

# ADOBE® PHOTOSHOP® ELEMENTS HELP

## **Legal notices**

For legal notices, see [http://help.adobe.com/en\\_US/legalnotices/index.html](http://help.adobe.com/en_US/legalnotices/index.html).

# Contents

## Chapter 1: Introduction to Photoshop Elements

What's new in Photoshop Elements .....	1
System requirements   Photoshop Elements .....	9
Photoshop Elements manual (PDF) .....	22

## Chapter 2: Workspace and environment

Get to know the Home screen .....	23
Workspace basics .....	31
Tools .....	38
Panels and bins .....	44
Open files .....	50
Rulers, grids, and guides .....	54
Enhanced Quick Mode .....	55
File information .....	60
Presets and libraries .....	63
Multitouch support .....	66
Scratch disks, plug-ins, and application updates .....	66
Undo, redo, and cancel actions .....	68
Viewing images .....	70

## Chapter 3: Fixing and enhancing photos

Resize images .....	74
Cropping .....	78
Process camera raw image files .....	88
Add blur, replace colors, and clone image areas .....	93
Adjust shadows and light .....	98
Retouch and correct photos .....	107
Sharpen photos .....	121
Transforming .....	126
Auto Smart Tone .....	131
Recomposing .....	134
Using actions to process photos .....	136

## Chapter 4: Adding shapes and text

Add text .....	138
Edit text .....	143
Create shapes .....	146
Editing shapes .....	150
Painting overview .....	151
Painting tools .....	155
Set up brushes .....	161
Patterns .....	165
Fills and strokes .....	167

**Contents**

Gradients .....	168
Work with Asian type .....	172
<b>Chapter 5: Guided edits, effects, and filters</b>	
Filters .....	175
Guided mode Photomerge edits .....	180
Guided mode Basic edits .....	192
Adjustment filters .....	196
Effects .....	200
Guided mode Fun edits .....	204
Guided mode Special edits .....	224
Artistic filters .....	233
Guided mode Color edits .....	235
Blur filters .....	236
Brush Stroke filters .....	238
Distort filters .....	239
Other filters .....	243
Noise filters .....	245
Render filters .....	246
Sketch filters .....	247
Stylize filters .....	249
Texture filters .....	251
<b>Chapter 6: Working with colors</b>	
Understanding color .....	253
Set up color management .....	254
Color and tonal correction basics .....	257
Choose colors .....	264
Adjust color, saturation, and hue .....	268
Fix color casts .....	274
Using image modes and color tables .....	275
Color and camera raw .....	281
<b>Chapter 7: Working with selections</b>	
Make selections in Photoshop Elements .....	285
Saving selections .....	300
Modifying selections .....	302
Move and copy selections .....	306
Edit and refine selections .....	309
Smooth selection edges with anti-aliasing and feathering .....	313
<b>Chapter 8: Working with layers</b>	
Create layers .....	315
Edit layers .....	319
Copy and arrange layers .....	321
Adjustment and fill layers .....	325
Clipping masks .....	329
Layer masks .....	331

Layer styles .....	331
Opacity and blending modes .....	334
<b>Chapter 9: Creating photo projects</b>	
Project basics .....	336
Making photo projects .....	336
Editing photo projects .....	349
<b>Chapter 10: Saving, printing, and sharing photos</b>	
Save images .....	352
Printing photos .....	357
Share photos online .....	366
Optimizing images .....	367
Optimizing images for the JPEG format .....	369
Dithering in web images .....	371
Guided Edits - Share panel .....	372
Previewing web images .....	373
Use transparency and mattes .....	374
Optimizing images for the GIF or PNG-8 format .....	377
Optimizing images for the PNG-24 format .....	379
<b>Chapter 11: Keyboard shortcuts</b>	
Keys for selecting tools .....	381
Keys for selecting and moving objects .....	383
Keys for the Layers panel .....	384
Keys for showing or hiding panels (expert mode) .....	384
Keys for painting and brushes .....	385
Keys for using text .....	386
Keys for the Liquify filter .....	386
Keys for transforming selections .....	387
Keys for the Color Swatches panel .....	387
Keys for the Camera Raw dialog box .....	387
Keys for the Filter Gallery .....	387
Keys for using blending modes .....	388
Keys for viewing images (expertmode) .....	389

# Chapter 1: Introduction to Photoshop Elements

## What's new in Photoshop Elements

Effortlessly edit, create, and organize with new automated options powered by Adobe Sensei AI technology — there's always room to add your personal touch. Revitalize your photos with automatic colorization. Auto-select your subjects with just one click. Make people look their best with automatic skin smoothing. Enjoy new Auto Creations: B&W Selection, Pattern Brush, Painterly, and Depth of Field effects. Plus, remove unwanted photo objects and brush on fun patterns with two new Guided Edits, and create and order photo prints and gifts right from Adobe Photoshop Elements.

Want to edit videos, too? See what's new in [Adobe Premiere Elements 2020](#).



*Adobe Photoshop Elements includes Elements Organizer which helps you organize your photos and videos. For information about new features in Elements Organizer, see [What's new in Elements Organizer](#).*

### Automatically colorize your photos

Create a fresh look for any black-and-white or see how a color photo looks with different hues. Automatic colorization makes it a snap. Powered by Adobe Sensei.

See how it works - [Change colors in a photo](#).



*Colorize a photo in Photoshop Elements*

### Select your subject with just one click

Selections just keep getting easier. Click once to auto-select the main subject of your photo, and then easily enhance it with an effect or cut it out and add it to another photo to create something all-new. Powered by Adobe Sensei.

See how it works - [Quickly select a person or thing in your photo.](#)



*Select the main subjects in your photo with a click to edit them*

## Smooth skin automatically

Easily reduce wrinkles or blemishes to make the people in your photos look their best. Powered by Adobe Sensei.

See how it works - [Smooth skin in photos](#).



*Smooth skin in photos*

## Enjoy new Auto Creations

Now an even wider variety of Auto Creations will be waiting for you when you launch the home screen. B&W Selection, Pattern Brush, Painterly, and Depth of Field effects are automatically applied to your photos, and you can always add your personal touch. Powered by Adobe Sensei.

See how it works - [View and share auto-created collages, slideshows, and more](#).





*Access Auto Creations such as Pattern Brush in Photoshop Elements*

## **Add creative sparkle with patterns**

Jazz up any photo with a fun pattern like hearts or stars. The Pattern Brush Guided Edit makes it easy to create a photo that really stands out in print or online.

See how it works - [Pattern Brush guided edit](#).



*Add creative patterns to your photos and create memorable keepsakes*

### **Make unwanted objects vanish**

Quickly remove power lines, pedestrians, or anything else that distracts from your main subject with the Object Removal Guided Edit.

See how it works - [Object Removal guided edit](#).



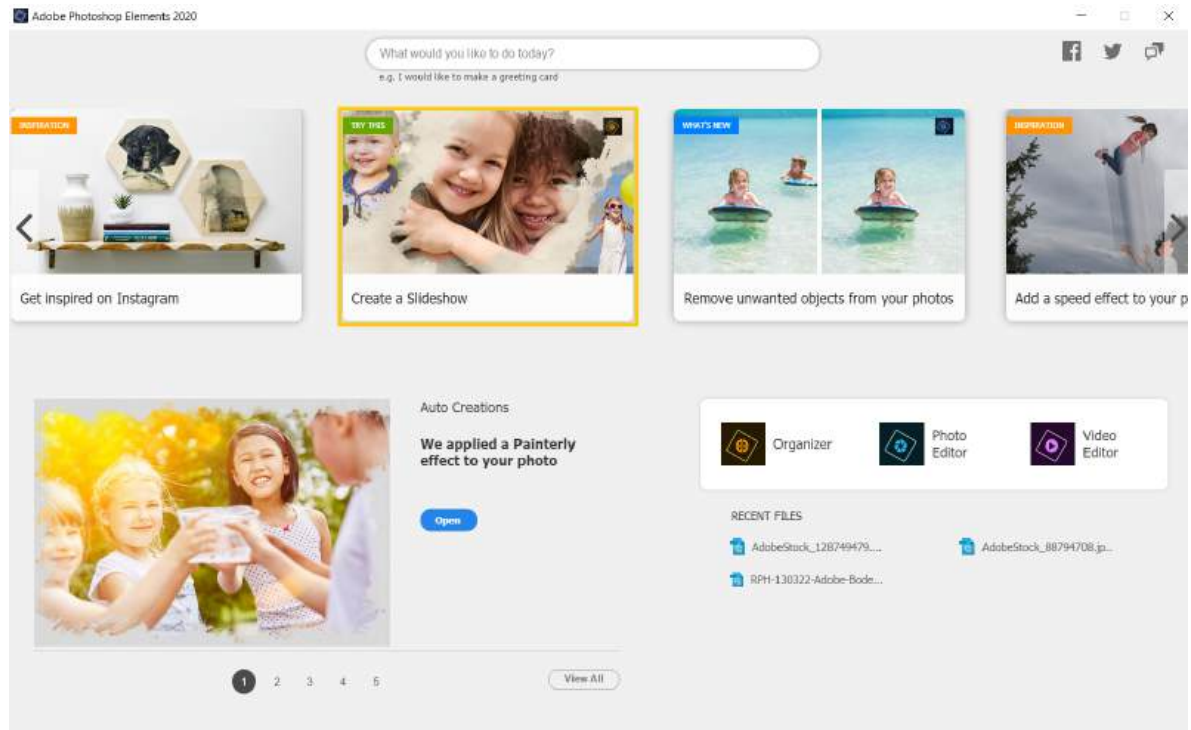
*Quickly remove a person or thing from photos*

## **Find new things to try**

Check out the Try This area of the home screen to discover fun photo editing tricks and techniques to try, like opening closed eyes in photos, restoring old photos, and more. Then just click to jump right to them.

See how it works - [Try out exciting features.](#)

## Introduction to Photoshop Elements



Click the 'Try this' card of your choice to learn about the feature

## Faster performance and expanded HEIF and HEVC support

### Work faster and better in Photoshop Elements!

Now you'll experience faster performance for everyday tasks like adding and editing photos, and you can switch between large catalogs faster. Plus, import and edit HEIF photo files and HEVC video files on Windows as well as macOS. See [system requirements](#).



*Add photos faster including HEIF files in Photoshop Elements*

### **Order photo prints, gifts, and gear (U.S. only)**

Create and order beautiful prints and over 140 photo gifts and keepsakes like wall art, mugs, phone accessories, and more with the new FUJIFILM Prints and Gifts service right inside Photoshop Elements.



# System requirements | Photoshop Elements

## Photoshop Elements 2020

### Windows

- 1.6 GHz or faster processor with SSE2 support
- 64-bit versions of Microsoft Windows 10 (versions 1809, 1903 are recommended) or Windows 8.1. (32-bit OS version is not supported). Windows 7 is not supported.
- HEIF/HEVC import is supported only on Microsoft Windows 10 versions 1809, 1903, or higher. [Learn more.](#)
- 4 GB of RAM (8GB recommended)
- 6.5 GB of available hard-disk space to install applications; additional 2.4GB to download all optional content (cannot install on a volume that uses a case-sensitive file system or on removable flash storage devices)
- 1280x800 display resolution (at 100% scale factor)
- Microsoft DirectX 9 or 10 compatible display driver
- DVD-ROM drive (for installation from DVD)
- Internet connection required for product activation and content download\*
- Supported browsers: Microsoft Internet Explorer 9 through 11, Mozilla Firefox 4 or later, or the latest version of Google Chrome

### macOS

- 64-bit multicore Intel processor
- macOS v10.15, v10.14, or v10.13
- 4 GB of RAM (8GB recommended)
- 7.0 GB of available hard-disk space to install applications; additional 2.5GB to download all optional content (cannot install on a volume that uses a case-sensitive file system or on removable flash storage devices)
- 1280x800 display resolution (at 100% scale factor)
- DVD-ROM drive (for installation from DVD)
- Internet connection required for product activation and content download\*
- Supported browsers: Safari 7.x or later, Mozilla Firefox 4 or later, or the latest version of Google Chrome

#### **Note:**

*You cannot install Photoshop Elements 2020 on a volume that uses a case-sensitive file system or on removable flash storage devices.*

\* This product may integrate with or allow access to certain Adobe or third-party hosted online services (“Online Services”). Online Services are available only to users 13 and older and require agreement to additional terms of use and Adobe’s online privacy policy (see [www.adobe.com/go/terms](http://www.adobe.com/go/terms)). Online Services are not available in all countries or languages, may require user registration, and may be discontinued or modified in whole or in part without notice. Additional fees or subscription charges may apply.

Fujifilm Prints and Gifts service is available only in USA.

