (or whatever you named your slice in Step 5) to reselect the slice selection you saved.
8. Choose Select ⇨ Select All Slices to select all the slices in your document, as shown in Figure 260-2.



**Figure 260-2:** The Select All Slices command

9. Choose Slices ⇨ Delete Slices to clear the slate by removing all slice information from your document.

## Task 260

### tips

- Hold the Shift key while continuing to click within other slices to select multiple slices.
- Choose Create Selection from Slice from the Select menu to take advantage of the slice shapes you've already drawn when making a selection.

### cross-reference

- Task 86 teaches how to save and load selections, as opposed to slices.

# Task 261

## Dividing, Combining, and Duplicating Slices

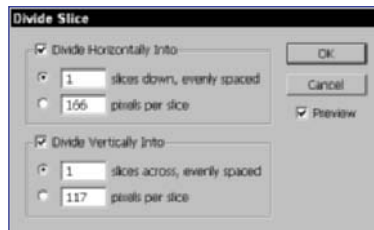
### notes

- When dividing slices, leaving the slice fields set to “1” will result in no change, as dividing one slice by one produces the same result.
- If your slice has a rollover state, and you don’t wish for that state to be duplicated with the new slice, uncheck the Duplicate Rollover States option in the Duplicate Slice dialog box.

As slices are drawn as rectangular shapes, the desire to work with these shapes in a similar fashion to other shapes is only natural. By allowing you to combine adjoining slices together into one larger slice, ImageReady lets you recreate Illustrator’s Union command. On the opposite spectrum of combining slices, the Divide Slice command can split a single slice into a user-defined number of slices. Further, you can take an existing slice and duplicate it for use elsewhere in your document.

With all these slice operations available, you will be able to quickly adjust your slices in many ways. The following steps walk you through some of these basic operations.

1. Open an existing document with slices already drawn.
2. Click within a slice’s boundary with the Slice Select tool to select a slice you wish to divide into multiple slices.
3. Choose Slices ⇨ Divide Slice to launch the Divide Slice command’s dialog box, as shown in Figure 261-1.



**Figure 261-1:** The Divide Slice command’s dialog box

### caution

- You can only divide a slice into as many slices as there are pixels in its dimensions. In other words, if a slice is 150 pixels wide, it can only contain between 1 and 150 slices, widthwise.

# Task 261

4. Enter a number in the first field, such as 2, to determine how many slices across your slice should be cut into, widthwise.
5. Enter a number in the third field, such as 3, to determine how many slices down your slice should be cut into, heightwise.
6. Press the OK button to execute the changes.
7. Using the Slice Select tool while holding the Shift key, select the left-most column of slices that formed a part of your original slice.
8. Choose Slices ⇨ Combine Slices to fuse the slices into one tall slice.
9. Choose Slices ⇨ Duplicate Slice to launch the Duplicate Slice command's dialog box, as shown in Figure 261-2.



**Figure 261-2:** The Duplicate Slice command's dialog box

10. Select where you wish the duplicated slice to appear from the Position drop-down menu, and press the OK button to return to your document where you can now move the duplicate slice to a new location.

## tips

- Choose Divide Slice (or other Slices menu commands) from the Slice palette's fly-out menu.
- Right-click (Windows) or Ctrl-click (Mac) within a slice to choose Duplicate Slice (or other Slices menu commands) from a contextual menu.

## cross-reference

- Not only can you divide a slice into multiple slices, Task 142 shows you how to split a channel into multiple images.

# Task 262

## Specifying Slice Background Color

Whenever you create a transparent image, ImageReady will export the image so that other imagery can show through the transparent “holes.” This can be changed, however, by setting a slice background color. This background color is used to fill behind the contents of the slice so that no part of the image is transparent. To ensure the slice’s contents don’t have “ghosted” edges, be sure to set the slice’s transparency matte color to match the slice background color.

### notes

- By default, the slice background color is set to none, allowing the image to retain its transparency.
- Slice background colors must be set for each individual slice, if desired at all.

### caution

- Slice background colors won’t appear in ImageReady. You must preview or save out your images to see the results of the slice background color.

1. Open an existing document with slices already drawn, as shown in Figure 262-1.



Figure 262-1: A pre-sliced document

2. Select the Slice Select tool from the third row and second column of the Tools palette. (Click and hold on the Slice tool’s icon until a small menu is displayed, move your cursor on the Slice Select tool icon, and release your mouse button.)
3. Click within a slice’s boundary to select the slice. The boundary lines will change color to show that the slice is selected.
4. Choose Window ⇨ Slice to open the Slice palette, shown in Figure 262-2.
5. Click on the Color drop-down menu in the Slice palette’s Background section to open a fly-out color picker.
6. Choose a color from the picker to determine the slice’s background color, as shown in Figure 262-3.
7. Choose File ⇨ Preview In ⇨ Internet Explorer (or whatever browser you have listed in this menu) to preview your document with this new slice background color. Your document should look similar to Figure 262-4.
8. Once your image appears as planned, choose File ⇨ Save Optimized As to export your Web-ready graphics.



Figure 262-2: The Slice palette

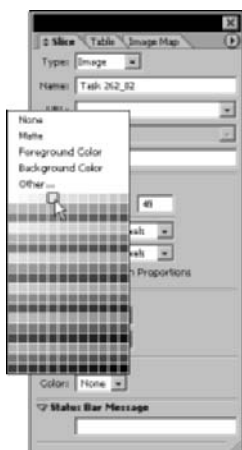


Figure 262-3: The Slice palette's color picker

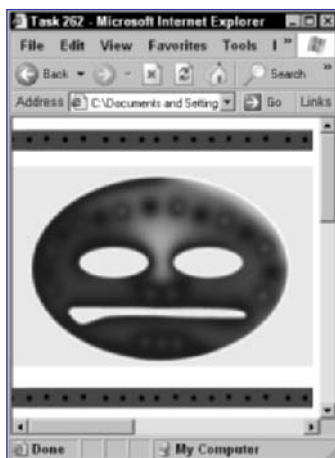


Figure 262-4: A slice with a background color set

## Task 262

### tips

- To save yourself some of the confusion of the slice background color, consider creating a new layer with a solid color filling the contents of a particular layer. By using this trick, you don't need to wait to see what such a change will look like.
- Choose Matte from the color picker to match the slice's background color with the slice's transparency matte color.

### cross-reference

- Task 252 details how to include other browsers in the Preview In menu.

# Task 263

## Assigning URLs to Slices

When specifying a slice's name and ALT text, you can also provide a URL. This is useful if some of the graphics in your PSD document are meant to serve as buttons when used online. By supplying the destination URL in ImageReady, you can ensure that any subsequent exports of imagery and HTML from the program will always produce a working, clickable button. As many Web sites require long-term maintenance, having the hotlink information defined within ImageReady can reduce the amount of times you need to provide the same URL when coding the same page over and over again.

### notes

- URL stands for Uniform Resource Locator, the address of the file or Web site to which your link is pointing.
- You can choose other target options from the Target menu as well as typing in your own destination name within the Target field.

1. Open an existing document with slices already drawn.
2. Select the Slice Select tool from the third row and second column of the Tools palette. (Click and hold on the Slice tool's icon until a small menu is displayed, move your cursor on the Slice Select tool icon, and release your mouse button.)
3. Click within a slice's boundary to select the slice. The boundary lines will change color to show that the slice is selected.
4. Choose Window ⇨ Slice to open the Slice palette, shown in Figure 263-1.



**Figure 263-1:** The Slice palette

### caution

- ImageReady doesn't test your links to make sure they are valid. Be sure to try your links in a browser to be sure they work before publishing your Web page to the Internet.

5. Click within the URL field of the Slice palette.
6. Enter a Web address, such as [www.apennyaday.com](http://www.apennyaday.com), to determine the destination of the slice's button upon clicking within the Web browser.

7. Choose `_blank` from the Target drop-down menu to have your link pop up in a new window rather than the same browser window your content is being viewed within. The other three options, `_self`, `_parent`, and `_top`, operate as follows:
  - a. `_self`: a link will open within the same window as the current document
  - b. `_parent`: a link will open within the same frame as the current document
  - c. `_top`: bypassing any frames on the page, a link will open within the same window as the current document
8. Choose File ⇨ Preview In ⇨ Internet Explorer (or whatever browser you have listed in this menu) to preview your graphics and link.
9. Once you are satisfied with your linked slice, choose File ⇨ Save Optimized As to export your Web-ready graphics and HTML via the Save Optimized As dialog box, shown in Figure 263-2.



**Figure 263-2:** The Save Optimized As dialog box

## Task 263

### *tips*

- Select multiple slices before entering a URL to apply the same link to each slice at the same time.
- To have your slice link accessible via a Web browser, you will need to choose HTML and Images from the Save Optimized As command's dialog box.

### *cross-reference*

- Task 263 will explain how to apply multiple links within one slice by using image maps.



# Task 264

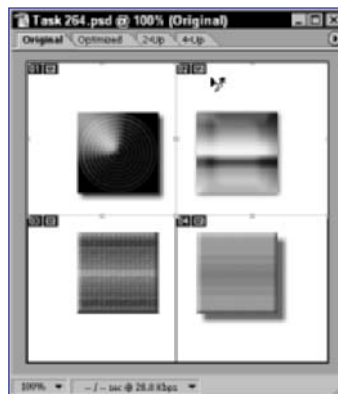
## Linking and Unlinking Slices

If you are designing a Web page, you will likely have several slices that share the same optimization settings, such as each option in a navigation bar. Rather than applying the optimization settings one at a time, you can apply such settings on one slice and have other slices automatically match the changed slice's settings. To do this, ImageReady lets you to link multiple slices together; a modification to any slice in a linked slice group will instantly affect the other slices in the group. And, as automatic updates to several slices may become undesirable at some point, you can unlink the slices as well for individual control again.

### notes

- Click on the Optimized tab near your document's header to see the effects of changing multiple optimization settings at once.
- By choosing Unlink Slice you can selectively remove all connections to a slice without selecting all slices to which it is connected.

- Open an existing document with slices already drawn.
- Select the Slice Select tool from the third row and second column of the Tools palette. (Click and hold on the Slice tool's icon until a small menu is displayed, move your cursor on the Slice Select tool icon, and release your mouse button.)
- Click within a slice's boundary to select the slice. The boundary lines will change color to show that the slice is selected.
- Holding the Shift key, click within a second adjoining slice's boundary to select that slice as well. Your document's slice guidelines will appear similar to Figure 264-1.

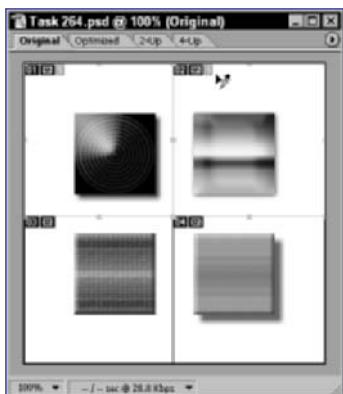


**Figure 264-1:** Slice selection guides

### caution

- Linked slices do not move in tandem with each other. To move or resize multiple slices, simply select all the slices before handling such a transformation

- Choose Slices ⇄ Link Slices to have the two slices adjust optimization settings in tandem. A little link icon will appear in the top-left corner of the linked slices, as shown in Figure 264-2.