## Photoshop Elements 2019

### Windows

- 1.6GHz or faster processor with SSE2 support
- 64-bit versions of Microsoft Windows 10 (recommended with version 1607 or later), Windows 8.1, or Windows 7 with Service Pack 1
- 4GB of RAM (8GB recommended)
- 5.2GB of available hard-disk space (additional free space required during installation and additional 2.4GB required to download all optional content)
- 1280x800 display resolution (at 100% scale factor)
- Microsoft DirectX 10 or 9 compatible display driver
- DVD-ROM drive (for installation from DVD)
- Internet connection required for product activation and content download\*
- Supported browsers: Microsoft Internet Explorer 9 through 11, Mozilla Firefox 4 or later, or the latest version of Google Chrome

### macOS

- 64-bit multicore Intel processor
- macOS X v10.14, v10.13, or v10.12
- 4GB of RAM (8GB recommended)
- 6.5GB of available hard-disk space (additional free space required during installation and additional 2.5GB to download all optional content)
- 1280x800 display resolution (at 100% scale factor)
- DVD-ROM drive (for installation from DVD)
- Internet connection required for product activation and content download\*
- Supported browsers: Safari 7.x or later, Mozilla Firefox 4 or later, or the latest version of Google Chrome

#### **Note:**

*You cannot install Photoshop Elements 2019 on a volume that uses a case-sensitive file system or on removable flash storage devices.*

\* This product may integrate with or allow access to certain Adobe or third-party hosted online services (“Online Services”). Online Services are available only to users 13 and older and require agreement to additional terms of use and Adobe’s online privacy policy (see [www.adobe.com/go/terms](http://www.adobe.com/go/terms)). Online Services are not available in all countries or languages, may require user registration, and may be discontinued or modified in whole or in part without notice. Additional fees or subscription charges may apply.

## Photoshop Elements 2018

## Windows

- 1.6GHz or faster processor with SSE2 support
- 64-bit versions of Microsoft Windows 7 with Service Pack 1, Windows 8, or Windows 10
- 4GB of RAM
- 5GB of available hard-disk space (additional free space required during installation and additional 2GB required to download all optional content)
- 1280x800 display resolution (at 100% scale factor)
- Microsoft DirectX 9 or 10 compatible display driver
- DVD-ROM drive (for installation from DVD)
- Internet connection required for product activation and content download\*

## macOS

- 64-bit multicore Intel processor
- macOS X v10.11, v10.12, or v10.13
- 4GB of RAM
- 5GB of available hard-disk space (additional free space required during installation and additional 2GB to download all optional content)
- 1280x800 display resolution (at 100% scale factor)
- DVD-ROM drive (for installation from DVD)
- Internet connection required for product activation and content download\*

\* This product may integrate with or allow access to certain Adobe or third-party hosted online services (“Online Services”). Online Services are available only to users 13 and older and require agreement to additional terms of use and Adobe’s online privacy policy (see [www.adobe.com/go/terms](http://www.adobe.com/go/terms)). Online Services are not available in all countries or languages, may require user registration, and may be discontinued or modified in whole or in part without notice. Additional fees or subscription charges may apply.

## Photoshop Elements 15.0

### Windows

- 1.6GHz or faster processor with SSE2 support
- 64-bit versions of Microsoft Windows 7 with Service Pack 1, Windows 8.1 or Windows 10
- 4GB of RAM
- 5GB of available hard-disk space (additional free space required during installation and additional 2GB required to download all optional content)
- 1024x768 display resolution (at 100% scale factor)
- Microsoft DirectX 9 or 10 compatible display driver
- DVD-ROM drive (for installation from DVD)
- Internet connection required for product activation and content download\*



## macOS

- 64-bit multicore Intel processor
- macOS X v10.10, v10.11, or v10.12
- 4GB of RAM
- 5GB of available hard-disk space (additional free space required during installation and additional 2GB to download all optional content)
- 1024x768 display resolution (at 100% scale factor)
- DVD-ROM drive (for installation from DVD)
- Internet connection required for product activation and content download\*

\* Internet connection required. This product may integrate with or allow access to certain Adobe or third-party hosted online services (“Online Services”). Online Services are available only to users 13 and older and require agreement to additional terms of use and Adobe’s online privacy policy (see [www.adobe.com/go/terms](http://www.adobe.com/go/terms)). Online Services are not available in all countries or languages, may require user registration, and may be discontinued or modified in whole or in part without notice. Additional fees or subscription charges may apply.

## Photoshop Elements 14.0

### Windows

- 1.6GHz or faster processor with SSE2 support
- Microsoft Windows 7 with Service Pack 1, Windows 8 or Windows 10 (32-bit versions will be installed on 32-bit systems; 64-bit versions will be installed on 64-bit systems)
- 2GB of RAM
- 5GB of available hard-disk space (additional free space required during installation)
- 1024x768 display resolution (at 100% scale factor)
- Microsoft DirectX 9 or 10 compatible display driver
- DVD-ROM drive (for installation from DVD)
- QuickTime 7 software
- Internet connection required for product activation and content download\*

### Mac OS

- 64-bit multicore Intel processor
- Mac OS X v10.9 or v10.10
- 2GB of RAM
- 5GB of available hard-disk space (additional free space required during installation)
- 1024x768 display resolution (at 100% scale factor)
- DVD-ROM drive (for installation from DVD)
- QuickTime 7 software
- Internet connection required for product activation and content download\*

\* Internet connection required. This product may integrate with or allow access to certain Adobe or third-party hosted online services (“Online Services”). Online Services are available only to users 13 and older and require agreement to additional terms of use and Adobe’s online privacy policy (see [www.adobe.com/go/terms](http://www.adobe.com/go/terms)). Online Services are not available in all countries or languages, may require user registration, and may be discontinued or modified in whole or in part without notice. Additional fees or subscription charges may apply.

## Photoshop Elements 13.0

### Enhancements

- HiDPI and Retina display support
- 64-bit support for Photoshop Elements, Adobe Premiere Elements, Elements Organizer, and Adobe Photo Downloader

### Windows

- 1.6 GHz or faster processor (including single-core support)
- Microsoft® Windows® 7.x or Windows 8.x (32 bit installed on 32-bit operating systems and 64 bit installed on 64-bit operating systems)
- 2 GB of RAM
- 4 GB of available hard-disk space (additional free space required during installation)
- Color monitor with 16-bit color graphics adapter
- 1024 x 768 display resolution
- Microsoft DirectX 9 or 10 compatible display driver
- DVD-ROM drive
- Internet connection required for product activation\*

### Mac OS

- 64-bit multicore Intel® processor
- Mac OS X v10.8 through v10.10
- 2 GB of RAM
- 4 GB of available hard-disk space (additional free space required during installation)
- 1024 x 768 display resolution
- DVD-ROM drive
- QuickTime 7 software required for multimedia features
- Internet connection required for product activation\*

\* Internet connection required. This product may integrate with or allow access to certain Adobe or third-party hosted online services (“Online Services”). Online Services are available only to users 13 and older and require agreement to additional terms of use and Adobe’s online privacy policy (see [www.adobe.com/go/terms](http://www.adobe.com/go/terms)). Online Services are not available in all countries or languages, may require user registration, and may be discontinued or modified in whole or in part without notice. Additional fees or subscription charges may apply.

## Older versions

### Photoshop Elements 12.0

#### Windows

- 1.6 GHz or faster processor (including single-core support)
- Microsoft® Windows® XP with Service Pack 3, Windows Vista® with Service Pack 2, Windows 7, or Windows 8 & 8.1 (Note: Limited Camera Raw functionality on Windows XP)
- 2 GB of RAM
- 4 GB of available hard-disk space (additional free space required during installation)
- Color monitor with 16-bit color video card
- 1024 x 768 display resolution
- Microsoft DirectX 9 compatible display driver
- DVD-ROM drive
- Internet connection required for product activation\*

#### Mac OS

- 64-bit multicore Intel® processor
- Mac OS X v10.7 through v10.9
- 2 GB of RAM
- 4 GB of available hard-disk space (additional free space required during installation)
- 1024 x 768 display resolution
- DVD-ROM drive
- QuickTime 7 software required for multimedia features
- Internet connection required for product activation\*

### Photoshop Elements 11.0

#### Windows

- 1.6 GHz or faster processor (including single-core support)
- Microsoft® Windows® XP with Service Pack 3, Windows Vista®, Windows 7, or Windows 8
- 1 GB of RAM (2 GB for HD video functions)
- 4 GB of available hard-disk space (additional free space required during installation)
- Color monitor with 16-bit color video card
- 1024 x 768 monitor resolution
- Microsoft DirectX 9 or 10 compatible display driver
- DVD-ROM drive

**Introduction to Photoshop Elements**

- Internet connection required for Internet-based services

**Mac OS**

- Multicore Intel® processor
- Mac OS X v10.6 through v10.8
- 1 GB of RAM (2 GB for HD video functions)
- 4 GB of available hard-disk space (additional free space required during installation)
- 1024 x 768 display resolution
- DVD-ROM drive
- QuickTime 7 software required for multimedia features
- Internet connection required for Internet-based services

**Photoshop Elements 10.0****Windows**

- 1.6 GHz or faster processor (including single-core support)
- Microsoft® Windows® XP SP3, Windows Vista®, or Windows 7
- 1 GB of RAM (2 GB for HD video functions)
- 4 GB of available hard-disk space (additional free space required during installation)
- Color monitor with 16-bit color video card
- 1024 × 576 display resolution
- Microsoft DirectX 9 compatible display driver
- DVD-ROM drive
- Internet connection required for Internet-based services

**Mac OS**

- Multicore Intel® processor
- Mac OS X v10.5.8 through v10.7
- 1 GB of RAM (2 GB for HD video functions)
- 4 GB of available hard-disk space (additional free space required during installation)
- 1024 × 768 display resolution
- DVD-ROM drive
- QuickTime 7 software required for multimedia features
- Internet connection required for Internet-based services

**Photoshop Elements 9.0**

**Windows**

- 1.6 GHz or faster processor
- Microsoft Windows XP with Service Pack 2 or 3, Windows Vista, or Windows 7
- 1 GB of RAM (2 GB for HD video functions)
- 3 GB of available hard-disk space (additional free space required during installation)
- Color monitor with 16-bit color video card
- 1024 x 576 display resolution at 96 dpi or less
- Microsoft DirectX 9 compatible display driver
- DVD-ROM drive
- QuickTime 7 software (required if importing QuickTime formats)
- Internet connection required for Internet-based services

**Mac OS**

- Multicore Intel processor
- Mac OS X v10.5.8 through v10.6
- 1 GB of RAM (2 GB for HD video functions)
- 3.4 GB of available hard-disk space (additional free space required during installation)
- 1024 x 768 display resolution
- DVD-ROM drive
- QuickTime 7 software (required if importing QuickTime formats)
- Internet connection required for Internet-based services

**Photoshop Elements 8.0****Windows**

- 1.6 GHz or faster processor
- Microsoft Windows XP with Service Pack 2 or 3, Windows Vista, or Windows 7 (runs in 32-bit mode on 64-bit systems)
- 1 GB of RAM
- 2 GB of available hard-disk space
- Color monitor with 16-bit color video card
- 1024 x 576 monitor resolution at 96 dpi or less
- Microsoft DirectX 9 compatible display driver
- DVD-ROM drive
- Web features require Microsoft Internet Explorer 6 through 8 or Mozilla Firefox 1.5 through 3.x

**Mac OS**

- Multi-core Intel processor

## Introduction to Photoshop Elements

- Mac OS X v10.4.11 through 10.5.8 or Mac OS X v10.6
- 512 MB of RAM (1 GB recommended)
- 64 MB of video RAM
- 2 GB of available hard-disk space (additional free space required during installation)
- 1,024 x 768 display resolution
- DVD-ROM drive
- QuickTime 7 software required for multimedia features
- Internet connection required for Internet-based services

## Languages

Adobe Photoshop Elements 8.0 for Windows is available in the following languages:

- Czech
- Dutch
- English
- French
- German
- Italian
- Japanese
- Polish
- Portuguese
- Russian
- Spanish
- Spanish (Latin American)
- Swedish
- Turkish

Adobe Photoshop Elements 8.0 for Mac OS is available in the following languages:

- English
- French
- German
- Japanese

## Photoshop Elements 7.0

### Windows

- 2 GHz or faster processor
- Microsoft Windows XP with Service Pack 2 or 3 or Windows Vista
- Certified for 32-bit version of Windows

**Introduction to Photoshop Elements**

- 1 GB of RAM
- 1.5 GB of available hard-disk space
- Color monitor with 16-bit color video card
- 1024 x 768 monitor resolution at 96 dpi or less
- Microsoft DirectX 9 compatible display driver
- CD-ROM drive
- Web features require Microsoft Internet Explorer 6 or 7 or Mozilla Firefox 1.5 through 3.x

**Languages**

Adobe Photoshop Elements 7.0 for Windows was available in the following languages:

- Czech
- Dutch
- English
- French
- German
- Italian
- Japanese
- Polish
- Russian
- Spanish
- Spanish (Latin American)
- Swedish
- Turkish

**Photoshop Elements 6.0****Windows**

- Intel Pentium 4, Pentium M, or Intel Centrino 1.3 GHz (or compatible) processor
- Microsoft Windows XP with Service Pack 2 or Windows Vista
- 256 MB of RAM (512 MB recommended)
- 1.5 GB of available hard-disk space
- Color monitor with 16-bit color video card
- 1024 x 768 monitor resolution at 96 dpi or less
- Microsoft DirectX 9 compatible display driver
- CD-ROM drive
- Web features require Microsoft Internet Explorer 6, Netscape Navigator 7.0, or Mozilla Firefox 1.5

## Languages

Adobe Photoshop Elements 6.0 for Windows was available in the following languages:

- Czech
- Dutch
- English
- French
- German
- Italian
- Japanese
- Polish
- Russian
- Spanish
- Spanish (Latin American)
- Swedish
- Turkish

## Mac OS

- PowerPC G4 or G5 or multicore Intel processor
- Mac OS X v10.4.8 through 10.5.2
- 512 MB of RAM (1 GB recommended)
- 64 MB of video RAM
- 1 GB of available hard-disk space (additional free space required during installation)
- 1024 x 768 display resolution
- DVD-ROM drive
- QuickTime 7 software required for multimedia features
- Internet connection required for Internet-based services

Now runs natively on PowerPC or Intel-based Macintoshes.