**Figure 264-2:** Linked slices feature a link icon

6. To unlink a series of slices, select the linked slices you wish to unlink.
7. Choose Slices ⇨ Unlink Slices (as shown in Figure 264-3) to break the bond between the two slices. From this point on, Optimize palette edits to one slice will not affect the other.



**Figure 264-3:** The Unlink Slices command

## Task 264

### tips

- Choose Link Slices from the contextual menu that pops up when right-clicking within one of the selected slices to find a shortcut to this command.
- Right-click (Windows) or Ctrl-click (Mac) within one of the selected slices to open a contextual menu. Choose Unlink Slices from the pop-up menu to more quickly access this command.

### cross-reference

- Task 156 shows how to link together layers instead of slices.

# Task 265

## Applying Different Optimizations to User Slices

### notes

- Be sure that your slices are drawn so as to take advantage of each file format's strengths. In other words, whenever possible, don't work with slices that contain half a line of text across a flat background and half a photographic image.
- You can also set a slice to be saved as a PNG. For the sake of brevity, this example only uses two formats.

### caution

- If you don't specify a setting for every slice, ImageReady will apply the most recently used Optimize settings at the time of the document's opening to unspecified slices.

The beauty of ImageReady slices lies not in the ability to draw yet another series of boxes within the program, but rather that you can provide each slice with its own optimization settings. For instance, one part of your PSD document may contain a photograph, while the rest of the document will consist of several small graphic buttons. Rather than making the entire document a JPEG to the detriment of the buttons, or making the entire document a GIF to the detriment of the photograph, slices allow you to apply custom optimizations to each of the buttons and the photograph. Once the document is exported, each slice will be saved according to its unique settings.

To try saving a single ImageReady file as multiple optimized graphics, the following steps will walk you through the different optimizations and export process.

- In ImageReady, open an image that requires multiple optimization settings for different parts of the document.
- If it is not already open, choose Window ⇨ Optimize to launch the Optimize palette.
- Using the Slice Select tool, select a slice containing flat, graphical artwork best saved as a GIF.
- Specify GIF under the Format drop-down menu in the Optimize palette, as shown in Figure 265-1.

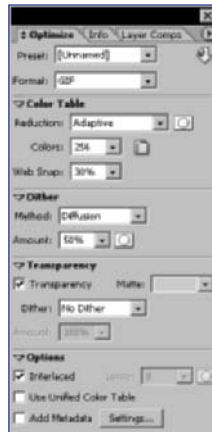


Figure 265-1: Optimizing a GIF

5. Specify a color reduction algorithm, transparency and dithering settings for this slice within the Optimize palette.
6. Again, using the Slice Select tool, select a different slice containing photographic artwork best saved as a JPEG.
7. Specify JPEG under the Format drop-down menu in the Optimize palette.
8. Choose a level of image quality, and specify the remaining JPEG options for this slice's final output, as shown in Figure 265-2, within the Optimize palette.



**Figure 265-2:** Optimizing a JPEG

9. Repeat Steps 3 through 5 or 6 through 8 (depending on your slice's needs) for each slice to determine the file format and optimization settings.
10. Once you are satisfied with your slice settings, choose File ⇨ Save Optimized As to export your Web-ready graphics.

## Task 265

### tips

- Press the Optimized tab near the top of the document to see the results of your optimization settings in real-time within ImageReady.
- By selecting more than one slice at a time, you can quickly apply one set of optimization settings on multiple slices.

### cross-reference

- Task 258 shows how to draw multiple slices within a document.

# Task 266

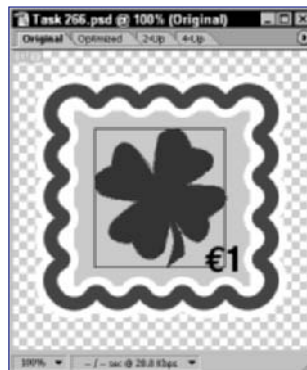
## Creating a Layer-based Image Map

Image maps allow you to make a custom-shaped hotlink within an image, rather than having the entire image act as a button. This can be preferable when you are looking to have multiple buttons within one image. For example, if you had a large map of the Midwest United States saved as a JPEG, you may wish for users to click on Nebraska to get information specific to the state. ImageReady allows you to define an image map's button shape with a layer's contents. Thus, anytime a user puts her mouse within the confines of the layer's contents when in a Web browser, the cursor will become a link pointer and allow the user to go to a specified URL.

### notes

- You can find out more about Nebraska at [www.visitnebraska.org](http://www.visitnebraska.org) or by actually going to visit.
- If you wish for the link to pop up in a new window, select `_blank` from the Target drop-down menu.

1. In ImageReady, open an image with several different layers, each containing a distinct artwork element, such as the image shown in Figure 266-1.



**Figure 266-1:** Sample artwork ready to be image mapped

2. Choose Window ⇨ Image Map to open the Image Map palette.
3. Also, if it is not already open, choose Window ⇨ Layers to open the Layers palette.
4. Select the layer of the artwork element you wish to use as your image map (such as the shamrock artwork in Figure 266-1's example).

### caution

- By default, image map areas are depicted with a partially transparent overlay within the map coordinate lines. This overlay will not appear in the saved map. Go to Edit ⇨ Preferences ⇨ Image maps... and choose Show Lines Only to eliminate the overlay if you wish.

5. Choose Layer ⇨ New Layer Based Image Map Area. Once chosen, the Image Map palette will activate, showing Shape and Name options as available to alter.
6. Rename the image map by selecting and overwriting the default Name field text (“ImageMap\_01”) in the Image Map palette.
7. If your layer is oddly shaped, you can choose a more form-fitting image map shape by selecting Polygon from the Image Map palette’s Shape menu, as shown in Figure 266-2.



**Figure 266-2:** Choosing a different image map shape

8. To further tighten the conformance of the image map to the layer’s artwork, enter a higher value in the Quality field below the Shape drop-down menu.
9. Enter a Web address, such as [www.apennyaday.com](http://www.apennyaday.com), in the URL field to determine the link’s destination.
10. Once you are satisfied with your map, choose File ⇨ Save Optimized As to export your Web-ready graphics.

## Task 266

### tips

- Use the Image Map palette’s fly-out menu to delete a selected image map.
- Keep in mind that the tighter your polygon conforms to the shape of your layer’s object, the larger your HTML document will become. This is because ImageReady will need to save coordinate information for every point along the polygon’s path; the more detailed the polygon, the more coordinate information required for your document.

### cross-reference

- Task 267 shows how to create an image map that you draw with tools.

# Task 267

## notes

- If you choose the Rectangle or Circle Image Map tools, you can specify fixed dimensions (such as width and height or radius) for any subsequently drawn image maps in the tools' Options bar.
- If you wish for the link to open in the same window, select `_self` from the Target drop-down menu.

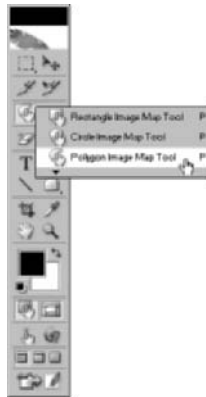
## caution

- By default, image map areas are depicted with a partially transparent overlay within the map coordinate lines. This overlay will not appear in the saved map. Go to `Edit>Preferences>Image maps...` and choose `Show Lines Only` to eliminate the overlay if you wish.

## Creating a Tool-Based Image Map

In not every case will you have a layer shape with which you wish to define your image map. In many cases, you may wish to draw the boundaries of an image map over your existing artwork. While this drawing is invisible to users seeing your work in a Web browser, it allows you some flexibility in determining the shape of your buttons. ImageReady provides rectangular, circular, and polygonal drawing tools to facilitate the drawing of these image map shapes. Because the hotlink areas will be defined with these tools, you can even define an area that has no visual information in it (such as the white space outside of a logo).

1. In ImageReady, open an image with several distinct artwork elements.
2. Choose `Window ⇨ Image Map` to open the Image Map palette.
3. Select the Polygon Image Map tool, as shown in Figure 267-1, from the third row and first column of the Tools palette. (Click and hold on the Rectangle Image Map tool's icon until a small menu is displayed, move your cursor on the Polygon Image Map tool icon, and release your mouse button.)



**Figure 267-1:** The Polygon Image Map tool

4. Click within the document to determine the first point in your image map's upcoming shape.
5. Continue clicking to define the image map's shape.

6. Complete the shape by clicking on the first point or double-clicking to define the last point in the shape. (If the latter option is chosen, ImageReady will complete the shape by drawing a straight line between the first and last point.)
7. Once you have finished drawing, the Image Map palette will activate, showing Shape and Name options as available to alter. Rename the image map by selecting and overwriting the default Name field text (“ImageMap\_01”) in the Image Map palette, as shown in Figure 267-2.



**Figure 267-2:** Renaming an image map

8. Enter a Web address, such as [www.apennyaday.com](http://www.apennyaday.com), in the URL field to determine the link's destination.
9. Choose File ⇨ Preview In ⇨ Internet Explorer (or whatever browser you have listed in this menu) to test your image map before exporting your graphics and HTML.
10. Once you are satisfied with your map, choose File ⇨ Save Optimized As to export your Web-ready graphics and HTML file.

## Task 267

### tips

- Use the Image Map palette's fly-out menu to duplicate a selected image map.
- Keep in mind that the tighter your polygon conforms to the shape of your layer's object, the larger your HTML document will become. This is because ImageReady will need to save coordinate information for every point along the polygon's path; the more detailed the polygon, the more coordinate information required for your document.

### cross-reference

- Task 266 shows how to create an image map based upon a layer's shape.



# Task 268

## Modifying Image Map Settings

Once you've drawn an image map you will need to define its various properties. Every image map has at least two required properties: a name and a destination URL. You can also provide it with target (what window will the destination URL load in) and ALT text information. To apply or edit any of these properties at any given point once an image map is drawn, you can turn to ImageReady's Image Map palette. This palette will allow you to define these properties quickly and endlessly.

### notes

- Use the commands chosen under Edit ⇨ Align Image Maps to control the arrangement and alignment of multiple image maps.
- While entering ALT text for every link and image may seem like a pain, the process is considerably helpful for the visually impaired (whose Web browsers speak ALT text whenever encountering a link or image) and those with slow modem connections (who can read ALT text while waiting for images to download).

### caution

- Be sure not to label your separate image maps with the same name, or bizarre results can occur in a Web browser.

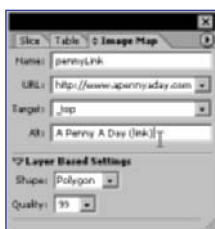
1. In ImageReady, open an image with an existing image map.
2. Choose Window ⇨ Image Map to open the Image Map palette.
3. Select the Image Map Select tool, as shown in Figure 268-1, from the third row and second column of the Tools palette.



Figure 268-1: The Image Map Select tool

4. Click on an existing image map to select the shape. Once you have selected a shape, the Image Map palette will activate.

5. Enter a Web address, such as [www.apennyaday.com](http://www.apennyaday.com), in the URL field to determine the link's destination.
6. Rename the image map by selecting and overwriting the default Name field text ("ImageMap\_01") in the Image Map palette with a new name (such as "USAsateSelector" if you were creating an image map for a graphic of the United States).
7. Choose \_blank from the Target drop-down menu to have your link pop up in a new window rather than the same browser window your content is being viewed within.
8. Enter a description of the image map's link in the ALT field to provide "tool tip" text for capable browsers to display when a cursor is placed over the image map, as shown in Figure 268-2.



**Figure 268-2:** Entering ALT text

9. Once you are satisfied with your map, choose File ⇨ Save Optimized As to export your Web-ready graphics.

## Task 268

### tips

- By holding the Shift key while clicking, you can select more than one image map, allowing you to make the same changes to many maps at once.
- If your document uses frames, you can enter the name of your custom frame in the Target field.

### cross-reference

- If a URL link would be better applied to a slice than an image map, Task 263 explains how to tackle that approach.

# Task 269

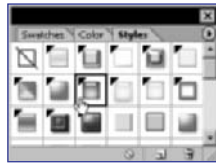
## Creating a Rollover Effect

**D**esigning for the Web is strikingly similar to designing for most other interactive mediums. While it may sound like common knowledge, you will always want to design your buttons so they look like buttons. One means of making buttons appear more like buttons is to create rollover effects. Rollover effects are very common on the Web, wherein a button changes its appearance once the mouse cursor is moved over the button. Using ImageReady's Rollover palette, you can quickly generate rollovers of your own.

### notes

- Keep in mind that for every rollover state you create, another image must be downloaded. If your document/slice is considerably large, the end-user will have to suffer through another download of a similarly large image.
- You can also create a simpler rollover effect by simply turning on another layer, such as an underline or bullet graphic, to accent the image without making a radical visual change to the button.

1. Create a new ImageReady document.
2. Using the Rectangle tool, draw a square in the center of your document to create a button.
3. Within the Styles palette, press the Button-Purple style thumbnail, as shown in Figure 269-1, to apply a quick button effect to your artwork.

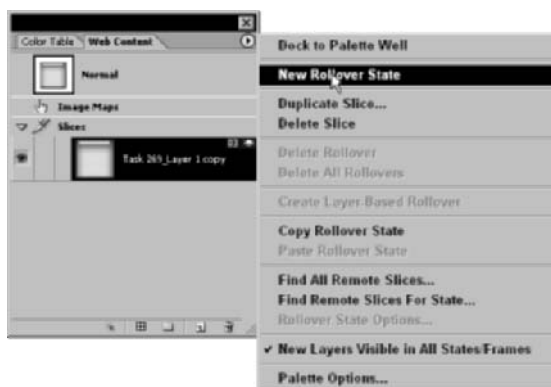


**Figure 269-1:** Applying the Button-Purple style

4. Choose Layers ⇄ Duplicate Layer to create a clone of your button.
5. Within the Styles palette, press the Chrome Button style thumbnail to apply a different button effect to your cloned layer.
6. Hide the cloned layer by disabling the layer's visibility in the Layers palette.
7. Choose Window ⇄ Web Content to open the Web Content palette.
8. Choose New Rollover State from the Web Content palette's fly-out menu to create an alternate rollover state, as shown in Figure 269-2.

### caution

- Be sure to define the new rollover state with alternative content within the same slice. Otherwise, when a user places her mouse over the image, she won't see any change.



**Figure 269-2:** Creating a new rollover state

9. Hide the original layer and reveal the cloned layer by adjusting the visibility of layers in the Layers palette to define the alternate rollover state.
10. Choose File ⇨ Preview In ⇨ Internet Explorer (or whatever browser you have listed in this menu) to preview your rollover effect.

## Task 269

### tips

- After mastering how to create a rollover, play around with creating more complex buttons, involving text and other artwork.
- Rather than selecting a different style, consider altering the existing style (such as changing the Color Overlay color) to provide a subtler rollover effect.

### cross-reference

- Task 270 details how to create secondary rollover effects beyond simple mouseovers.

# Task 270

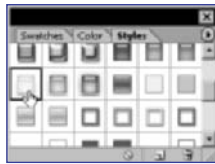
## Creating a Secondary Rollover Effect

**W**hile most rollovers consist of a simple off and on state (that is, the state of the button before it is moused over and its state when the mouse is over it), you can create multiple states for a button. You can create states for when a user presses a button, when the user has clicked a button but has not released it, and even when the user moves the cursor outside of the button. With all of the different button states available, you will be hard-pressed to find one that ImageReady cannot create.

### notes

- You can also create a more complex rollover effect by turning on layers that span several slices to radically change the page's appearance.
- Keep in mind that for every rollover state you create, another image must be downloaded. If your document/slice is considerably large, the end-user will have to suffer through another download of a similarly large image for every rollover state.

1. Open an existing ImageReady document with a rollover effect on a button, such as the document you created in Task 269.
2. Choose Layer ⇨ Duplicate Layer to create a clone of your initial button layer.
3. Press the Button-Shiny style thumbnail in the Styles palette, as shown in Figure 270-1, to apply a metallic button effect to your newly cloned layer.



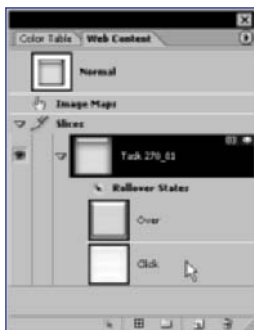
**Figure 270-1:** Applying the Button-Shiny layer style

4. Turn off the visibility of the cloned layer by clicking on the layer's eyeball icon in the Layers palette.
5. Choose Window ⇨ Web Content to open the Web Content palette.
6. Choose New Rollover State from the Web Content palette's fly-out menu to create a second rollover state. By default the second rollover state is created as the Down state (the image shown when a user presses, but doesn't release, the button).

### caution

- Be sure to define the new rollover state with alternative content within the same slice. Otherwise, when a user places her mouse over the image, she won't see any change.

7. Choose Rollover State Options from the Web Content palette's fly-out menu to change the new Down state to a Click state (where the image changes once a button is pressed and released) instead. A Rollover State Options command dialog box will appear.
8. Select the Click option, and press the OK button to confirm the change. You will notice that the "Down state" listing in the Web Content palette switches its name to "Click state," as shown in Figure 270-2.



**Figure 270-2:** The Web Content palette's different states

9. Hide the original layer and reveal the newly cloned layer by adjusting the layer views in the Layers palette to define the Click rollover state.
10. Choose File ⇨ Preview In ⇨ Internet Explorer (or whatever browser you have listed in this menu) to preview your rollover effect.

## Task 270

### tips

- Choose Find All Remote Slices from the Web Content palette's fly-out menu to optimize any rollover dependencies that may have emerged.
- Experiment with the different rollover states to see which ones might be applicable for your Web site.

### cross-reference

- Task 269 walks you through how to create a simple rollover effect.

# Task 271

## Constructing a Simple Animation

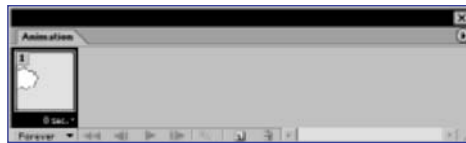
Not only do they handle transparency, GIF graphics can support basic animation. While not as flashy as Macromedia Flash graphics, GIFs can store animations that repeat, have multiple timing sequences, and more. Using ImageReady, you can define animations by using layer placement, opacity, and effects. By creating different animation cells with the Animation palette, you define each point along the animation's timeline.

The following steps will walk you through the animation of a simple sky scene. By animating a cloud as it moves across the document, you can learn how to create animations based upon the varying positions of a layer.

### notes

- Every frame is notated with a number in its top-left corner to designate its cell position.
- ImageReady handles the timing of animations in seconds. To use milliseconds, minutes, or hours, you will need to do the conversion on your own.

1. Create a new 300-pixel square document with a blue background. Using the Brush tool, paint a small white cloud, and then, using the Move tool, position it so that it sits in the far left edge of the document.
2. Specify GIF under the Format drop-down menu in the Optimize palette, as well as any other GIF-related optimization settings.
3. If it is not already open, choose Window ⇨ Animation to launch the Animation palette, as shown in Figure 271-1. As you haven't created an animation yet, there should only be one frame (also known as a "cell") in the Animation palette.



**Figure 271-1:** The Animation palette containing only one frame

4. Choose New Frame from the Animation palette's fly-out menu to create the next frame in the animation sequence. A second cell will appear in the Animation palette.
5. Using the Move tool, move the artwork on the layer you wish to animate to a position 50 pixels to the right of its location.

### caution

- Please note that ImageReady can only animate a layer's position, visibility, opacity and effects.

# Task 271

6. Repeat Steps 4 through 5 several more times until you have a frame featuring your artwork on the far right side.
7. While holding the Shift key, click on each frame in the Animation palette to select all the frames at once. This will allow you to make a global change across the animation.
8. Select 0.5 from the pull-down menu underneath one of the Animation palette's frames to have the animation pause 0.5 seconds on each frame before proceeding to the next, as shown in Figure 271-2.



Figure 271-2: An Animation palette with multiple cells

9. Choose Other from the Animation palette's Looping Options drop-down menu (located in the bottom left corner) to determine how many times the animation will repeat playing itself. Enter 3 (or any other number you wish) in the resulting Set Loop Count dialog box, as shown in Figure 271-3, and press the OK button to confirm the change. Your animation is now ready to be previewed or saved.

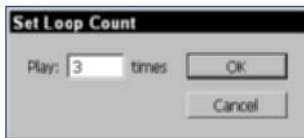


Figure 271-3: The Loop Count dialog box

## tips

- Always position your artwork in the animation's start location before beginning your animation to save editing time.
- You can also preview an animation within ImageReady by pressing the Play button in the Animation palette's bottom strip of little playback buttons.

## cross-reference

- Task 275 shows how to simplify the animation process by using tweening.



# Task 272

## Optimizing and Saving Animation Files

Once you've created an animation, the trick will be to get it outside of ImageReady and into your Web page. By using the Save Optimized As command, you can determine how your graphics are exported for Web use. Before saving, though, you will want to optimize your animation so that the graphic you produce will be as small (in terms of file size) as possible. The smaller the graphic's file size, the quicker users will be able to see your graphics on the Internet.

### notes

- Optimizing an animation will not have any visible effect on your document; rather, the process determines how the animation's data is stored in the final file.
- Name the file "index.html" to be sure the HTML page loads as your Web site's homepage.

1. Open an existing animation in ImageReady.
2. Specify GIF under the file format drop-down menu in the Optimize palette, as well as any other GIF-related optimization settings.
3. If it is not already open, choose Window ⇨ Animation to launch the Animation palette.
4. Choose Optimize Animation from the Animation palette's fly-out menu to launch the Optimize Animation command's dialog box, as shown in Figure 272-1.



**Figure 272-1:** The Optimize Animation command's dialog box

5. With both checkboxes selected, press the OK button in the Optimize Animation command's dialog box. These two options enhance the manner in which ImageReady encodes its GIF information across multiple frames.
6. Choose File ⇨ Save Optimized As to launch the Save Optimized As command's dialog box.
7. Choose HTML and Images from the Format drop-down menu below the filename to save an HTML page alongside your animation image with the necessary code to load the graphic.
8. Enter a name for your HTML file in the Save As field, as shown in Figure 272-2.

### caution

- Remember, the only animated formats that ImageReady has the capability to save are GIF and SWF.