Experience native performance on Intel and PowerPC-based Macintosh computers.

## Languages

Adobe Photoshop Elements 6.0 for Mac OS was available in the following languages:

- English
- French
- German
- Japanese

## Photoshop Elements 5.0



## Windows

- Intel® Pentium® 4 or Intel Celeron® (or compatible) 1.3-GHz processor (dual-core processors and processors with Hyper-Threading Technology supported)
- Microsoft Windows Vista (32 bit only), Windows® XP, or Windows Media Center Edition (Windows XP and MCE require Service Pack 2)
- Windows XP: 256 MB of RAM (512 MB recommended)
- Windows Vista: 512 MB of RAM (1 GB recommended)
- 1.5 GB of available hard-disk space
- Color monitor with 16-bit color video card
- 1,024 x 768 monitor resolution at 96 dpi or less
- Display driver compatible with Microsoft DirectX 9 or 10
- CD-ROM drive

## Mac OS

(No Mac version)

## Photoshop Elements 4.0

### Windows

- Intel® Pentium® III or 4 or Intel Centrino™ (or compatible) 800-MHz processor
- Microsoft® Windows® XP Professional, Home Edition, or Media Center Edition 2005 with Service Pack 2
- 256 MB of RAM (512 MB recommended)
- 900 MB of available hard-disk space
- Color monitor with 16-bit color video card
- 1,024 x 768 monitor resolution
- Microsoft DirectX 9 compatible display driver
- CD-ROM drive
- For handhelds: Requires Palm OS® 4.0, 4.1, or 5.0 and Palm Desktop 4.0 or 4.01

### Mac OS

- PowerPC® G3, G4, or G5 processor
- Mac OS X v.10.3 or 10.4
- 256 MB of RAM
- 750 MB of available hard-disk space
- 1,024 x 768 16-bit (XGA) display
- CD-ROM drive

## Photoshop Elements 3.0

**Windows**

- Intel® Pentium® III or 4 processor at 800 MHz (faster recommended)
- Microsoft® Windows® XP® Home or Professional with Service Pack 1 or Windows 2000 with Service Pack 4
- 256 MB of RAM (512 MB or more recommended)
- 800 MB of available hard disk space
- Adobe Reader™ 6.0.1 and Microsoft DirectX 9.0 software (included on application CD and installed if not already present)
- 1024x768 16-bit (XGA) color display or greater monitor resolution
- CD-ROM drive
- Compatible File Formats: JPEG, TIFF, PSD, PDF, BMP, GIF, and additional file formats

**Mac OS**

- PowerPC® G3, G4, or G5 processor
- Mac OS X 10.2.8 or 10.3
- 256 MB of RAM
- 200 MB of available hard disk space
- Color monitor with video card capable of thousands of colors
- 1024x768 or greater monitor resolution
- CD-ROM drive
- Compatible File Formats: JPEG, TIFF, PSD, PDF, BMP, GIF, and additional file formats

**Photoshop Elements 2.0****Windows**

- Intel® Pentium® processor
- Microsoft® Windows® 98, NT 4.0, 2000, ME or XP
- 128 MB of RAM (512 MB or more recommended)
- 150 MB of available hard disk space
- Color monitor capable of displaying thousands of colors
- CD-ROM drive
- Internet Explorer 5.0, 5.5 or 6.0 (for Help menus)

**Mac OS**

- Mac System Requirements
- PowerPC® processor
- OS 9.1, 9.2.x, Mac OS X v. 10.1.3 through 10.1.5
- 128 MB of RAM
- 350 MB of available hard disk space

## Introduction to Photoshop Elements

- Color monitor with video card capable of thousands of colors
- CD-ROM drive
- Internet Explorer 5.0, 5.5 or 6.0 (for Help menus)

## Photoshop Elements 1.0

### Windows

- Intel® Pentium® processor
- Microsoft® Windows® 98, NT 4.0, 2000, ME or XP
- 128 MB of RAM (512 MB or more recommended)
- 150 MB of available hard disk space
- Color monitor capable of displaying thousands of colors
- CD-ROM drive
- Internet Explorer 5.0, 5.5 or 6.0 (for Help menus)

### Mac OS

- Mac System Requirements
- PowerPC® processor
- OS 9.1, 9.2.x, Mac OS X v. 10.1.3 through 10.1.5
- 128 MB of RAM
- 350 MB of available hard disk space
- Color monitor with video card capable of thousands of colors
- CD-ROM drive
- Internet Explorer 5.0, 5.5 or 6.0 (for Help menus)

## Photoshop Elements manual (PDF)

Find a PDF of articles to learn how to use Photoshop Elements.

[Photoshop Elements manual \(PDF\)](#)

# Chapter 2: Workspace and environment

## Get to know the Home screen

When you launch Elements 2019, the Home screen helps you to easily get started with Elements applications. The Home screen showcases a carousel of cards to help you discover new features, try out exciting features, and explore and personalize [Auto Creations](#). You can also quickly search for Help resources of your desired features. The Home screen also allows you to start from scratch with one of the Elements applications.

In the upper-right corner of the Home screen, you can click  or  to visit the Elements pages on Facebook and Twitter. If you need to contact Adobe Customer Care, click .

The Home screen has all the resources to get you up and running with your Elements app.

**Note:**

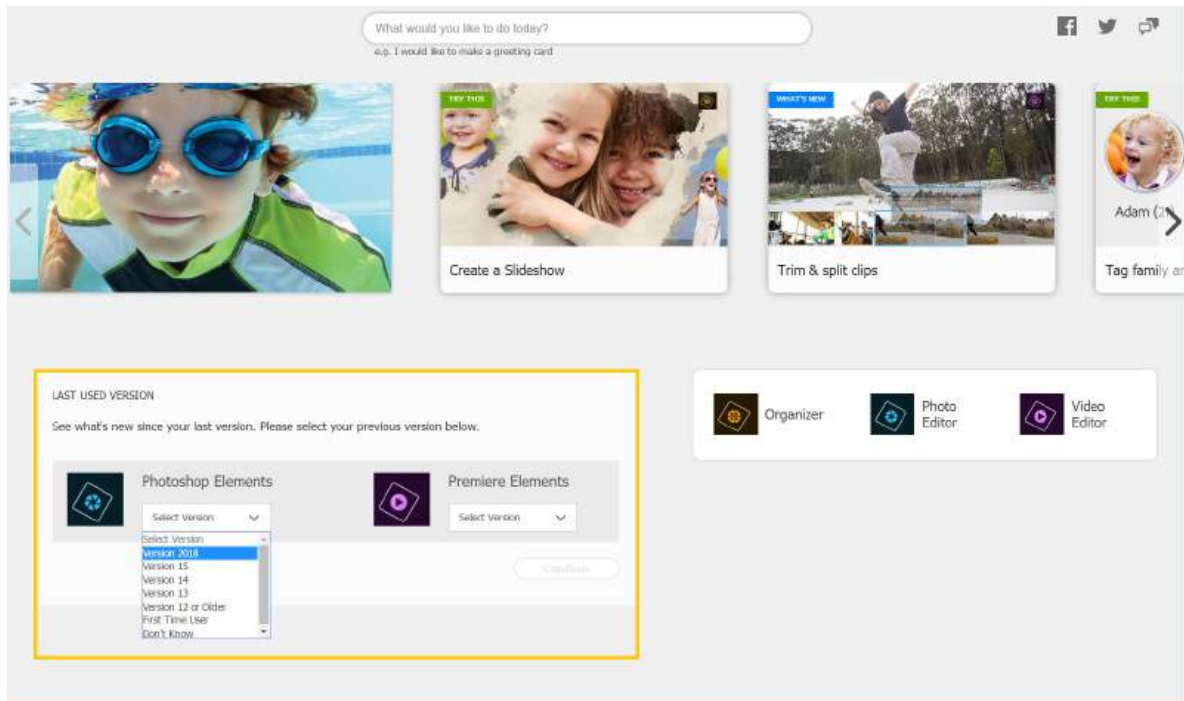
*In the Windows Application Store version of Adobe Photoshop Elements, the Video Editor (Adobe Premiere Elements) is not available. Hence, video projects are not supported in this version.*

## Get started with the Home screen

When you launch the latest release of an Elements app for the first time, you can view the **Last Used Version** section on the Home screen. In this section, you can do one of the following:

- For Adobe Photoshop Elements, select your previously used version in the **Select Version** drop-down list of **Photoshop Elements** and click **Confirm**.
- For Adobe Premiere Elements, select your previously used version in the **Select Version** drop-down list of **Premiere Elements** and click **Confirm**.

## Workspace and environment

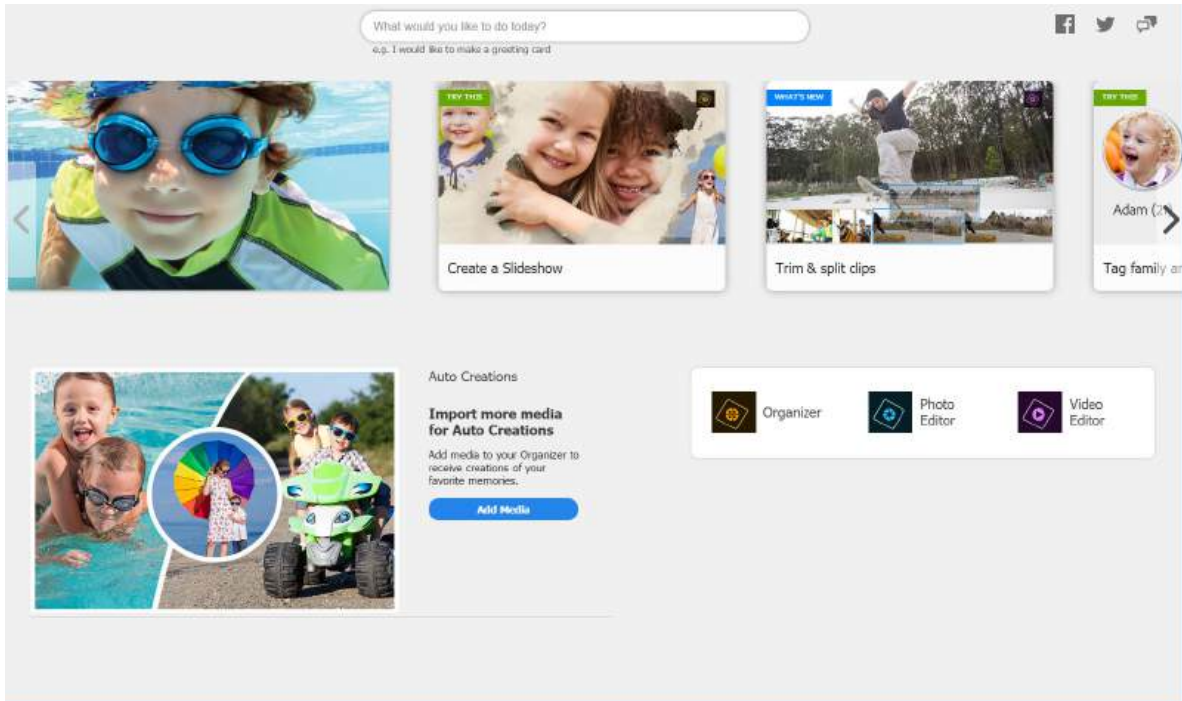


The Home screen after the first launch of an Elements app; Notice the Last Used Version section.

### Note:

- Apart from selecting the previously used version in the **Select Version** drop-down list:
  - If you don't remember your previously used Elements version, select **Don't Know**.
  - If you are a new user, select **First Time User**.
- In the Windows Application Store version of Adobe Photoshop Elements, the **Select Version** drop-down list for **Premiere Elements** is unavailable.

## Workspace and environment



The Home screen on a subsequent launch of an Elements app. Under Auto Creations, click Add Media to import media. You can then view Auto Creations when you relaunch the app.

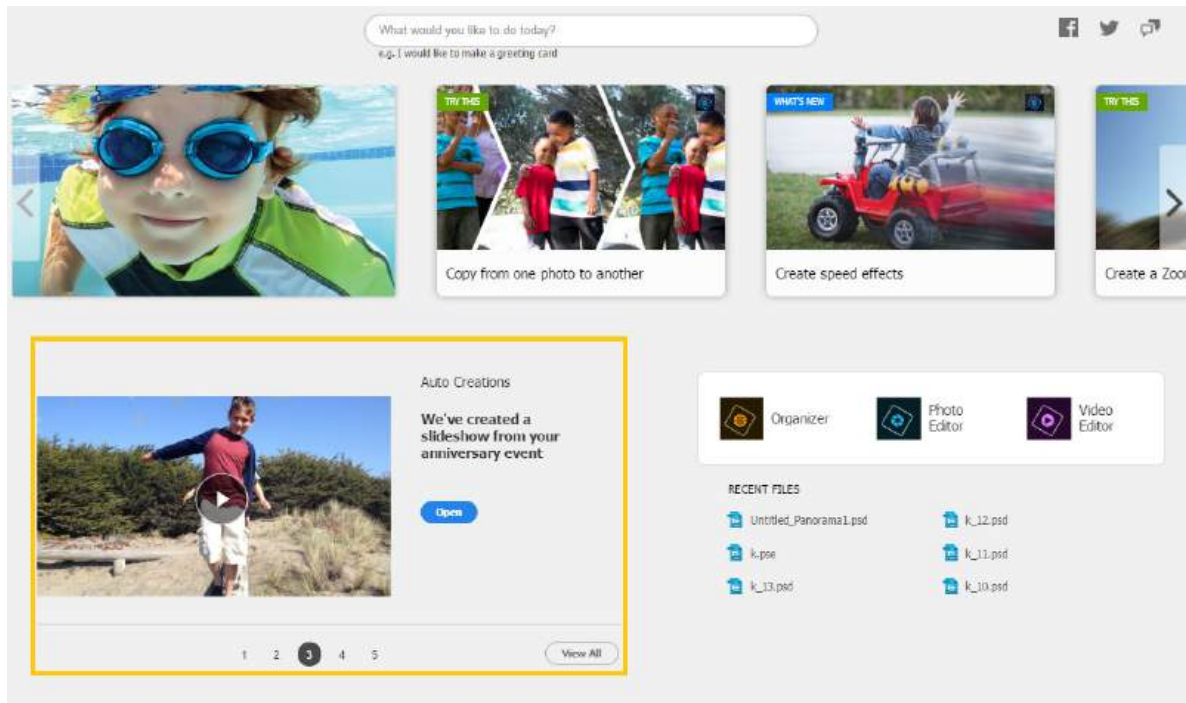
## Explore and customize Auto Creations

Auto Creations, or auto-generated creations, are available to you on the Home screen. Under the section **Auto Creations**, you can view auto-created photo collages, slideshows, video collages, and Candid Moments. Click **View All** or use the number icons below the Auto Creations thumbnail to view all the auto-created projects.