**Figure 272-2:** The Save Optimized As dialog box

9. Navigate to the location, such as your Desktop, where you wish to save your animation and its HTML wrapper file.
10. Press the Save button to save the files to the chosen location.

## Task 272

### *tips*

- Choose Other from the Settings drop-down menu in the Save Optimized As dialog box to further customize how your graphics and HTML are created.
- Refer to this book's Web site ([www.wiley.com/compbooks/10simplestepsorless](http://www.wiley.com/compbooks/10simplestepsorless)) to find links to hosting providers that will let you store your HTML pages and Web graphics online so that others can view them outside of coming over to your house.

### *cross-reference*

- You can make an animation so that it only appears when a user puts her cursor over the image. Task 274 explains how to achieve this effect.

# Task 273

## Editing an Animation Action to Customize It

### notes

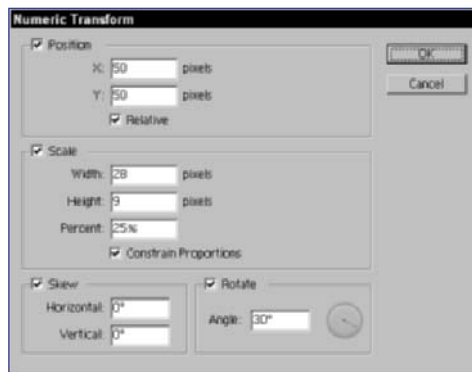
- The Actions palette is by default grouped with the History and Layers palettes. Check to see if the palette is already open but hidden behind one of the other palettes.
- You can also delete commands from the action listing by pressing the little trash can icon at the bottom of the Actions palette after selecting the item.

### caution

- ImageReady actions have a different extension and are not interchangeable with Photoshop actions.

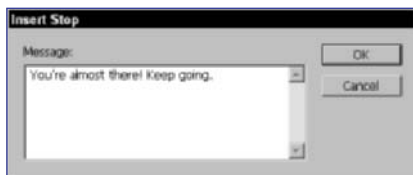
ImageReady comes shipped with a number of actions you can run to create simple animations. While some of these actions may produce animations you wish to use, most may require some editing to achieve the results you want. By modifying an action in ImageReady, you can customize an animation action to produce interesting results. Whether by deleting or inserting commands into the action, you can produce a new action that more closely fits the effect you desire.

1. Choose Window ⇨ Actions in ImageReady to open the Actions palette.
2. Click on the arrow next to the Spinning Zoom In listing in the Actions palette to see each step making up the action. (You may, in fact, wish to create a simple image, such as a button shape, and play the action on it first to see how it was originally designed to operate before you proceed to modify it.)
3. Double-click on the fourth item under Spinning Zoom In, Transform Current Layer, to modify the action's settings.
4. In the newly revealed Numeric Transform dialog box, enter new values for the X, Y, and Scale fields (such as 50, 50, and 25%), as shown in Figure 273-1.



**Figure 273-1:** Modifying the Numeric Transform command

5. Press the OK button to confirm the changes.
6. Repeat Steps 3 through 5 on some of the other Transform Current Layer listings in the action to further modify the group of commands, altering the Skew and Rotate fields as well.
7. Click once on the final item under Spinning Zoom In, Reverse Frames, and select Insert Stop from the Actions palette's fly-out menu to insert a pop-up message with Continue or Stop buttons.
8. Specify the text to appear in the Stop box's text area (shown in Figure 273-2), and press the OK button.



**Figure 273-2:** The Insert Stop dialog box

9. Open an existing document in ImageReady and select a layer with an artwork element on it.
10. Select the Spinning Zoom In listing in the Actions palette again, press the Action palette's play button (pressing the Continue button when your newly added Stop message appears), and then press the Animation palette's play button to watch the bizarre results of your action modification.

## Task 273

### tips

- Choose the Action Options command under the Actions palette's fly-out menu to rename and assign hot keys to an existing action.
- If your edited actions are useful, consider saving the actions to an external file using the Save Actions command under the Actions palette's fly-out menu.

### cross-reference

- Similar to the Insert Stop's ability to put a message in the document, Task 17 shows how to add notes inside your Photoshop document.

# Task 274

## Using an Animation in a Rollover

**R**ollovers can help make buttons seem more responsive by appearing differently according to mouse interaction. Not only can you create any number of different rollover states to achieve this effect, you can also use animation within a rollover state to increase this perceived responsiveness. For example, if you designed a button with the word “Home” on it, an obvious rollover state might be to have the word light up when the cursor appears over the button. By adding animation to that rollover state, though, you could have the text grow larger, too. Using animation in these rollover states, you can create some intriguing interactive effects.

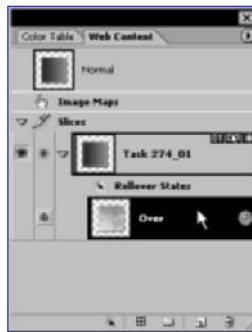
### notes

- You can apply a unique animation to each rollover state in your document, not just the Over state, resulting in multiple animations within one document.
- You can view the frames of your animation within the Web Content palette as well by specifying the Include Animation Frames option in the Web Content Palette Options command, accessible from the palette’s fly-out menu.

### caution

- Rollover state animation is only stored in a single rollover state; should you switch to another rollover state, or the Normal state, all animation frames will seem to disappear.

1. Open an existing document with a rollover effect in ImageReady.
2. Choose Window ⇨ Web Content to open the Web Content palette.
3. Select the Over state within the Web Content palette, as shown in Figure 274-1.



**Figure 274-1:** Selecting the rollover state

4. Choose Window ⇨ Animation to open the Animation palette.
5. Choose New Frame from the Animation palette’s fly-out menu to create the next frame in the animation sequence. A bouncing ball icon will appear in the Web Content palette listing to symbolize that the state contains an animation.
6. Assuming that your artwork layer was already set to 100% Opacity, halve its opacity using the Master Opacity slider in the Layers palette.

7. Repeat Steps 5 through 6 several more times, each time decreasing the opacity of the layer until the final frame of the animation has an opacity of 0.
8. Adjust any remaining Animation palette settings (such as frame timing, looping, and optimization) as needed, such as those shown in Figure 274-2.



**Figure 274-2:** Adjusting Animation palette settings

9. Specify GIF under the file format drop-down menu in the Optimize palette, as well as any other GIF-related optimization settings.
10. Choose File ⇨ Preview In ⇨ Internet Explorer (or whatever browser you have listed in this menu) to preview your animated rollover effect.

## Task 274

### tips

- You can quickly duplicate an animation frame by dragging its Animation palette thumbnail to the palette's New Frame icon.
- Consider a subtle, pulsing animation for your rollover animation state to enhance the idea of a live button without visually screaming at the user with an overly flashy and frenetic animation.

### cross-reference

- In Task 269 you can learn how to create a simple non-animating rollover.

# Task 275

## Creating an Animation Using the Tweening Function

### notes

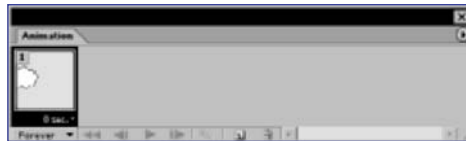
- Aside from layer position, you can also animate the disappearance of the artwork by adjusting the layer's opacity to 0.
- Choosing in which direction to tween can be very important when your chosen frame is sandwiched between other frames. The resulting animation can be very different depending on your selection.

### caution

- Remember that animations can only be saved out of ImageReady in the GIF format. Choosing any other format will result in a still frame from the animation.

If you have worked with Macromedia Flash, you can probably remember the first time you saw the program “tween” two different points in the animation. By taking the start and stop points of an animation and then producing all the points in between (thus creating a smooth transition from point A to B), tweening can significantly reduce the amount of time it takes to produce great animations. The team at Adobe recognized the value of this feature and quickly integrated it into ImageReady. Accessible through the Animation palette, the Tween command is guaranteed to make short work of your animation transitions.

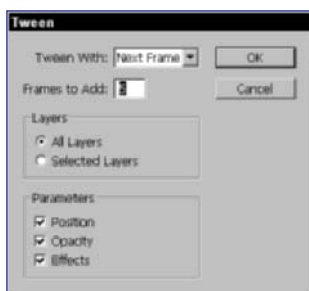
1. Open a document within ImageReady with flat, graphic artwork located on the far left edge of the document.
2. Specify GIF under the file format drop-down menu in the Optimize palette, as well as any other GIF-related optimization settings.
3. If it is not already open, choose Window ⇨ Animation to launch the Animation palette, as shown in Figure 275-1. As you haven't created an animation yet, there should only be one frame (also known as a “cell”) in the Animation palette.



**Figure 275-1:** The Animation palette containing only one frame

4. Choose New Frame from the Animation palette's fly-out menu to create the next frame in the animation sequence. A second cell will appear in the Animation palette.
5. Using the Move tool, move the artwork on the layer you wish to animate to your desired location for the last frame of the animation, such as the far right edge of the document.

6. Choose Tween from the Animation palette's fly-out menu to launch the Tween command's dialog box.
7. Select Previous Frame from the Tween With drop-down menu to determine in which direction ImageReady will create frames.
8. Click in the Frames to Add field, then press the up arrow on your keyboard several times until the field reads 10. This field determines how many frames ImageReady will insert between your currently selected frame and the frame listed in the Tween With selection.
9. Leave the other settings as is, as shown in Figure 275-2, to ensure your animation utilizes all aspects of your document (such as layer position, opacity, and effects), and press the OK button.



**Figure 275-2:** The Tween command's dialog box

10. Press the Animation palette's play button to preview the animation within ImageReady.

## Task 275

### *tips*

- Drag a frame from the Animation palette onto the palette's New Frame button to duplicate the frame.
- To tween only one layer's different states (instead of your entire document), select that layer before choosing the Tween command. Then choose Selected Layer from the Layer options.

### *cross-reference*

- Task 271 walks you through the process of creating an animation step by step, rather than letting the application generate your frames.