Auto Creations are created with media (photos or videos) that you've imported. If you haven't imported any media, click **Add media** under **Auto Creations** on the Home screen and upload photos and videos. After sometime, relaunch the app to view Auto Creations in the Home screen.

To know more about how to edit and share Auto Creations, see [View and share auto-created photo collages, slideshows, and more.](#)

## Workspace and environment



Import media to view Auto Creations such as slideshows, photo and video collages, and more.

### Note:

In the Windows Application Store version of Adobe Photoshop Elements, video creations such as video collages and Candid Moments are not supported.

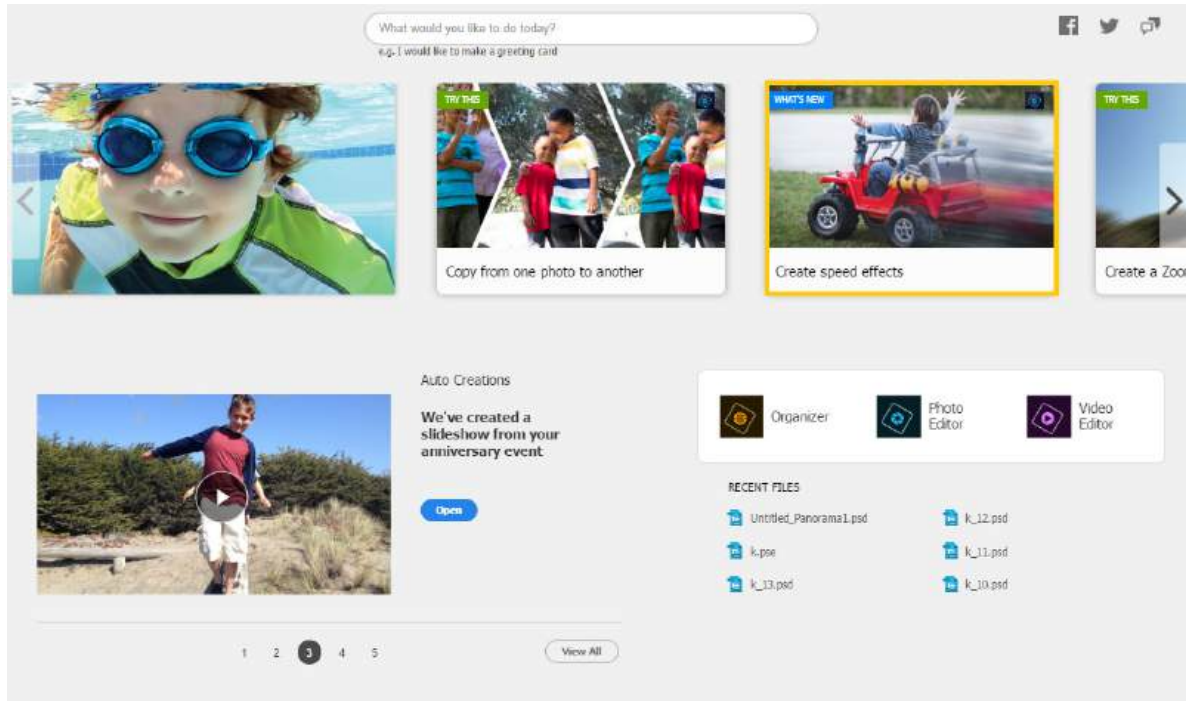
## Discover features and their Help resources

- [Learn new features](#)
- [Find out exciting features](#)

### Learn new features

In the carousel of cards displayed in the upper part of the Home screen, you can find information about newer features in your Elements app. The cards are labeled **What's New** and have a blue tag. Use the arrows on the left and right side of the carousel to discover resources on new features. Hover over a **What's new** card and click **Open Link**. You can then access relevant Help resources to learn more about the feature. The **What's new** cards are also updated from time to time based on your actions in the app.

## Workspace and environment



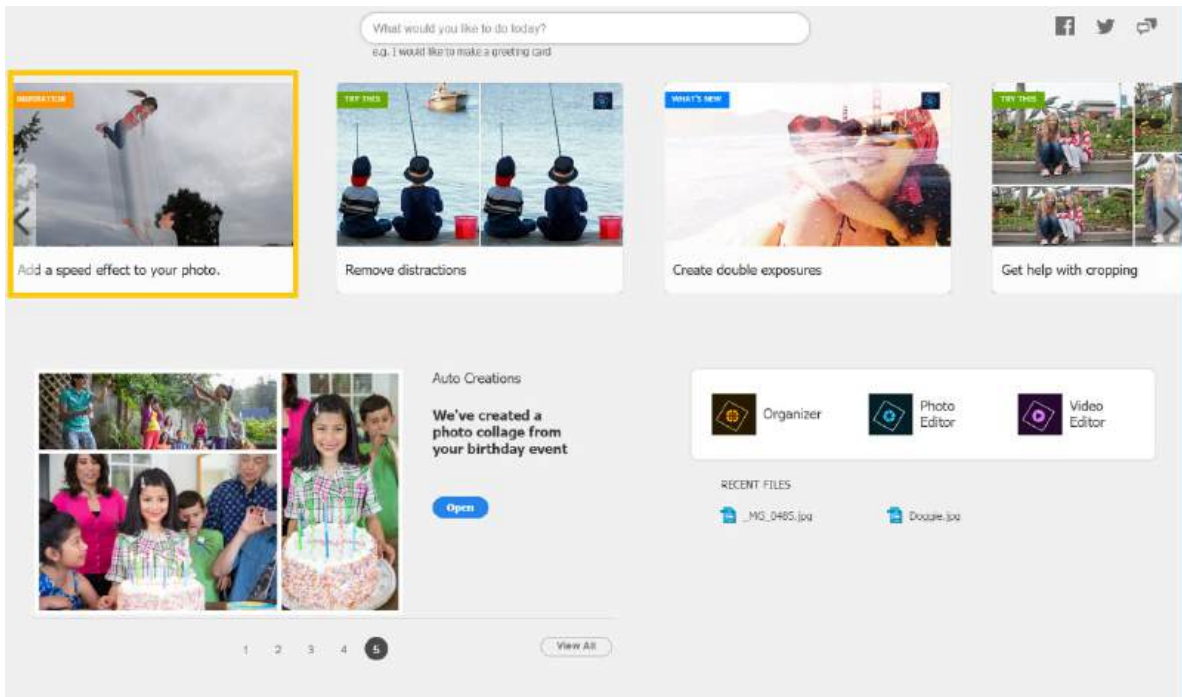
Use the arrows on the sides of the upper panel to learn about new features.

### Find out exciting features

In the carousel of cards displayed in the upper part of the Home screen, you can find cards labeled **Inspiration** with an orange tag. These cards help you to discover fun features and access resources for the same. Use the arrows on the left and right side of the carousel to view these cards. Hover over a desired Inspiration card and click **View**. You can then access relevant resources to learn about the desired feature.



## Workspace and environment

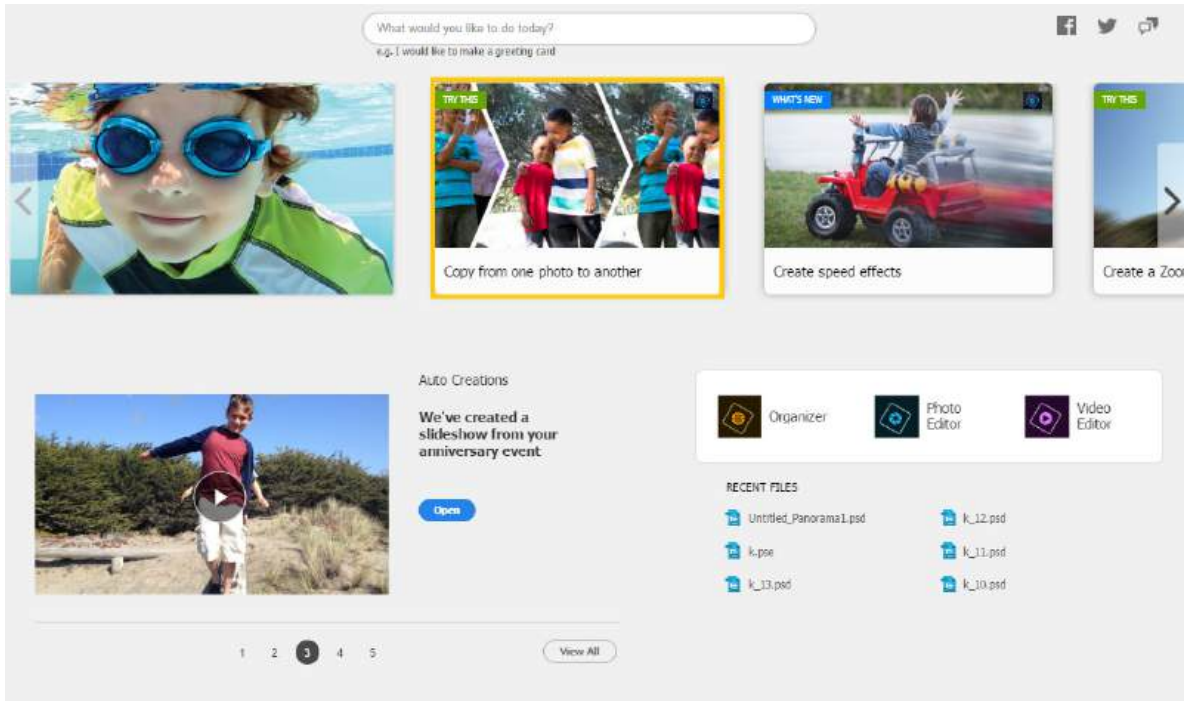


Click the Inspiration cards to learn exciting features.

## Try out exciting features

The carousel of cards displayed in the upper part of the Home screen includes **Try This** cards (with green tags). These cards help you try many exciting features. The features can range from basic to advanced and are updated based on the actions that you perform in the app. Use the arrows on the left and right side of the carousel to access the **Try this** cards. To try out a feature, hover over the feature thumbnail on the **Try this** card and click **Try**. The Elements app is then launched and an onboarding coach-mark guides you through the steps to achieve your desired result.

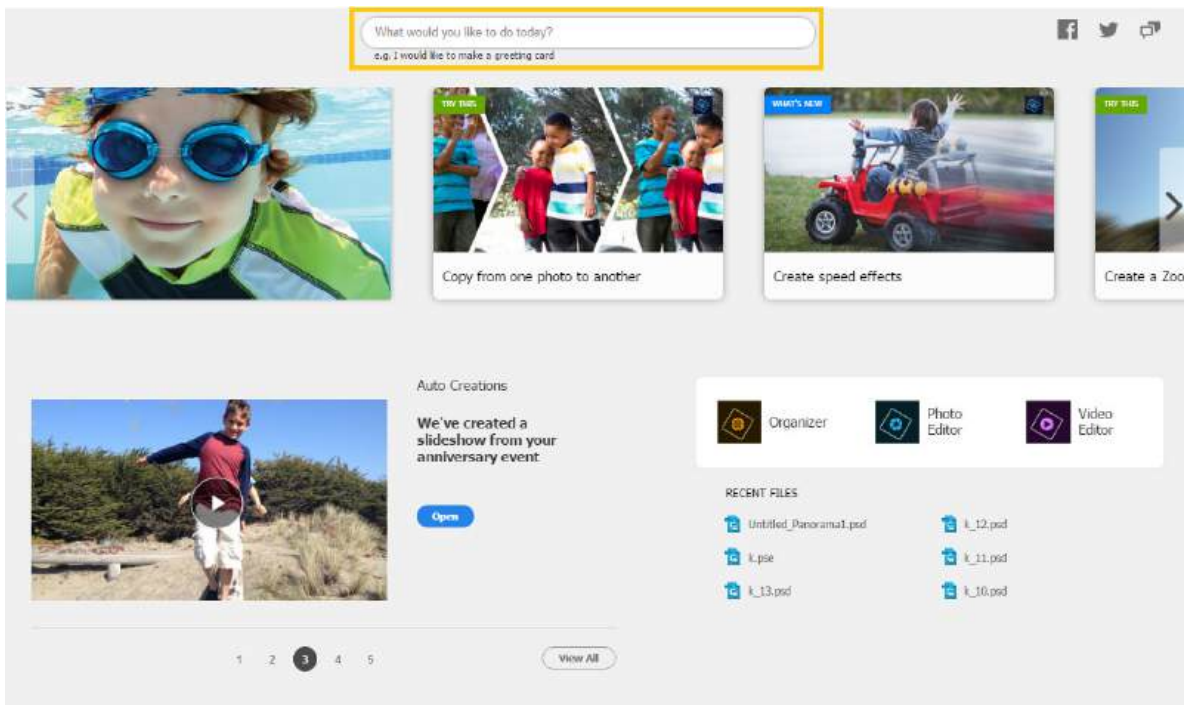
## Workspace and environment



Use the left and right arrows to find the Try This cards on the Home screen.

## Search for Help resources of features

On the Home screen, use the Search bar at the top to quickly search and find Help documentation or tutorials of your desired features. You can search projects such as slideshow, photo collage, greeting card, and more.

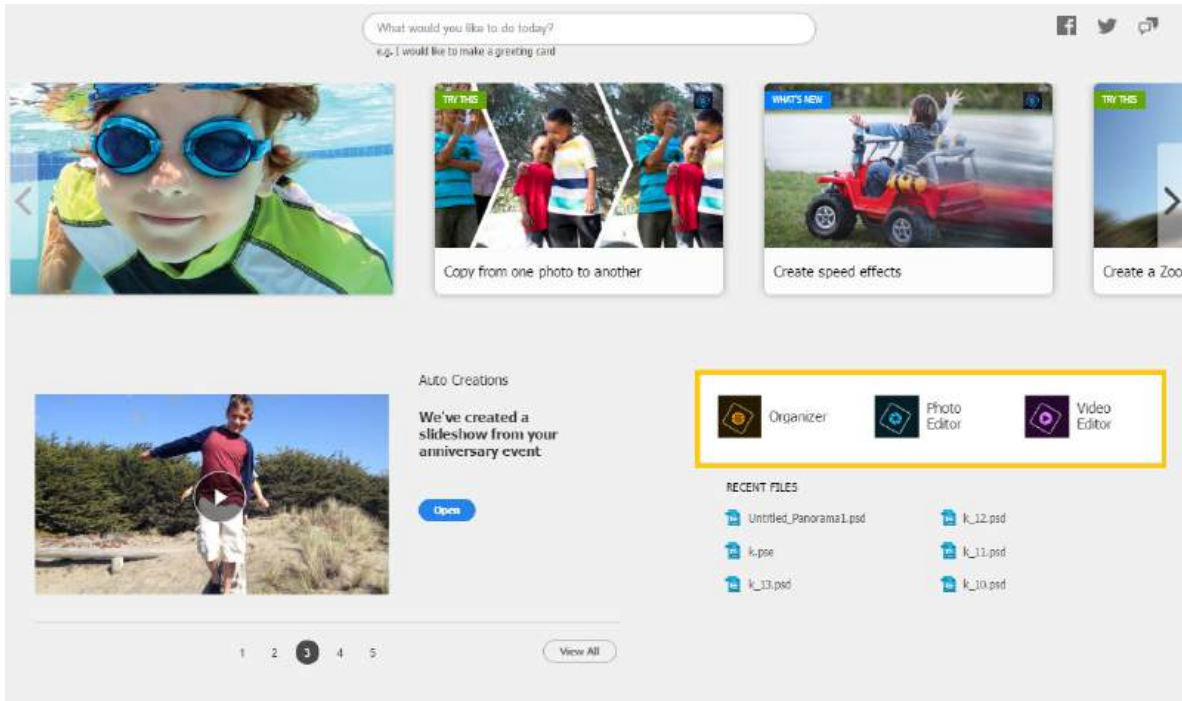


Use the Search bar to search resources for features such as slideshow, photo and video collages, and more.

## Open your desired Elements application

You can open any of the three Elements apps from the Home screen. Click the icon of the desired Elements app to open and work with it. From the Home screen, you can open the following:

- Elements Organizer (**Organizer**) to import and manage media (photos and videos) files
- Adobe Photoshop Elements (**Photo Editor**) to create and work with photo projects
- Adobe Premiere Elements (**Video Editor**) to create and work with video projects



Click an icon to easily open your favorite Elements app.

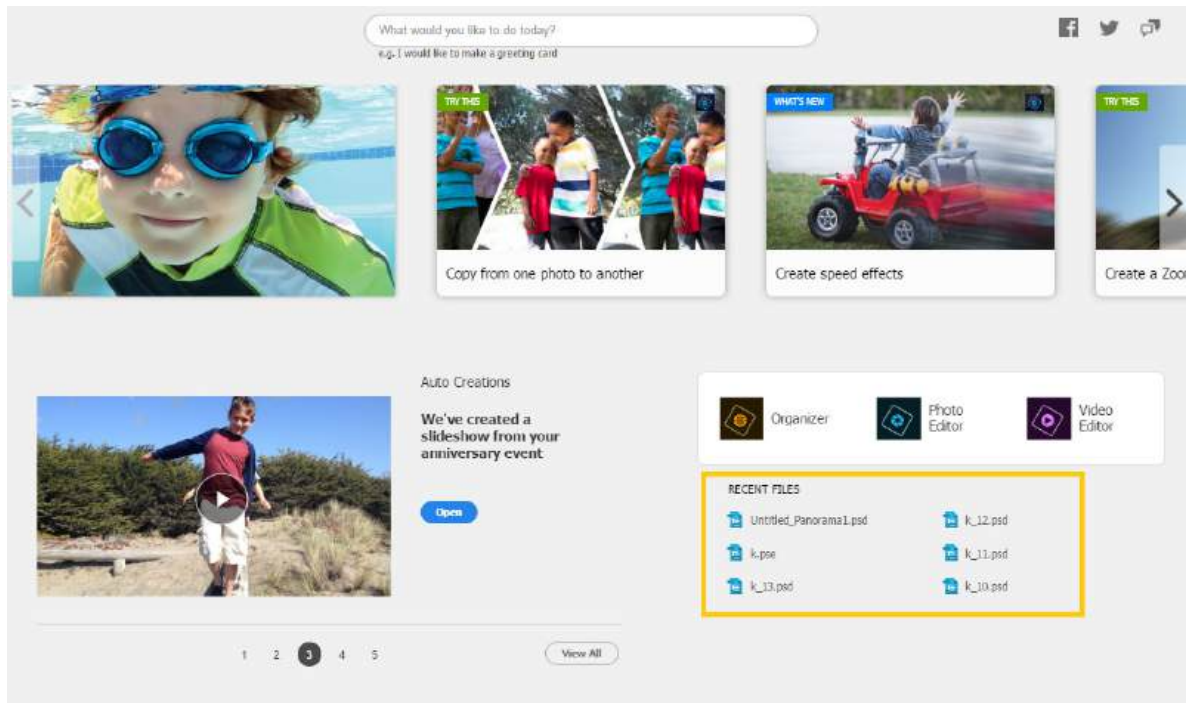
## Access recent files

You can access your project files in one of the Elements apps that you recently worked on, from the Home screen. This way you can quickly work with the project from where you left it. Elements displays up to six project files under **Recent Files** on the Home screen.

### **Note:**

*Ensure that you save your project file each time you exit the app. When you re-launch the app, you can pick it from where you left it from the Home screen.*

## Workspace and environment



## Workspace basics

The Adobe Photoshop Elements workspace presents an easy-to-use interface that helps you enhance your images--the way you want. Based on your level of expertise with Photoshop Elements, you can choose to work in Quick, Guided, or Expert modes.

**Note:**

*If you are using Photoshop Elements 2018 or earlier versions, you will also see the eLive tab. The eLive tab helps access a stream of resources right from your workspace to get creative ideas for your images and become more proficient with Adobe Photoshop Elements. For more information, see [eLive](#).*

## Home screen

When you launch Adobe Photoshop Elements, the first screen that you receive is the Home screen. On this screen, you can open your desired application, view several feature tutorials, access resources for latest features, view [Auto Creations](#), and more. For more information about the Home screen, see [Get to know the Home screen](#).

**Note:**

*If you are using Photoshop Elements 2018 or earlier versions, you will see the [The Welcome screen - 2018 and earlier releases](#).*

## The Welcome screen - 2018 and earlier releases

When you start Photoshop Elements, the Welcome screen opens by default. The Welcome screen is a convenient starting place, or hub, for major tasks.

## Workspace and environment

On the Welcome screen, click:

- Photo Editor, to enhance your images or add special effects.
  - Click the Photo Editor icon to open the editor in default mode.
  - Click the Photo Editor drop-down icon to open the editor along with one of the recently opened files, a new file, or choose a file to open.
- Organizer, to import, tag, or organize your photos.
- Video Editor, to creatively edit and create fun movies with your videos.

### Note:

*In the Windows Application Store version of Photoshop Elements, Video Editor is not available.*

- Close button (X) in the upper-right corner of the Welcome screen to close the Welcome screen. It's not necessary to return to the Welcome screen to open other workspaces—you can open different workspaces from within any other workspace.
- Settings icon (next to the Close button) to choose what application is started when you start.



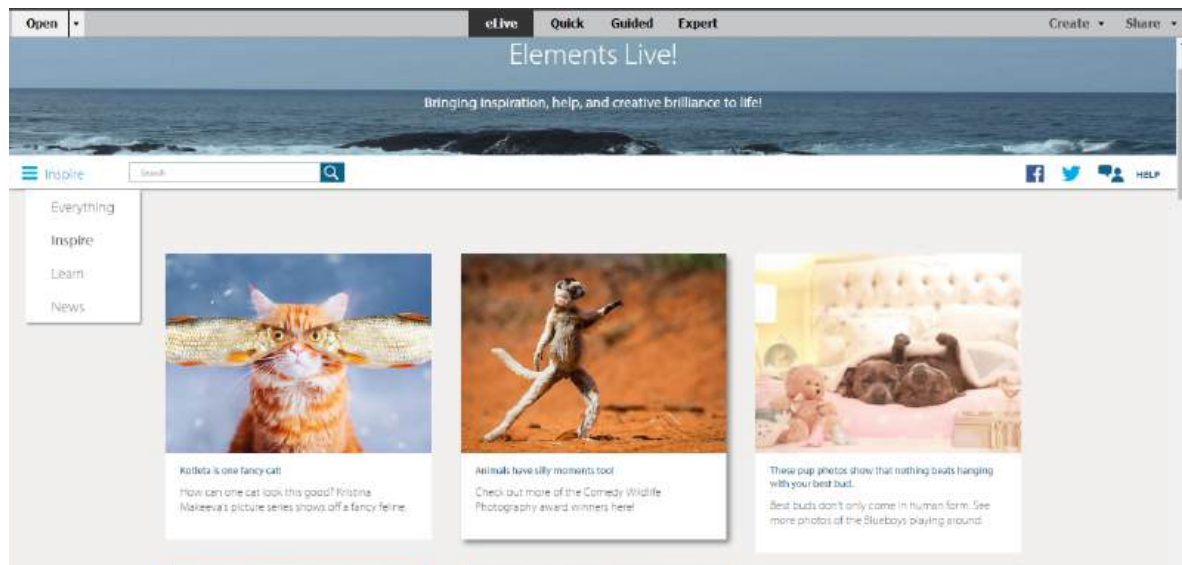
*Photoshop Elements 2018 Welcome Screen*

## Photoshop Elements window

### eLive (in 2018 and earlier releases)

Elements Live (eLive) view makes content and resources available to you right from within Photoshop Elements Editor and Organizer. The eLive view displays articles, videos, tutorials, and more - categorized into channels such as Learn, Inspire, and News. You can search for tutorials, Help pages, and troubleshooting articles within this window by simply clicking the search icon and typing your query.

## Workspace and environment



*eLive - a view to access content and resources*

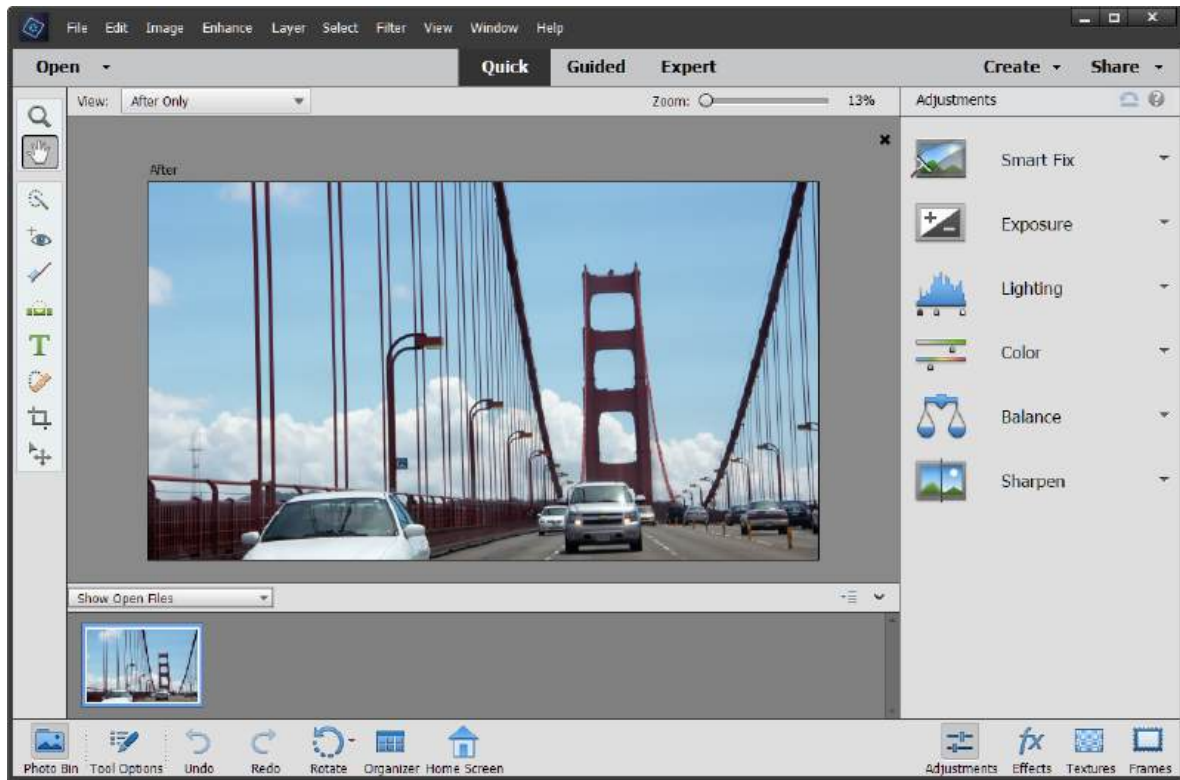
- By default, all the articles are shown.
- You can filter the articles for channels available: Learn, Inspire, News

### Quick

Enables you to edit photos in the Quick mode. Use this mode to make quick and simple edits to your photo such as fix the exposure, color, sharpness, and other aspects of an image.