## A

- Accented Edges filter, 460
- Acrobat Reader, downloading, 30
- Action Options command, Actions palette, 579
- actions
  - batch processing and, 492–493
  - creating, 486–487
  - customizing, 488–489
  - deleting, 487
  - Droplet creation, 490–491
  - editing, 488–489
  - naming, 487
  - preset, 484–485
  - steps' order, 488
- Actions palette
  - animation, 578–579
  - creating actions, 486–487
  - custom actions, 488–489
  - editing actions, 488–489
  - History palette and, 489
  - Make Web Page, 544
  - preset actions, 484–485
- Add Anchor Point tool, 194–195
- Add to Sample Eyedropper, Color Range selections, 154–155
- Add To Selection option, 158–159
- adjustment layers
  - color fine-tuning and, 350–351
  - creating, 129
  - Invert command, 135
  - masks, 352–353
  - naming, 350
  - preview thumbnails, 352
- adjusting channels, Hue/Saturation dialog box, 350
- Adobe Gamma Control Panel, accessing, 78
- Adobe Gamma Wizard, monitor calibration, 80–81
- Adobe Illustrator, importing paths, 206–207
- Adobe Studio Exchange, scripts and, 506–507
- Advance Blending option, Photomerge, 504–505
- Align Linked command, 334–335

## alignment

- Gradient Overlays, 386–387
- linked layers, 334–335

## alpha channel

- creating and editing, 304–305
- histograms, adding, 102
- image formats, 314

## ALT text

- image maps, 568–569
- images, 550

## anchor points, 194–195

## Angled Strokes filter, 460

## angles, measuring, 53

## animation

- customizing actions, 578–579
- editing actions, 578–579
- exporting layers and, 369
- file saving, 576–577
- files optimization, 576–577
- Flash files, 534–535
- frame duplication, 581
- frame notation, 574–575
- GIF, creating, 574–575
- JPEGs and, 530
- PNG files, 532
- in rollovers, 580–581
- tweening and, 582–583

## Animation palette

- animation creation, 575
- tweening and, 582–583

## annotations

- audio, 34–35
- text, 32–33

## anti-aliasing, edge smoothing, 401

## Arrange commands, 324

## Art History Brush tool, 276–277

## Artistic filter set, 454–455

## Assign Profile option, 98–99

## attributes, layers, 328–329

## audio annotations, 34–35

## Auto Contrast option, 104–105

## Auto Corrections, 106–107

## Auto Levels option, 104

## auto slices, 548–549

## automatic adjustments, image editing, 104–105

## automation

- actions, creating, 486–487
- actions, editing, 486–487

- actions, preset, 484–485
- batch processing, 492–493
- contact sheets, images and, 496–497
- cropping photos, 502–503
- customizing actions, 488–489
- Droplets, 490–491
- naming actions, 487
- Picture Packages, 494–495
- scripts, 506–507
- straightening photos, 502–503
- Web Photo Gallery, 498–499

## B

## background

- extracting objects from, 442–443
- Kaleidoscope Tile option, 539
- tiled, seamless, 538–539
- transparent, converting to flat, 320

## background color

- selecting, 90–91
- slices, 556–557

## Background Eraser tool, boundary control, 242–243

## black and white images, Threshold command, 138–139

## Batch dialog box, 492–493

## batch processing, actions and, 492–493

## Bevel and Emboss effect, 382–383

## Bezier curve, 186

## Bezier path

- shape layers, 396
- Shape tools and, 400–401

## Bitmap mode, converting, 94–95

## black point, setting, 110–111

## Blend Mode

- layer styles, 376
- Overlay layer style, 386
- Smart Blur filter and, 456–457
- Stroke effect and, 392

## blending

- channels, restricting to, 340–341
- layers, 338–339

## Blending Options command, 327, 339

Blending Options dialog box, 340–341  
 Blur tool, 248–249  
 Border Selection command, 168–169  
 bounding boxes, transformations, 359  
 Brightness/Contrast command, 116–117, 254, 256. *See also* Burn tool; Dodge tool  
 browsers, HTML Help System and, 18–19  
 Brush Blend Mode, 238–239  
 Brush Dynamics, setting, 290–291  
 Brush Preset picker, 232–233  
 Brush Strokes filter, 460–461  
 Brush tool, 234–235  
 brushes  
   creating brush sets, 296–297  
   custom brushes, creating, 292–293  
   preset brushes, editing, 294–295  
   removing brushes from brush sets, 297  
   saving brush sets, 296–297  
 Burn tool, 256–257. *See also* Brightness/Contrast command  
 Button-Shiny layer style, 572–573

## C

cache, clearing, 24  
 calibration  
   Macintosh monitors, 78–79  
   Windows monitors, 80–81  
 canvas area, 212–213  
 Canvas Size command, 212–213  
 chain link button, shape options, 399  
 Channel Mixer, creating color effects, 316–317  
 channels  
   adjusting, Levels option, 108–109  
   adjusting, Hue/Saturation dialog box and, 350  
   alpha channel, creating and editing, 304–305  
   alpha channel, image formats, 314  
   Channel Mixer, color effects, creating, 316–317  
   color channels, 6, 300–303

  converting selection to, 306–307  
   grayscale, layer masks and, 342  
   histograms, adding to, 102  
   masks, storing in, 312–313  
   Posterize mode and, 140  
   restricting blending to, 340–341  
   Save Selection Dialog Box, channel options, using, 314–315  
   saving selection into, 306–307  
   spot channels, spot color and, 524–525  
   texture channel, specialized lighting effect, applying, 474–475  
 Channels palette  
   color balancing, 114–115  
   spot color, 524–525  
 Check Spelling command, 422–423  
 checkerboard grid (transparency), 8–9  
 Choke value, shadows and, 377  
 Clear command, selections, 177  
 Clear History option, 64  
 clip value, shadows and highlights, 107  
 clipboard, purging, 178  
 clipping groups, layers, 410–411  
 Clipping path, Work Path type as, 434–435  
 Clone Stamp tool, 266–267. *See also* Healing Brush tool  
 cloning, Healing Brush tool, 260–261  
 cloud effects, 470–471  
 CMYK color, Paste command and, 320  
 collages, layers, 358–359  
 color  
   adjustment layers and, 350–351  
   Bevel and Emboss effect, 382  
   channels, 6  
   Colorize command, 119  
   Curves command, 112–113  
   Custom Shape tool and, 402  
   drop shadow, 374  
   foreground color, setting, 237  
   GIFs and, 528–529  
   Gradient Map command, 128–129

  guides and grid, selecting, 12–13  
   Hue/Saturation command, 118–119  
   Hue/Saturation sliders, 120–121  
   inner glows, 380–381  
   inner shadows, 376  
   Invert command, 134–135  
   layer organization, 322–323  
   modifications, Variations command, 143  
   outer glows, 378  
   out-of-gamut, 518–519  
   printing and, 514–515  
   process, modifying, 126–127  
   proofing, 96–97  
   ranges, Magic Eraser tool and, 244–245  
   Replace Color command, 124–125  
   replacing, 236–237  
   restricting, 140–141  
   sampling, Eyedropper tool, 90–91  
   Satin effect, 384–385  
   saturation, 258–259  
   selecting, 82–83  
   selections based on, 152–153  
   settings management, 76–77  
   shapes, 397  
   slices, 13, 556–557  
   solid color gradient fill layers, 346–347  
   spot color, spot channels and, 524–525  
   Stroke effect, 392  
   Swatch palette, 86–89  
   transparency grid, setting, 9  
   Web safe, 83  
 Color Balance adjustment layer, 350  
 Color balance command, 114–115  
 color banding, reducing, 129  
 color blending, gradient blends and, 129  
 color channels  
   CYMK image and, 300  
   RGB image and, 300  
   splitting into individual images, 302–303  
 Color Management Policies, 77  
 color markers, 92

color matching, 122–123  
 color model, 93  
 color modes, 94–95  
 Color Overlay layer style, 386–387  
 Color palette, 84–85  
 color palettes, exchanging among images, 122–123  
 Color Picker, 82–83  
 color profiles, 98–99  
 Color Range command, 154–155  
 Color Replacement tool, 236–237  
 Color Sampler tool, 92–93  
 color sliders, 84  
 color space, EXIF sRGB tag, 3  
 combining slices, 554–555  
 comments, Layer Comps and, 366  
 compatibility  
   File Saving Options, 3  
   PSD file format, 38–39  
   saving images, 36–37  
 composite layer, verifying editing, 127  
 comps. *See* Layer Comps  
 Concavity, arrowheads, 407  
 contact sheets, 496–497  
 context menu  
   Load Selection command, 180  
   Transform Selection command, 173  
 Contract Selection command, 171  
 contrast  
   adjusting, 116–117  
   Auto Contrast options, 106–107  
 Convert Point tool, 196–197  
 Copy Color as HTML, 85  
 copyright laws, 358–359  
 Create Droplet dialog box, 490–491  
 Crop tool, 218–219  
 cropping  
   automation, 502–503  
   selections, 174–175  
 Crosshatch filter, 460  
 Curves adjustment layer, 350  
 Curves command, 112–113  
 Custom Shape tool, 402–403  
 Custom Shapes  
   creating, 404–405  
   loading, 404–405  
   saving, 404–405  
 CYMK image, color channels and, 300

## D

Dark Strokes filter, 460  
 Defringe command, 356–357  
 Delete Anchor Point tool, 194–195  
 Delete Layer command, 337  
 Density slider, Photo Filter, 131  
 deselecting selections, 176  
 dialog boxes  
   Batch, 492–493  
   Blending Options, 340–341  
   Create Droplet, 490–491  
   Divide Slice, 554  
   Duotone Options, 520–521  
   Duplicate Slice, 554  
   Export Layers to Files, 368–369  
   Gradient Fill, 346–347  
   Halftone Screens, 523  
   Hue/Saturation, 350–351  
   Layer Comp Options, 366–367  
   Layer Comps to Files, 367  
   Layer Properties, 322–323  
   Layer Style, 374–375  
   New Layer Set, 332–333  
   Numeric Transform, 578–579  
   Optimize Animation, 576–577  
   Page Setup, 510–511  
   Pattern Fill, 348–349  
   Photomerge, 504–505  
   Picture Package, 494–495  
   Print with Preview, 512–513  
   Save Optimized As, 559  
   Save Selection Dialog Box, 314–315  
   Save Slice Selection, 552–553  
   Set Frame Delay, 575  
   Tile Maker, 538–539  
   Web Photo Gallery, 498–499  
 Diffusion Dither, 6  
 digital cameras, importing images, 28–29  
 Direct Selection tool  
   Bezier path, shape layers, 396  
   path components, selecting, 192–193  
 displacement map  
   creating, 466–467  
   distorting an image with, 466–467  
 Display & Cursors, preferences, 6–7  
 Display Calibrator Assistant, 78–79  
 Distort command, 224–225

distortion, collages and, 359  
 Distribute Linked command, 334–335  
 distribution, linked layers, 334–335  
 Divide Slice dialog box, 554  
 dividing slices, 554–555  
 documents, moving layers between, 354–355  
 Dodge tool, 254–255. *See also* Brightness/Contrast command  
 drag and drop, layers, between documents, 354–355  
 drawing, 234–235  
 drop shadows, 374–375  
 Droplets, 490–491  
 Duotone mode, converting, 94–95  
 Duotone Options dialog box, 520–521  
 duotones, printing, 520–521  
 Duplicate command, 66–67  
 Duplicate Layer command, 324  
 Duplicate Layer dialog box, 355  
 Duplicate Layer Set command, 337  
 Duplicate Slice dialog box, 554  
 duplication  
   animation frames, 581  
   layers, 324–325  
   slices, 554–555  
 Dynamic Color Sliders, 84

## E

edge mask, creating using the Distort filter, 464–465  
 edges, Defringe command, 356  
 editing  
   duplicating images, 66–67  
   grids and, 56–57  
   guides and, 58–59  
   histograms and, 102–103  
   History Log, enabling, 4–5  
   images, automatic adjustments, 104–105  
   images, Curves command, 112–113  
   images, Levels option, 108–109  
   images, Marquee tool, 146–147  
   images, Variations command, 142–143  
 effects. *See also* layer styles  
   Bevel and Emboss effect, 382–383  
   Color Overlay, 386–387  
   Gradient Overlay, 387–388

effects (*continued*)