For more information, see [Enhanced Quick Mode](#).

## Workspace and environment



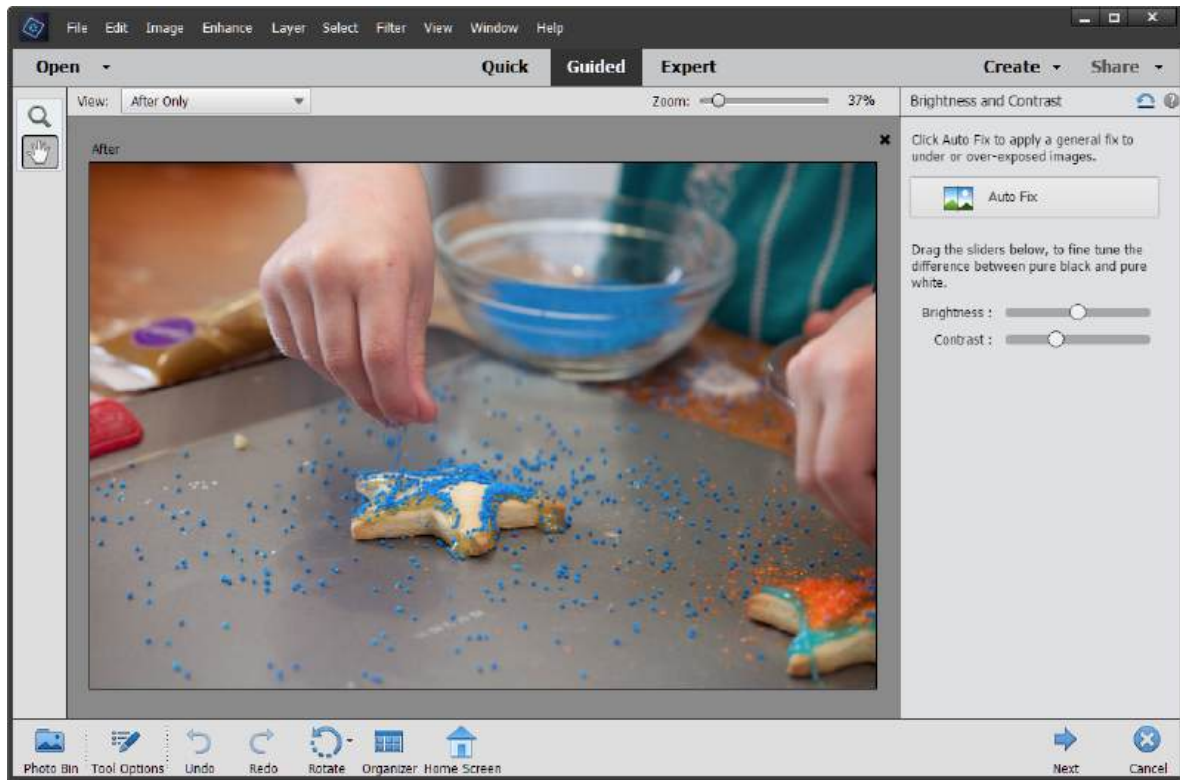
*Quick mode*

### **Guided**

Enables you to edit photos in the Guided mode.

The Guided mode is a wizard-like interface that allows you to accomplish certain predefined effects. Each guided edit has an associated image that displays the applied effect when you hover the mouse pointer on it. For more information, see [Guided mode](#).

## Workspace and environment



*Guided mode*

## Expert

Enables you to edit photos in the Expert mode.

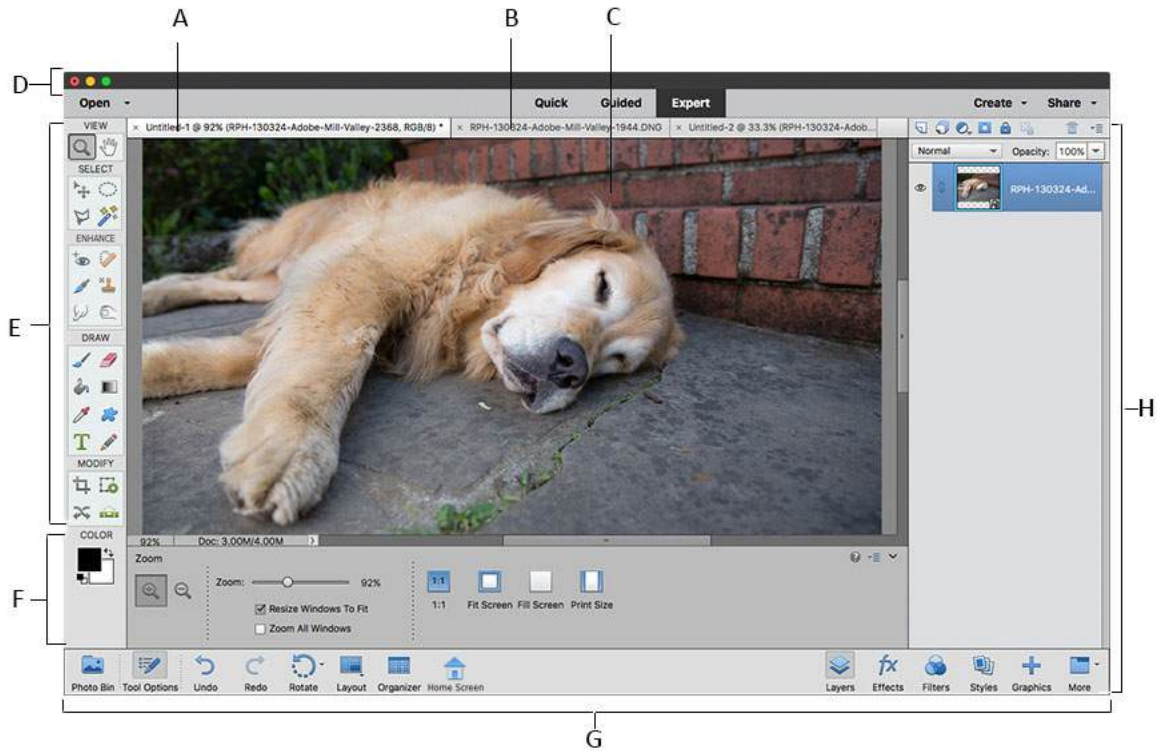
The Expert mode has tools to correct color problems, create special effects, and enhance photos. The Quick mode contains simple tools for correcting color and lighting, and commands to quickly fix common problems, such as red eye. The Guided mode contains tools for basic photo edits, guided activities, and photographic effects.

If you are new to digital imaging, Quick or Guided modes are a good place to start fixing photos.

If you have worked with image-editing applications before, you can find that the Expert mode provides a flexible and powerful image-correction environment. It has lighting and color-correction commands, along with tools for fixing image defects, making selections, adding text, and painting on your images. You can rearrange the Expert workspace to best suit your needs. You can move, hide, and show panels, and arrange panels in the Panel Bin. You can also zoom in or out of the photo, scroll to a different area of the document window, and create multiple windows and views.



## Workspace and environment



*Photoshop Elements in Expert mode*

*A Active tab B Inactive tab C Active image area D Options bar E Toolbox F Tool Options bar / Photo bin G Taskbar H Panel bar*

**Menu bar** Contains menus for performing tasks. The menus are organized by topic. For example, the Enhance menu contains commands for applying adjustments to an image.

**Mode selector** Contains buttons to enter the three available editing modes. Also, contains the Open (recently used files) drop-down and the Create (photo projects) drop-down.

**Toolbox** Holds tools for editing images.

**Panel bin** Logically grouped features, actions, or controls.

**Photo Bin / Tools Options** Toggles between Photo Bin (display and manage thumbnails of currently used photos) and Tools Options (displays and sets options for the currently selected tool)

**Taskbar** Displays the most frequently used actions as buttons, for quick and easy access.

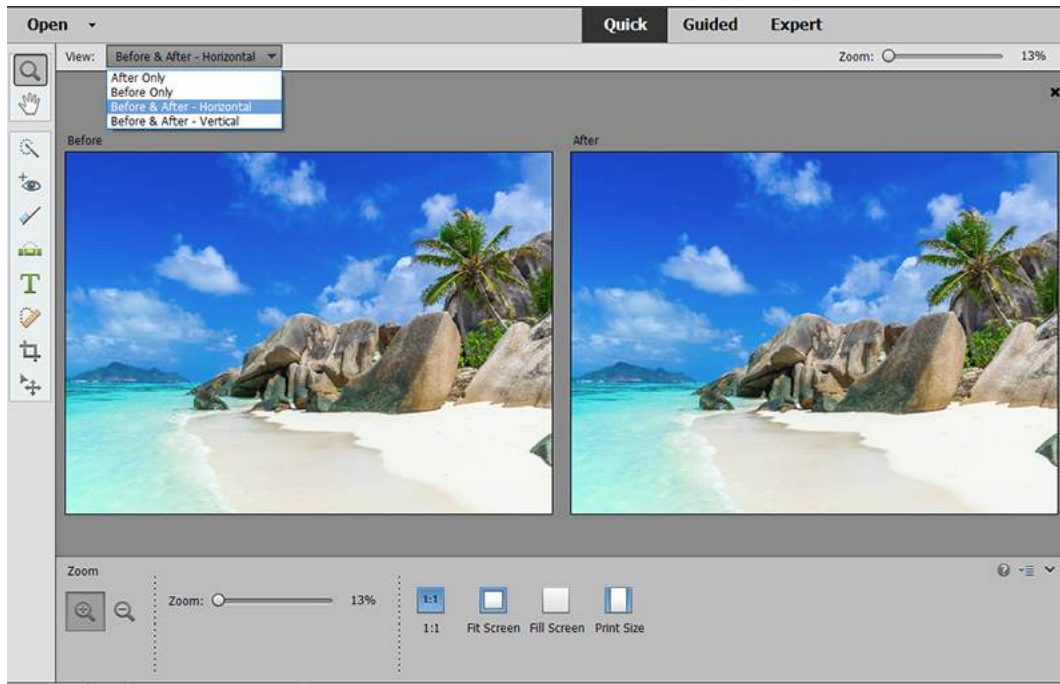
## Customize workspace

You can hide or show different parts of the workspace to suit your needs.

To hide or show the photo bin or the Tool Options, toggle the respective icons at the bottom of the screen.

To work split-screen with the original photo on one side, and the edited photo on the other, use **Quick** mode, and then select one of the different **View** options.

## Workspace and environment



Viewing the original photo and the edited photo at the same time

### Note:

The ability to work split-screen with the original photo and the edited photo in view is available only in **Quick** mode.

## Use context menus

You can use context menus in both the Photo Editor and Organizer workspaces. Context-sensitive menus display commands that are relevant to the active tool, selection, or panel. These menus are often another way to access the commands in the main menus.

- 1 Position the pointer over an image or panel item.

### Note:

*Not all panels offer context menus.*

- 2 Right-click and choose a command from the menu.

## Use keyboard commands and modifier keys

You can use keyboard shortcuts in both the Photo Editor and Organizer workspaces. Keyboard commands let you quickly execute commands without using a menu; modifier keys let you alter how a tool operates. When available, the keyboard command appears to the right of the command name in the menu.

For a list of keyboard shortcuts categorized by modes and tools, see [Keys for selecting tools](#).

## Save photos and include in Elements Organizer

To save any changes in an image, and have it show up in Elements Organizer, simply save the image.

## Workspace and environment

In the Save dialog box that opens, select the **Include in the Elements Organizer** checkbox. You can then see the image in Elements Organizer.

## Exit Photoshop Elements

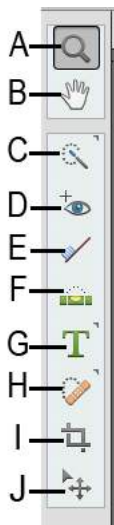
To exit Photoshop Elements, close both the Photo Editor and Organizer workspaces—closing one does not automatically close the other.

- From any workspace, do one of the following:
  - In Windows, choose **File > Exit** (Ctrl + Q). In Mac, choose **Photoshop Elements > Quit Photoshop Elements** (Cmd + Q).
  - Click the Close button (X) in the upper-right corner of the workspace.
- When closing Photoshop Elements, choose whether to save any open files that you have modified.

## Tools

### Toolbox in the Quick mode

The toolbox in the Quick mode contains a small set of easy-to-use tools. The tools available in this mode are Zoom, Hand, Quick Selection, Eye, Whiten Teeth, Straighten, Type, Spot Healing Brush, Crop, and Move.



*Quick mode toolbox*

*A Zoom tool B Hand tool C Quick Selection tool D Eye tool E Whiten Teeth tool F Straighten tool G Type tool H Spot Healing Brush tool I Crop tool J Move tool*

### Toolbox in the Expert mode

In the Expert mode, the toolbox is richer than the toolbox in the Quick mode. The tools are organized in the following logical groups:

- View

## Workspace and environment

- Select
- Enhance
- Draw
- Modify

### Toolbox overview



### Expert mode toolbox

A View tools B Select tools C Enhance tools D Draw tools E Modify tools F Color

### Tools in the View group of the Expert mode toolbox

**Zoom tool (Z)** Zooms in or zooms out your image. The related tools shown in the Tool Options bar are Zoom In and Zoom Out. For more information about the Zoom tool, see [Zoom in or out](#).

**Hand tool (H)** Moves your photo in the Photoshop Elements workspace. You can drag your image using this tool. For more information, see [Viewing images in Expert or Quick modes](#).

### Tools in the Select group of the Expert mode toolbox

**Move tool (V)** Moves selections or layers. For more information, see [Move a selection](#).

**Rectangular Marquee tool (M)** Selects an area in your image in a rectangular box. Hold the Shift key to make the selection a square.

**Elliptical Marquee tool (M)** Selects an area in your image in an elliptical shape. Hold the Shift key to make the selection a circle.

**Lasso tool (L)** Selects an area in your image in a free-form shape.

**Magnetic Lasso tool (L)** Selects part of an image by selecting the high-contrast edges around a shape.

**Polygonal Lasso tool (L)** Draws straight-edged segments of a selection border.

**Quick Selection tool (A)** Makes a selection based on color and texture similarity when you click or click-drag the area you want to select.

**Selection Brush tool (A)** Selects the area where you paint with the brush.

**Magic Wand tool (A)** Selects the pixels with similar colors in a single click.

## Workspace and environment

**Refine Selection Brush tool (A)** Adds or removes areas to and from a selection by automatically detecting the edges. For more information on this tool, see [Edit and refine selections](#).

**Auto Selection tool (A)** Automatically makes a selection when you draw a shape around the object you want to select. For more information on selection, see [Make selections in Photoshop Elements](#).

## Tools in the Enhance group of the Expert mode toolbox

**Eye tool (Y)** Removes the red eye effect, pet eye effect, and corrects closed eyes in your photos. For more information about the tool, see [Precisely remove red eye](#), [Remove the Pet Eye effect](#), and [Correct closed eyes](#).

**Spot Healing Brush tool (J)** Removes spots from your photos. For more information about this tool, see [Remove spots and unwanted objects](#).

**Healing Brush tool (J)** Removes spots from your photo by selecting a part of your photo as the reference point.

**Smart Brush tool (F)** Applies tonal and color adjustments to specific areas of a photo.

**Detail Smart Brush tool (F)** Paints the adjustment to specific areas of a photo just like a painting tool.

For more information about Smart brushes, see [Adjust color and tonality using the Smart Brush tools](#) and [Apply the Smart Brush tools](#).

**Clone Stamp tool (S)** Paints with an image sample, which you can use to duplicate objects, remove image imperfections, or paint over objects in your photo. You can also clone part of an image to another image. For more information, see [Clone images or areas in an image](#).

**Pattern Stamp tool (S)** Paints with a pattern defined from your image, another image, or a preset pattern. For more information, see [Use the Pattern Stamp tool](#).

**Blur tool (R)** Softens hard edges or areas in an image by reducing details. For more information, see [Blur or soften edges](#).

**Sharpen tool (R)** Sharpens a photo by focusing soft edges in the photo to increase clarity or focus. For more information on sharpening, see [Sharpen an image](#).

**Smudge tool (R)** Simulates the actions of dragging a finger through wet paint. The tool picks up color where the stroke begins and pushes it in the direction you drag. For more information on the tool, see [Use the Smudge tool](#).

**Sponge tool (O)** Changes the color saturation of an area. For more information on how to use the tool, see [Adjust saturation in isolated areas](#).

**Dodge tool (O)** Lightens areas of an image. You can use the tool to bring out details in shadows. For more information on the Dodge tool, see [Quickly lighten or darken isolated areas](#).

**Burn tool (O)** Darkens areas of the image. You can use the tool to bring out details in highlights. For more information on the Burn tool, see [Quickly lighten or darken isolated areas](#).

## Tools in the Draw group of the Expert mode toolbox

**Brush tool (B)** Creates soft or hard strokes of color. You can use it to simulate airbrush techniques. For more information about the tool, see [Use the Brush tool](#).

**Impressionist Brush tool (B)** Changes the existing colors and details in your image so your photo looks like it was painted using stylized brush strokes. For more information about the tool, see [Use the Impressionist Brush tool](#).

**Color Replacement tool (B)** Simplifies replacing specific colors in your image. For more information about the tool, see [Replace colors in an image](#).

## Workspace and environment

**Eraser tool (E)** Erases the pixels in the image as you drag through them. For more information about the tool, see [Use the Eraser tool](#).

**Background Eraser tool (E)** Turns color pixels to transparent pixels so that you can easily remove an object from its background. For more information about the tool, see [Use the Background Eraser tool](#).

**Magic Eraser tool (E)** Changes all similar pixels when you drag within a photo. For more information, see [Use the Magic Eraser tool](#).

**Paint Bucket tool (K)** Fills an area that is similar in color value to the pixels you click. For more information about the tool, see [Use the Paint Bucket tool](#).

**Pattern tool (K)** Applies a fill or a pattern to your image, instead of using one of the brush tools. For more information, see [Fill a layer with a color or pattern](#).

**Gradient tool (G)** Fills in an area of image by a gradient. For more information, see [Apply a gradient](#).

**Color Picker tool (I)** Copies or samples the color of an area in your photo to set a new foreground or background color. For more information about the tool, see [Choose a color with the Eyedropper tool](#).

**Custom Shape tool (U)** Provides different shape options for you to draw. When you select the Custom Shape tool, you can access these shapes in the Tool Options bar.

The other shape-related tools available in the Tool Options bar are:

- Rectangle
- Rounded Rectangle
- Ellipse
- Polygon
- Star
- Line
- Selection

For more information about creating shapes, see [Create shapes](#).

**Type tool (T)** Creates and edits text on your image.

The other type-related tools available in the Tool Options bar are:

- Vertical Type
- Horizontal Type Mask
- Vertical Type Mask
- Text on Selection
- Text on Shape
- Text on Custom Path

For more information about adding and editing text on your image, see [Add text](#).

**Pencil tool (N)** Creates hard-edged freehand lines. For more information, see [Use the Pencil tool](#).

## Tools in the Modify group of the Expert mode toolbox

**Crop tool (C)** Trims the part of an image according to the selection. For more information about the tool, see [Crop an image](#).

## Workspace and environment

**Cookie Cutter tool (C)** Crops a photo into a shape that you choose. For more information about the tool, see [Use the Cookie Cutter tool](#).

**Perspective Crop tool (C)** Transforms the perspective of a picture while cropping it. For more information about the tool, see [Perspective Crop tool](#).

**Recompose tool (W)** Intelligently resizes photos without changing important visual content, such as people, building, animals, and more. For more information, see [Recompose a photo in Expert mode](#). For a step-by-step, guided method to recompose, see [Recompose a photo in Guided mode](#).

**Content-Aware Move tool (Q)** Selects an object in your photo and moves the selection to a different location, or extends it. For more information about the tool, see [Move and reposition objects](#).

**Straighten tool (P)** Realigns an image vertically or horizontally. For more information about the tool, see [Straighten an image](#).

## Use a tool

To use a tool in the Quick or Expert mode, first select the tool from the toolbox. Next, use the various options in the Tool Options bar to accomplish your task.

### Select a tool

Do one of the following:

- Click a tool in the toolbox.
- Press the keyboard shortcut for the tool. For example, press B to select the Brush tool. The keyboard shortcut for a tool is displayed in the tool tip. You can also find a list of helpful keyboard shortcuts in [Keys for selecting tools](#).

#### Note:

*You cannot deselect a tool—once you select a tool, it remains selected until you select a different tool. For example, if you've selected the Lasso tool, and you want to click your image without selecting anything, select the Hand tool.*

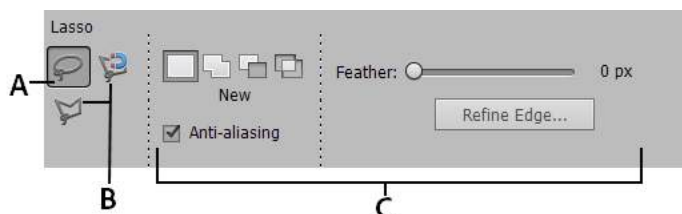
### Select options from the Tool Options bar

The Tool Options bar appears at the bottom in the Photoshop Elements window. It displays the options for a selected tool. For example, if you select the Crop tool from the toolbox, you find related tools (Cookie Cutter tool and Perspective Crop tool), and other options in the Tool Options bar.

[Click here](#) to watch a video on how to use the Crop tool. The video explains the options available in the Tool Options bar for the Crop tool.

#### Note:

*If the Tool Options bar is not visible, click the tool icon in the toolbox or click **Tool Options** in the Taskbar.*



*Tool Options bar for the Lasso tool  
A Active tool icon B Related tools C Additional options*

## Edit tool preferences

You can modify the default preferences for tools. For example, you can hide the tool tips or change the appearance of a tool pointer.

### Edit General preferences

1 Do one of the following:

- In Windows, choose **Edit > Preferences > General**.
- In Mac, choose **Photoshop Elements > Preferences > General**.

Set one or more of the following options:

- Select **Show Tool Tips** to show tool tips.
- Select **Use Shift Key for Tool Switch** to cycle through a set of hidden tools by holding down the *Shift* key. When this option is deselected, you can cycle through a set of tool options by pressing the keyboard shortcut (without holding down *Shift*). For example, pressing *B* on your keyboard repeatedly cycles through all the Brush tool options (Brush, Impressionist Brush, and Color Replacement tools).
- Select **Select Move tool After Committing Text** to select the Move tool after you use the Type tool to add text to your photo.

2 Click **OK**.

### Set the appearance of a pointer

1 Do one of the following:

- In Windows, choose **Edit > Preferences > Display & Cursors**.
- In Mac, choose **Photoshop Elements > Preferences > Display & Cursors**.

2 Select a setting for the painting cursors:

- **Standard** Displays pointers as tool icons
- **Precise** Displays pointers as cross-hairs
- **Normal Brush Tip** Displays pointers as circles at 50% of the size you specify for the brush
- **Full Size Brush Tip** Displays pointers as circles at the full size you specify for the brush
- **Show Crosshair In Brush Tip** Displays cross-hairs in the circles when you choose either **Normal Brush Tip** or **Full Size Brush Tip**

3 Select a setting for **other cursors**:

- **Standard** Displays pointers as tool icons
- **Precise** Displays pointers as cross-hairs

4 Click **OK**.

### Resize or change the hardness of painting cursors by dragging (Windows only)

You can resize or change the hardness of a painting cursor by dragging in the image. As you drag, you preview both the size and hardness of the painting tool.

- To resize a cursor, right-click + press **Alt**, and drag to the left or right.
- To change the hardness of a cursor, right-click + press **Alt**, and drag up or down.




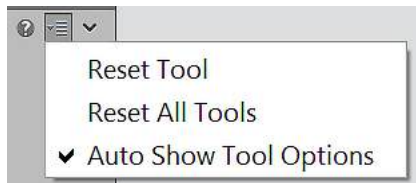
## Reset tool settings to default

You can restore the default settings of a selected tool or all tools.

- 1 Select a tool from the toolbox.

Alternatively, press keyboard shortcut for the tool.

- 2 Click  to open the pop-up menu in the Tool Options bar and do one of the following:
  - To reset the selected tool, click **Reset Tool**.
  - To reset all the tools, click **Reset All Tools**.