- Inner Glow, 380–381
- Inner Shadow, 376–377
- Outer Glow, 378–379
- Pattern Overlay, 390–391
- Rollover, 570–571
- Satin, 384–385
- Stroke, 392–393
- Elliptical Marquee tool, 146–147
- Equalize command, 136–137
- Erase to History tool, erasing to a History State, 278–279
- Eraser tool, 240–241
- EXIF sRGB tag, ignoring, 3
- Expand Selection command, 171
- Export Layers to Files dialog box, 368–369
- export operations
  - layers as files, 368–369
  - to SWF (Flash), 534–535
- Eyedropper tool
  - compared to Color Sampler tool, 92
  - measuring with, 52
  - replacing color, 125
  - sampling color, 90–91
- F**
  - Fade command, filter effects and, 478–479
  - feathering selection edges, 166–167
    - borders, 168
    - cropping selections, 174–175
  - Magic Wand tool, 152–153
  - Magnetic Lasso tool, 151
  - Marquee tools, 147, 149
  - mixing hard with soft edges, 158
  - Transform Selection command and, 172
  - File Browser
    - file management, 26–27
    - images, searching for, 27
    - thumbnails, organizing, 24–25
    - viewing images, 22–23
  - file extensions
    - File Saving Options, 2–3
    - platform compatibility and, 3
  - file formats
    - Large Document Format, file size, 2
    - PDF, importing, 30–31
    - previews and, 536–537
    - PSD, advantages, 38–39
    - RAW, importing, 28–29
    - TIFF, size limitations, 2
  - file handling preferences, 2–3
  - file management, File Browser, 26–27
  - File Saving Options, 2
  - file size
    - file formats, 2
    - History Log and, 4
    - saving selections and, 181
  - files
    - exporting layers as, 368–369
    - lossy file format, 530–531
    - size, color number, 529
  - Fill Layer command, 346–347
  - fill layers, 346–347
  - Fill tool, 280–281
  - fills, layer opacity and, 326–327
  - filter effects, Fade command and, 478–479
  - Filter Gallery, filter effects, 452–453
  - filters
    - Accented Edges, 460
    - additional plug-ins directory, 480–481
    - Angled Strokes, 460
    - Artistic filter set, 454–455
    - Brush Strokes, 460–461
    - Crosshatch, 460
    - Dark Strokes, 460
    - Distort, 464–465
    - Extract, 442–443
    - Fade command and, 478–479
    - Filter Gallery, 452–453
    - Glass, 462–463
    - Ink Outlines, 460
    - Lighting Effects, 474–475
    - Liquify, 446–447
    - Noise, 468–469
    - Pattern Maker, 450–451
    - Photo Filter command, 130–131
    - Plaster, 476–477
    - Radial Blur, 458–459
    - Smart Blur, 456–457
    - Spatter, 460
    - Sprayed Strokes, 460
    - Sumi-e, 460
  - Find and Replace Text command, 422–423
  - fingerpainting effect, 252
  - Fixed Aspect Ratio, selections, 147

- Fixed Size (selections), 147
- Flash
  - exporting to, 534–535
  - transparency, 534–535
- flat backgrounds, converting from transparent, 320
- flattening, layers, 364–365
- flip commands, 214–215
- floating palettes, 48
- foreground color, selecting, 90–91
- frames
  - Border Selection command, 168–169
  - notation, animation, 574–575
  - Stroke command, 162–163
- framing, Distort filter, 464–465
- freeform path, creating, 188–189
- Freeform pen tool, 188
- freeform selections, Lasso tools, 148–149
- full screen mode, selecting, 43
- Fuzziness slider, Color Range selections, 155

**G**

- gamma, adjusting, 78–79
- gamut (color), 518–519
- General preferences
  - Dynamic Color Sliders, 84
  - History palette states, 64
- Geometry options, Shape tools, 398–399
- GIF (Graphic Interchange Format) images
  - animation, creating, 574–575
  - optimization, Web use, 528–529
  - transparency, 528
  - Variations command and, 142
- Glass filter, 462–463
- Gradient Editor
  - custom gradient, creating, 284–285
  - stops, 284
- Gradient Fill dialog box, 346–347
- gradient fill layers, 346–347
- Gradient Map command, 128–129
- Gradient Overlay layer style, 387–388
- Gradient Picker, 346–347, 389
- Gradient Picker palette, 347
- Gradient tool
  - color gradient, applying, 282–283
  - document types, 282

- gradients
  - color gradient, applying, 282–283
  - custom gradient, creating, 284–285
  - Gradient Editor, 284–285
  - introduction, 282–285
  - inverting, 347
  - layer masks, 344–345
  - library of gradients, 286–287
  - styles, 347
- gray point, setting, 111
- grayscale channels
  - gradient masks, 344–345
  - layer masks, 342
- grayscale images
  - colorizing, 119
  - Paste command and, 320
  - posterizing, 141
- Grayscale mode
  - converting, 94–95
  - Posterize mode and, 140
- grid
  - Curves dialog box, 113
  - precision image editing, 56–57
  - settings, 12–13
  - Snap To command, 60–61
  - transparency, 8–9
- guides
  - editing images, 58–59
  - preferences, 10–11
  - settings, 12–13
  - Snap To command, 60–61
- H**
  - Halftone Screens dialog box, 523
  - halftones, converting images to, 522–523
  - halos, deleting, 356–357
  - Hand tool, 51
  - Healing Brush tool, 260–263. *See also* Clone Stamp tool
  - Help System, navigating, 18–19
  - Hide All layer masks
    - adding, 342–343
    - editing, 342–343
  - hiding/showing
    - palettes, 48
    - rulers, 54
  - high-contrast objects, 150–151
  - highlights
    - adjusting manually, 108–109
    - clip values, setting, 107
  - Histogram palette, 47, 102–103
  - histograms
    - displaying, 17
    - image editing and, 102–103
    - Threshold dialog box, 138
  - History Brush tool
    - painting to a history state, 272–273
    - snapshots, creating, 274–275
  - History Log, 4–5
  - History palette
    - Actions palette and, 489
    - overview, 64–65
  - HTML Help System, navigating, 18–19
  - HTML (Hypertext Markup Language), Output settings and, 538
  - hue, adjusting, 118–119
  - Hue/Saturation command, 118–119, 258. *See also* Sponge tool
  - Hue/Saturation dialog box, 350–351
  - Hue/Saturation sliders, 120–121
- I**
  - ICC profiles, exporting layers and, 369
  - image cache, 16–17
  - image layers, converting from layer styles, 394–395
  - Image Map palette
    - image map settings, 568–569
    - layer-based image maps, 564–565
    - tool-based image maps, 566–567
  - Image Map Select tool, 568–569
  - image maps
    - ALT text, 568–569
    - layer-based, 564–565
    - properties, 568–569
    - settings, 568–569
    - tool-based, 566–567
  - Image Size command, 210–211
  - Image view, changing to Selection view, 125
  - ImageReady
    - animation timing, 574–575
    - grids and, 56
    - object-based user interface, 542–543
    - printing, 510–511
  - tables, 546–547
  - transparent GIFs, 528
  - tweening and, 582–583
- images
  - ALT text, 550
  - artistic style, adding, 276–277
  - automatic adjustments, 104–105
  - blurring, 248–249
  - burning (shading), 256–257
  - canvas area, increasing and decreasing, 212–213
  - cloud effects, generating and manipulating, 470–471
  - color gradient, applying, 282–283, 283
  - color palettes, exchanging among images, 122–123
  - contact sheets, 496–497
  - converting a selection to a channel, 306–307
  - copying and pasting selections into, 178–179
  - creating, preferences, 20–21
  - cropping, 218–219
  - Curves command, 112–113
  - dodging (highlighting), 254–255
  - duplicating, 66–67
  - erasing, 240–241
  - flipping vertically and horizontally, 214–215
  - halftone, converting to, 522–523
  - histograms and, 102–103
  - History State, 274–275, 278–279
  - image area, 222–225
  - importing, digital cameras, 28–29
  - isolating image areas, Quick Mask Mode, 308–309
  - Levels option, 108–109
  - Lighting Effects, applying, 472–473
  - Liquify command, contorting images, 444–445
  - Marquee tool, 146–147
  - notes, adding, 32–33
  - one-point perspective, applying, 226–227
  - painting with a pattern, Pattern Stamp tool, 268–269
  - patterns, creating and defining, 288–289

images (*continued*)

- preset shapes, 402–403
- repairing, Patch tool, 264–265
- resizing and resampling, Image Size command, 210–211
- rollovers, 570–571
- rotating, 216–217
- scaling, 222–223
- sharpening, 250–251
- sizing, dynamically, 47
- skewing and distorting corners, 224–225
- Slice tool, 548–549
- smudging, 252–253
- text, inserting, 414–415
- transferring part of an image, Clone Stamp tool, 266–267
- trimming specified outer image areas, 220–221
- turning, 214
- Variations command, 142–143
- viewing, File Browser, 22–23
- zooming, 50–51

## importing

- EXIF sRGB tag, ignoring, 3
- images, digital cameras, 28–29
- PDF files, 30–31

- Index Color mode, converting, 94–95

- Info palette, 46–47

- Ink Outlines filter, 460

- Inner Glow effect, 380–381

- Inner Shadow effect, 376–377

- input levels, adjusting, 108–109

- interface, ImageReady, 542–543

- Intersect With Selection option, selecting selections, 160–161

- Invert command, color value inversion, 134–135

- inverting selections, 164–165

**J**

- JavaScript, 507

- JPEG (Joint Picture Experts

- Group) files

- animation and, 530

- lossy file format, 530–531

- optimization, Web use, 530–531

**K**

- Kaleidoscope Tile option, 539

- keyboard directional keys, selection manipulation, 157

## keyboard shortcuts

- Color Settings dialog box, 77
- creating and editing, 44–45
- feathering selection edges, 167
- File Browser, 23
- gridlines, locking, 59
- Intersect With Selection option, 161
- inverting selections, 165
- reselecting selections, 176
- Undo and Redo commands, 63

## knockouts

- arrowhead lines, 406
- components, 360–361
- Defringe command and, 356–357
- drop shadows and, 375

**L**

- Lab Color mode, converting, 94–95

- Large Document Format, file size, 2

- Lasso tool, freeform selections, 148–149

- Layer Comp Options dialog box, 366–367

- Layer Comps, 366–367

- Layer Comps palette, 366–367

- layer effects, flattening all, 395

## layer masks

- adjustment layers, 352–353
- discarding, 342
- erasing, 240
- gradient, 344–345
- Hide All, 342–343
- moving independent of layer content, 345
- precision, 343, 345
- Reveal All, 342–343
- vector layer masks, 408–409

- Layer Properties command, 323

- Layer Properties dialog box, 322–323

## Layer Sets

- blend modes, 339
- deleting, 337
- file folder comparison, 323
- linking, 330–331
- organization and, 332–333
- stacking order, changing, 336–337

- Layer Style dialog box, 374–375

layer styles. *See also* effects

- Bevel and Emboss, 382–383
- Button-Shiny, 572–573
- Color Overlay, 386–387
- converting to image layers, 394–395
- custom shapes and, 403
- drop shadow, 374–375
- Gradient Overlay, 387–388
- Inner Glow, 380–381
- Inner Shadow, 376–377
- linked layers, 330–331
- Outer Glow, 378–379
- Pattern Overlay, 390–391
- Preset, 372–373
- removing from layers, 373
- Satin, 384–385
- Stroke, 392–393
- Web element design, 540–541

- layer-based image maps, 564–565

- layer-based slices, 548–549

## layers

- Adjustment, 129
- adjustment layers, color fine-tuning and, 350–351
- adjustment layers, masks and, 352–353
- Arrange commands, 324
- attributes, 328–329
- blending, 338–339
- clipping groups, 410–411
- collages and, 358–359
- color coding, 322–323
- color markers and, 92
- composite, verifying editing, 127
- creating, 320
- cropping selections and, 174–175
- duplicating, 324–325
- erasing, 240–241
- exporting as files, 368–369
- fills, gradient, 346–347
- fills, opacity, 326–327
- fills, solid color, 346–347
- flattening, 364–365
- introduction, 320
- knockouts, 360–361
- limiting number, 320
- linking, 330–331
- linking, alignment, 334–335
- linking, distributing, 334–335
- locking, 328–329



- merging, 362–363
- moving, 324–325
- moving, to other documents, 354–355
- naming, 321, 322–323
- opacity, 326–327
- ordering, 324
- pattern fill, patterned layers and, 348–349
- patterns, 348–349
- rasterizing, 364–365
- selecting, 324–325
- selection tools and, 153
- stacking order, changing, 336–337
- styles, removing, 373
- TIFF files, compatibility considerations, 3
- Layers palette
  - blend modes, 338–339
  - layer creation, 320
  - Layer mask thumbnails, 342
  - layer order, 336–337
  - lock icon, 328
  - opening, 320
  - selection manipulation, 175
- Levels adjustment layer, 350
- Levels option
  - black and white points, setting, 110–111
  - tone, setting, 108–109
- libraries, color, 88–89
- library of gradients, saving and loading, 286–287
- Lighting Effects filter
  - applying, 472–473
  - specialized lighting effect, applying, 474–475
- lightness, 118–119
- Line tool, arrowhead lines and, 406–407
- lines
  - drawing, transformations, 406
  - drawing, weight, 406
  - guide and grid, style, 12–13
- links
  - layers, 330–331
  - layers, alignment, 334–335
  - layers, distributing, 334–335
  - slices, 560–561
- Liquify command
  - contorting images, 444–445
  - Liquify Mesh, creating and saving, 448–449
- Liquify filter, functions
  - Freeze function, 446–447
  - Thaw function, 446–447
- Liquify Mesh, creating and saving, 448–449
- Load Slice Selection menu, 552
- Lock Position button, layer locking and, 328
- locking
  - layers, 328–329
  - slices, 550–551
- Looping Options, Animation palette, 575
- lossy file formats, 530–531
- M**
  - magazine clippings, 358–359
  - Magic Eraser tool, 244–245
  - Magic Wand tool
    - introduction, 244
    - inverting selections, 164
    - selections based on color, 152–153
  - Magnetic Lasso tool, high-contrast objects, 150–151
  - Magnetic Pen tool, tracing paths around an object, 190–191
  - Make Ramp Web Safe, 85
  - Make Web Page action, 544
  - Marquee tool
    - Equalize command, 137
    - histograms and, 102
    - making selections, 146–147
    - Posterize command, 141
    - Threshold command, 139
  - masks. *See* layer masks
  - Match Color command, 122–123
  - Matting commands, 356–357
  - Measurement tool, 52–53
  - measurement units
    - guides, 58
    - selecting, 10–11
  - memory
    - cache, clearing, 24
    - image cache, preferences, 16–17
    - scratch disks, 15
    - usage settings, 16
  - Memory & Image Cache, preferences, 16–17
  - Merge commands, layers and, 362–363
  - merges, layers, 362–363
  - messages, Slice palette, 551
  - Mode option, 94–95
- monitor calibration
  - Macintosh, 78–79
  - Windows, 80–81
- mouse buttons, rollovers and, 572–573
- move operations
  - layers, 324–325
  - layers between documents, 354–355
  - resolution and, 354–355
  - selection marquee, 156–157
  - slices, 550–551
- Multichannel mode, 94–95
- N**
  - naming
    - actions, 487
    - adjustment layers, 350
    - colors, 87
    - files, File Browser, 26–27
    - layers, 321, 322–323
  - Navigator palette, 46
  - negatives, Invert command, 134–135
  - New Layer Set dialog box, 332–333
  - noise, inner glows, 381
  - Noise filter, patterns, creating, 468–469
  - notes, adding to images, 32–33
  - Numeric Transform dialog box, 578–579
- O**
  - object-based user interface, ImageReady, 542–543
  - objects, extracting from background, 442–443
  - Ofoto web site, 498
  - one-point perspective, applying to images, 226–227
  - opacity
    - Blending Options command and, 327
    - Eraser tool *versus* Layer opacity, 327
    - fills, layers and, 326–327
    - layers, 326–327
  - optimization. *See also* performance
    - animation files, 576–577
    - GIFs, Web use, 528–529
    - JPEGs, Web use, 530–531
    - PNG files, Web use, 532–533
    - Save for Web option, 36–37
    - user-based slices, 562–563



Optimize Animation dialog box, 576–577

Optimize palette  
options, 528

slices, 562–563

options bar, 43

order, layers, 324, 336–337

organization

layer naming, 322–323

layer sets, 332–333

Other Cursors option, 7

Out Glow effect, 378–379

out-of-gamut color, 518–519

Output settings, HTML with  
images, 538

overlapping slices, 550

overlays

Color Overlay layer style,  
386–387

Gradient Overlay layer style,  
386–387

Pattern Overlay layer style,  
390–391

## P

Page Setup dialog box, printer  
options, 510–511

Paint Bucket tool, 246–247. *See also*

Fill Command

paintbrush

adjusting brushes, 233

Brush Dynamics, setting,  
290–291

Brush Preset picker, 232–233

choosing brushes, 232–233

creating brush sets, 296–297

custom brushes, creating,  
292–293

preset brush, editing, 294–295

removing brushes from brush  
sets, 297

resetting brushes, 233

resizing brushes, 233

saving brush sets, 296–297

Paintbrush tool, 163

painting, 234–235, 246–247

Painting Cursors, 7

Palette Well, 48–49

palettes

Animation, 575

arranging, 72–73

Channels, 114

Color, 84–85

floating, 48

Gradient Picker, 347

Histogram, 46–47

History, 64–65

Image Map, 564–565

Info, 46–47

Layer Comps, 366–367

Navigator, 46

Optimize, 528

Palette Well, 48–49

Paths, 401

Pattern Picker, 348–349

Slice, 550–551

Styles, 372–373

Swatch, 86–89

Tool Presets, 68–69

Web Content, 580–581

panoramas, Photomerge and,  
504–505

Paragraph Text box, creating,  
424–425

paragraph type (text boundary box),  
managing and transforming,  
424–425

\_parent: option, Target menu, 559

Patch tool, 264–265

paths

adding anchor points, 194–195

Adobe Illustrator, exporting to,  
206–207

angles, drawing, 184

Clipping path, Work path type  
as, 434–435

components, aligning and  
distributing, 198–199

components, selecting, 192–193

converting from a selection,  
202–203

converting to a selection,  
202–203

deleting, 204–205

deleting anchor points, 194–195

duplicating, 204–205

filling and stroking, 200–201

freeform path, creating,  
188–189

Path tool, 192–193

pen tool, 184–185

reshaping, adding and deleting  
anchor points, 194–195

saving, 204–205

Shape tools and, 400–401

shapes as path data, 400–401

text, inserting within or onto,  
428–429

tracing around an object,  
Magnetic Pen tool, 190–191

work path, creating, 184–185

Work path type, Clipping path,  
as, 434–435

Paths palette, 401

Paths shape tools, 401

Pattern Fill dialog box, 348–349

pattern fill layers, patterned layers  
and, 348–349

Pattern Maker filter, 450–451

Pattern Overlay layer style,  
390–391

Pattern picker, Pattern Overlay  
layer style and, 391

Pattern Picker palette, 348–349

Pattern Stamp tool, painting with a  
pattern, 268–269

patterns

creating, Pattern Maker filter,  
450–451

creating and defining, 288–289

movable, 349

Noise filter, creating with,  
468–469

Pattern Overlay layer style,  
390–391

resolution and, 348

PDF files, importing, 30–31

Pen tool

Bezier curve, 186

curves, drawing, 186–187

drawing paths with angles, 184

introduction, 163

work path, creating, 184–185

Pencil tool, 234–235

performance. *See also* optimization  
Help System, speeding  
searches, 19

screen redraw, 16

Perspective command, 226–227

Photo Corners, Actions

palette, 485

Photo Filter command, 130–131

Photomerge, panoramas and,  
504–505

Picture Packages, 494–495

Pixel Aspect Ratios

creating, 228

video format, 228–229

pixel doubling, 6

Plaster filter, 476–477

Plug-ins & Scratch Disk, 14–15

plug-ins directory, 480–481

PNG-8 file format, 534–535

PNG files, optimization for Web  
use, 532–533

- Polygonal Lasso tool, freeform selections, 148–149
  - positioning printing, 513
  - Posterize command, 140–141
  - precise cursor, enabling, 7
  - preferences
    - Display & Cursors, 6–7
    - File Browser, 23
    - file handling, 2–3
    - Guides, Grid & Slices, 12–13
    - History Log, 4–5
    - Memory & Image Cache, 16–17
    - new images, 20–21
    - Plug-ins & Scratch Disk, 14–15
    - saving images, 36–37
    - Transparency & Gamut, 8–9
    - Units & Rulers, 10–11
  - Preferences file, adding colors, 86
  - preset actions, 484–485
  - Preset Manager, 70–71
  - preset shapes, 402–403
  - Preset Styles, 372–373
  - presets
    - Preset Manager, 70–71
    - Tool Presets, 69–69
  - Preview in Browser command, 536–537
  - preview pane
    - changing between Selection and Image view, 125
    - rendering and, 375
  - previews
    - color balance, 115
    - file handling preferences, 2–3
    - Posterize command, 141
    - Print with Preview command, 512–513
    - shadow and highlight corrections, 132
    - speeding up display, 6
    - Threshold command, 139
  - Print dialog box, 511
  - Print with Preview command, 512–513
  - Print with Preview dialog box, 512–513
  - printing
    - color management and, 514–515
    - Color Picker, unprintable colors, 82–83
    - duotone images, 520–521
    - ImageReady and, 510
    - images, converting to halftone, 522–523
    - out-of-gamut color, 518–519
    - Page Setup dialog box, 510–511
    - positioning, 513
    - printer options, 510–511
    - proof setup, 516–517
    - proofing color, 96–97
    - spot color, spot channels, 524–525
  - process colors, modifying, 126–127
  - proof setup, printing, 516–517
  - proofing, color, 96–97
  - properties
    - image maps, 568–569
    - Layers, 322–323
  - PSD (Photoshop Document)
    - format, advantages, 38–39
    - punch-through effect, knockouts, 360–361
  - purging, clipboard, 178
- Q**
- Quick Mask Mode
    - channels, storing masks in, 312–313
    - editing options, changing, 310–311
    - isolating image areas, 308–309
- R**
- Radial Blur filter, Zoom and, 458–459
  - ranking thumbnails, File Browser, 24–25
  - rasterization
    - layers, 364–365
    - Shape tools and, 400–401
  - RAW file format, importing, 28–29
  - Rectangular Marquee tool, making selections, 146–147
  - red-eye repair, 238–239
  - Redo command, 62
  - refreshing File Browser, 27
  - Release Clipping Mask option, 410
  - Remove Black Matte command, 356–357
  - Remove From Selection option, 161
  - Remove White Matte command, 356–357
  - renaming
    - files, File Browser, 26–27
    - tool presets, 70
  - rendering, previewing and, 375
  - Replace Color command, 124–125
  - reselecting selections, 177
  - Reset Swatches option, 89
  - resizing, slices, 550–551
  - resolution
    - moving artwork and, 354–355
    - patterns and, 348
    - selecting, 11
    - standard, 210
  - Reveal All layer masks
    - adding, 342–343
    - editing, 342–343
  - RGB color, 83, 320
  - RGB Color mode, converting, 94–95
  - RGB image, color channels and, 300
  - RGB mode, Posterize mode and, 140
  - rollovers. *See also* image maps
    - animation in, 580–581
    - creating, 570–571
    - secondary rollover effect, 572–573
    - slices and, 554
  - rotating
    - collages and, 359
    - images, File Browser, 22
  - rulers, 54–55
- S**
- sampling color, Eyedropper tool, 90–91
  - Satin effect, 384–385
  - saturation, adjusting, 118–119, 142
  - Save for Web option, settings, 36–37
  - Save Optimized As dialog box, 559
  - Save Selection Dialog Box, channel options, 314–315
  - Save Slice Selection dialog box, 552–553
  - Save Workspace command, 72–73
  - saving
    - animation files, 576–577
    - preferences for, 36–37
    - slices, 552–553
  - Scale command, 222–223
  - scaling
    - bounding boxes, 359
    - collages and, 359
  - scratch disks, 15

- screen redraw, increasing speed, 16
- scripts, 506–507
- searching in File Browser, 27
- secondary rollover effect, 572–573
- selection marquee, moving, 156–157
- Selection view, changing to Image view, 125
- selections
  - adding to/subtracting from, 158–159
  - all in document, 147
  - Clear command, 177
  - Color Range command, 154–155
  - Contract Selection command, 171
  - copy and pasting into images, 178–179
  - cropping, 174–175
  - deselecting, 176
  - Expand Selection command, 171
  - expanding from center, 147
  - feathering edges, 166–167
  - Fixed Aspect Ratio, 147
  - framing, Stroke command, 162–163
  - hisg-contrast objects, 150–151
  - Intersect With Selection option, 160–161
  - inverting, 164–165
  - Lasso tools, 148–149
  - layer considerations, 153
  - layers, 324–325
  - Magic Wand tool, 152–153
  - Marquee tool, 146–147
  - reselecting, 177
  - saving, 180–181
  - slices, 552–553
  - Smooth Selection command, 170
  - Transform Selection command, 172–173
- Selective Color adjustment layer, 350
- Selective Color command, 126–127
- \_self: option, Target menu, 559
- Set Frame Delay dialog box, 575
- Shadow/Highlight Correction command, 132–133
- shadows
  - adjusting manually, 108–109
  - clip values, setting, 107
- shape layers
  - creating, 396–397
  - Shape tools and, 396–397
  - vector masks, 408
- Shape tools
  - Bezier paths and, 400–401
  - Custom Shape, 402–403
  - paths, 400–401
  - raster shape creation, 400–401
  - shape layers and, 396–397
  - shapes and, 398–399
- shapes
  - mixing and matching, 400
  - as path data, 400–401
  - rasterized pixels, 400
  - Shape tools and, 398–399
  - Style picker, 398
- Sharpen tool, 250–251
- Shutterfly web site, 498
- sketch effect, Blend mode and Smart Blur filter, 456–457
- Skew command, 224–225
- Slice palette
  - color picker, 556–557
  - introduction, 550–551
  - messages, 551
- Slice Select tool, 556–557
- Slice tool
  - images, 548–549
  - tables, ImageReady and, 546
- slices
  - auto, 548
  - background color, 556–557
  - color, setting, 13
  - combining, 554–555
  - deleting, 552–553
  - dividing, 554–555
  - duplicating, 554–555
  - layer-based, 548
  - linking, 560–561
  - links, removing, 560
  - loading, 552–553
  - locking, 550–551
  - modifying, 550–551
  - moving, 550–551
  - Optimize palette, 562–563
  - overlaps, 550
  - resizing, 550–551
  - saving, 552–553
  - selecting, 552–553
  - unlinking, 560–561
  - URL assignment, 558–559
  - user-based, 548
  - user-based, optimizations, 562–563
- Smart Blur filter, Blend mode and, 456–457
- Smooth Selection command, 170
- Smudge tool, 252–253
- Snap To command, grids and guides, 60–61
- Snap to Origin option, overlays, 390
- snapshots
  - definition of, 274
  - naming, 275
  - painting from, 274–275
  - recovering previous work using, 274–275
- soft-proofs, options, 97
- software, knockouts, 357
- solid color fill layers, 346–347
- solid fill layers, 346–347
- Spatter filter, 460
- Sponge tool, 258–259. *See also* Hue/Saturation command
- spot channels, histograms, 102
- spot color, spot channels and, 524–525
- Sprayed Strokes filter, 460
- stacking order, layers, 336–337
- standard resolution, 210
- Step Backward command, 62
- Step Forward command, 62
- stops
  - color stops, 284
  - opacity stops, 284
- storage, scratch disks, 15
- straight lines, drawing, 113
- Straighten Photos command, 502–503
- Stroke command, framing selections, 162–163
- Stroke layer style, 392–393
- Style picker, shapes, 398
- styles
  - Bevel and Emboss effect, 382–383
  - Color Overlay, 386–387
  - drop shadow, 374–375
  - Gradient Overlay, 387–388
  - gradients, 347
  - image styles, converting from layer styles, 394–395
  - Inner Glow effect, 380–381

- Inner Shadow effect, 376–377
- layer styles, 330–331
- layer styles, converting to image layers, 394–395
- linked layers, 330–331
- Outer Glow, 378–379
- Pattern Overlay, 390–391
- Preset, 372–373
- removing from layers, 373
- Satin effect, 384–385
- Stroke, 392–393
- style sheets, 373
- Web Photo Gallery, 500–501
- Styles palette
  - Layer Styles, 372–373
  - saving new styles, 373
- Subtract From Selection option, 159
- Sumi-e filter, 460
- Swatch palette
  - libraries, saving, 88–89
  - overview, 86–87
- SWF format (Flash), exporting to, 534–535
- system requirements, Help
- System, 18

## T

- tables, ImageReady, 546–547
- targets, URL, assigning to slices, 558–559
- templates, Web Page Templates, 544–545
- text
  - aligning, 418–419
  - ALT text, images and, 550
  - checking and correcting spelling, 422–423
  - Convert to Shape command, 430–431
  - distorting and transforming,
    - Warp Text command, 426–427
  - finding and replacing, 422–423
  - imagery, combining using
    - Selection Mask type, 432–433
  - images, inserting into, 414–415
  - justifying, 418–419
  - layers, manipulating layer styles, 436–437
  - moving, 418–419
  - Options and Character palettes, 416–417

- paths, inserting text within or onto, 428–429
- resizing and transforming, 420–421
- Selection Mask type, combining text with imagery, 432–433
- text effects, manipulating layer styles and, 436–437
- text logo, customizing with shape type, 430–431
- text reflections, using to form layers, 438–439
- Transform command, 420–421
- type parameters, specifying and adjusting, 416–417
- text boundary box (paragraph type), creating, 424–425
- texture channel, specialized lighting effect, 474–475
- Threshold command, black and white images, 138–139
- thumbnails
  - adjustment layer preview, 352
  - Layer mask thumbnails, 342
  - organizing, File Browser, 24–25
  - patterns, 391
  - styles, 373
  - vector mask, 408
  - Web Photo Gallery, 500
- TIFF file format
  - file size limitations, 2
  - sharing, layers and, 3
- Tile Maker dialog box, 538–539
- tiled background, seamless, 538–539
- tint, Photo Filter command and, 131
- tone
  - Auto Contrast options, 106–107
  - Levels option, 108–109
- Tool Presets palette, 68–69
- tool-based image maps, 566–567
- toolbox, 42–43
- tools
  - Add Anchor Point tool, 194–195
  - Art History Brush tool, 276–277
  - Background Eraser tool,
    - boundaries, controlling while erasing, 242–243
  - Blur tool, 248–249
  - Brush tool, 234–235

- Burn tool, 256–257
- Clone Stamp tool, 266
- Color Replacement tool, 236–237
- Convert Point tool, 196–197
- Crop tool, 218–219
- Delete Anchor Point tool, 194–195
- Direct Selection tool, 192–193
- Dodge tool, 254–255
- Erase to History tool, 240, 278–279
- Eraser tool, 240–241
- Fill tool, History State, filling with, 280–281
- Freeform pen tool, 188
- Gradient tool, 282–283
- Healing Brush tool, 237, 260–263
- History Brush tool, 272–275
- Magic Eraser tool, 244–245
- Magic Wand tool, 244
- Magnetic Pen tool, tracing paths around an object, 190–191
- Paint Bucket tool, 246–247
- Patch tool, 237, 264–265
- Path tool, path components, selecting, 192–193
- Pattern Stamp tool, 268–269
- pen tool, 184–187
- Pencil tool, 234–235
- selecting, 42
- Sharpen tool, 250–251
- Smudge tool, 252–253
- Sponge tool, 258–259
- Text tool, Options and
  - Character palettes, 416–417
- transformation tool, rotating images, 216–217
- Type tool, Options and
  - Paragraph palettes, 4118–419
- Type tools, 424–425
- \_top: option, Target menu, 559
- Transform commands, collages and, 359
- Transform Selection command, 172–173
- transformation tool, 216–217
- transformations
  - bounding box, 359
  - lines, 406

transparency

- backgrounds, converting transparent to flat, 320
- Flash files, 534–535
- GIFs, 528
- PNG files, 532
- preferences, 8–9

Transparency & Gamut, 519

Trim command, 220–221

tweening, animation creation, 582–583

Type tool, Options and Paragraph palettes, 418–419

## U

Undo command, 62

undoing, History palette, 64

Units & Rulers, preferences, 10–11

URLs (Uniform Resource Locator), assigning to slices, 558–559

user interface, ImageReady, 542–543

user-based slices, 548–549, 562–563

## V

Variations command, 142–143

vector layer masks, 408–409

video alpha, 9

video format

- North American *vs.* European formats, 228

- Pixel Aspect Ratio, 228–229

view modes, toggling, 43

vignettes, creating, 166–167

## W

Warp Text command, 426–427

Web

- element, layer styles and, 540–541

- GIF optimization, 528–529

- JPEG optimization, 530–531

- PNG files, 532–533

Web Content palette, animation and, 580

Web Page Templates, 544–545

Web Photo Gallery

- creating, 498–499

- styles, custom, 500–501

Web safe colors, selecting, 83

Web sites

- Acrobat Reader download, 30
- digital camera support, 29

- Web page Templates, 544–545

white point, setting, 110–111

woodcut style images, Threshold command, 139

Work path type, as Clipping path, 434–435

workspace, customizing, 72–73

## Z

zero origin (rulers), resetting, 54–55

Zoom, Radial Blur filter and, 458–459

Zoom tool

- overview, 50–51
- Save for Web option, 37

zooming, 50–51