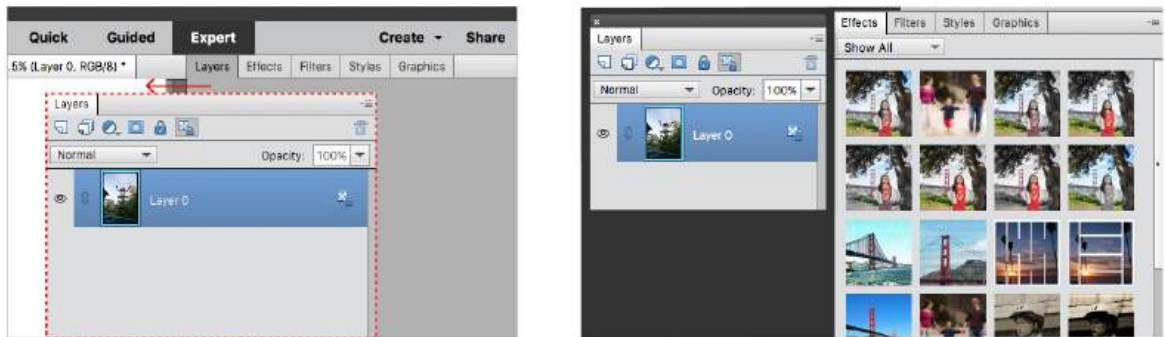
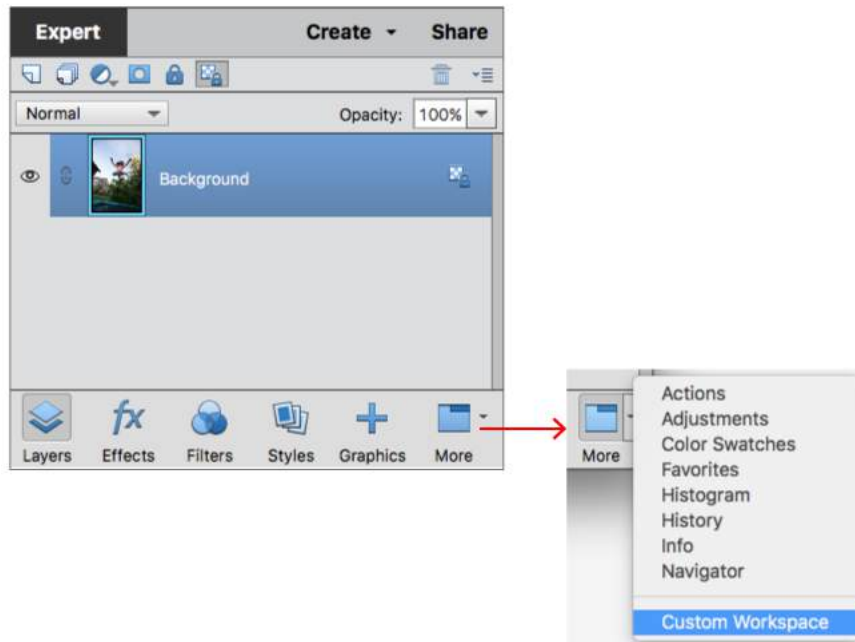


## Panels and bins

### About panels

Panels are available in both Photoshop Elements and Elements Organizer; however, they behave a little differently in each. Panels help you manage, monitor, and modify images. Some panels have menus that provide additional commands and options. You can organize panels in the basic and custom workspaces in Expert mode. You can store panels in the Panel Bin to keep them out of your way, but easily accessible.

## Workspace and environment



*Dragging a panel.*

### Panel menus

Some commands appear in both the panel menu and the menu bar. Other commands are exclusive to panel menus. Click panel menu to view the different commands in each panel.

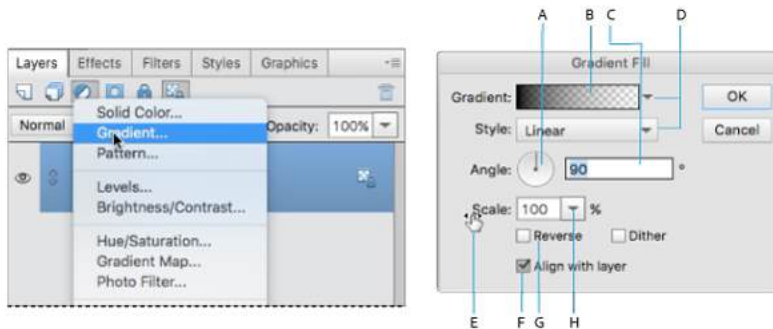
### Pop-up sliders within panels

Some panels and dialog boxes contain settings that use pop-up sliders (for example, the Opacity option in the Layers panel). If there is a triangle next to the text box, you can activate the pop-up slider by clicking the triangle. Position the pointer over the triangle next to the setting, hold down the mouse button, and drag the slider or angle radius to the desired value. Click outside the slider box or press Enter to close the slider box. To cancel changes, press Esc.



## Workspace and environment

To increase or decrease values in 10% increments when the pop-up slider box is open, hold down Shift and press the Up or Down arrow keys.



Different ways to enter values

A Dial B Click to open window C Text box D Menu arrow E Scrubby slider F Check box G Hotkey H Pop-up slider triangle

## Work with panels

Panels contain features, information, or functionality, in logical groups, for fast and easy access. The Panel Bin is on the right side of Photoshop Elements. It displays tabs and panels, depending on the mode you are in, or the kind of elements you want to work with. The Panel Bin displays:

- Quick mode: lists the quick-mode effects that can be applied to a photo
- Guided mode: lists all the guided-mode edits that you can apply to a photo
- Expert mode: lists the options for a selected panel (Layers, Effects, Graphics, or Favorites)

## Panels in the Expert mode

In the Expert mode, panels can be displayed in two ways - Basic Workspace, and Custom Workspace.

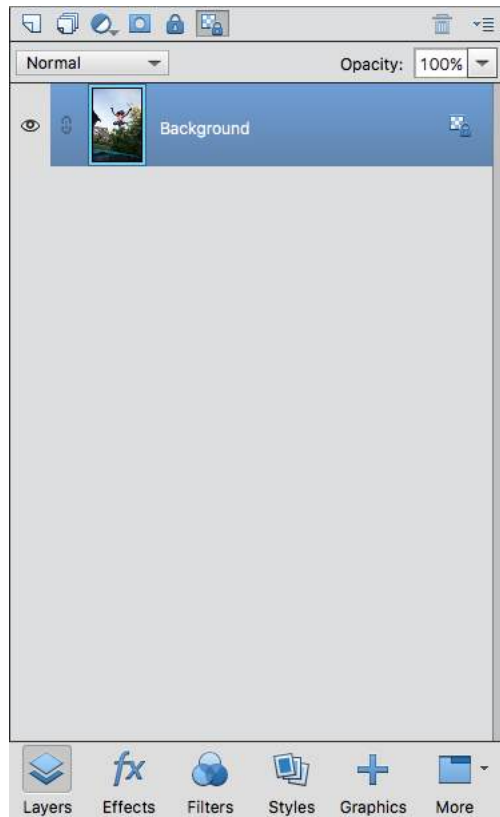
**Basic Workspace** By default, the available workspace displayed is the Basic Workspace. In this view, buttons for the most frequently used panels are placed in the taskbar. The buttons in this workspace are Layers, Effects, Graphics, and Favorites. For example, clicking the Layers button displays all the layers-related options. To view all the other available tabs, or close open tabs, click More.

**Custom Workspace** To view panels in a tabbed layout in the Panel Bin, click the arrow next to More, and select Custom Workspace. Click More to view a list of all the available tabs, and select one from the pop-up list. The selected tab is displayed. You can keep the frequently used panels open in the custom workspace. Group panels together or dock one panel at the bottom of another panel. You can drag title bar of the tab and drop it in the tabbed layout, or drag-and-drop the tabs dialog into the tabbed layout.

**Note:**

*Drag a panel out of the Panel Bin if you want to remove it from the Panel Bin and keep it open.*


## Workspace and environment



*The Panel Bin*

- 1 To show or hide the Panel Bin, Choose Window > Panel Bin.
- 2 In the Panel Bin (Custom Workspace),
  - To remove a panel from the Panel Bin, drag the title bar of the panel out of the Panel Bin.
  - To add a panel to the Panel Bin, drag the title bar of the panel into the Panel Bin.
  - To rearrange panels in the Panel Bin, drag the title bar of the panel to a new location.
  - To expand or collapse panels in the Panel Bin, double-click the name of the panel.

## Workspace and environment

- 3 To use panels outside the Panel Bin, in Custom Workspace view, do any of the following:
- To open a panel, choose the name of the panel from the Window menu, or click the arrow next to the More button in the taskbar and select a panel.
  - To close a panel, choose the name of the panel from the Window menu. Or click the Close button  in the title bar of the panel.
  - To change the size of a panel, drag any corner of the panel.
  - To group panels (one panel with multiple tabs), drag the panel onto the body of the target panel. A thick line appears around the body of the target panel when the pointer is over the correct area for grouping to occur. If you want to move a panel to another group, drag the tab of the panel to that group. To separate a panel from a group, drag the tab of the panel outside the group.
  - To move a panel group, drag the title bar.
  - To expand or collapse a panel or panel group, double-click the tab of the panel or title bar.
  - To dock panels together (stacked panels), drag a tab of the panel or the title bar to the bottom of another panel. A double line appears at the bottom of the target panel when the pointer is over the correct area.
  - To reset panels to their default positions, choose Window > Reset Panels.

## Use the taskbar

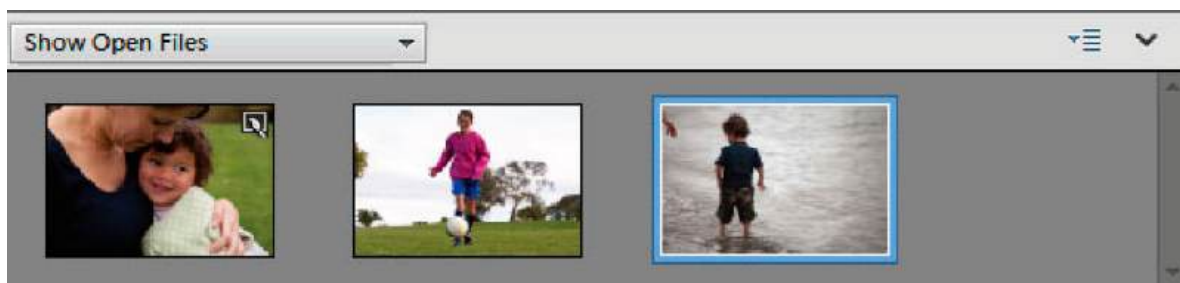


### Taskbar

At the bottom of the Photoshop Elements, the taskbar displays buttons for the most frequently used panels and operations performed while editing and modifying images. You can use the Photo Bin and Tool Options buttons to toggle between displaying thumbnails and tool options. You can quickly undo and redo operations, rotate images, or change the layout. You can also click the Organizer button to start Photoshop Elements Organizer. The Home Screen button give you access to the home screen. In the Expert mode, click the arrow beside the More button, to see the option to toggle between Basic and Custom workspaces.

## Use the Photo Bin

Located toward the bottom of the Photoshop Elements window, above the taskbar, the Photo Bin displays thumbnails of open photos. It's useful for switching between multiple open photos in your workspace. The Photo Bin has controls that let you open or close images, hide images, navigate through open images, make a specific image the frontmost image, duplicate an image, rotate an image, or view file information. You can easily bring open images into Quick mode for editing. Multipage projects created using the Create tab open in the Create panel.



The Photo Bin

? Do any of the following:

- (Windows only) To open an image, drag a file from any location on your computer (including the Photo Browser) or from any storage device connected to your computer into the Photo Bin.
- To bring an opened image forward as the frontmost image, click a thumbnail.
- To rearrange photos, drag thumbnails in the Photo Bin. The order here does not impact the photo's order in the Elements Organizer.
- To close an image, right-click a thumbnail in the Photo Bin and choose Close.
- To hide an image that is in a floating window, right-click the thumbnail and choose Minimize from the context menu.

**Note:**

*To show an image after hiding it, double-click its thumbnail in the Photo Bin, or right-click the thumbnail and choose Restore from the context menu.*

- To view a photo's file information, right-click a thumbnail and choose File Info from the context menu.
- To duplicate an image, right-click a thumbnail, choose Duplicate from the context menu, and name the file.
- To rotate an image, right-click a thumbnail and choose Rotate 90° Left or Rotate 90° Right from the context menu.
- To show filenames, right-click in the Photo Bin and choose Show Filenames from the context menu.
- To manually show or hide the bin, click the Photo Bin taskbar icon.
- The flyout menu of the Photo Bin contains additional options to work with the images that are available in the Photo Bin:
  - Print Bin Files. Opens the Photoshop Elements Print dialog box, with options to print the photos currently selected in the Photo Bin.
  - Save Bin as an Album. Enables you to name and save an album containing the images in the Photo Bin. The new album is available in Organizer.
  - Show Grid. Displays a grid around images in the Photo bin.

## Open files

Working in the Edit workspace of Photoshop Elements gives you choices about working with your files. You can set options for opening, saving, and exporting files by type, by file size, and resolution. You can also process and save camera raw files. These tools make it easy to combine files of different types and optimize them in Adobe Photoshop Elements.

In the Edit workspace, you can create a blank file, open a recently used file, specify which files types to open in Photoshop Elements, and more.

An additional option for working in the Edit workspace is to use the Guided Edit feature. Guided Edits helps you when you're unsure of a workflow or how to accomplish a task. They empower users to complete complex editing workflows in a small number of easy steps.

### Create a new blank file

You may want to create a web graphic, banner, or company logo and letterhead, in which case you need to start from a new blank file.

- 1 Choose File > New > Blank File.
- 2 Enter options for the new image and click OK.

**Name** Names the new image file.

**Preset** Provides options for setting the width, height, and resolution of images that you intend to print or to view on-screen. Select Clipboard to use the size and resolution of data that you copied to the clipboard. You can also base a new image on the size and resolution of any open image by choosing its name from the bottom of the Preset menu.

**Size** Choose from a list of standard sizes available for the selected preset.

**Width, Height, and Resolution** Sets these options individually. The default values are based on the last image you created, unless you've copied data to the clipboard.

**Color Mode** Sets an image to RGB color, grayscale, or bitmap (1-bit mode).

**Background Contents** Sets the color of the image Background layer. White is the default. Select Background Color to use the current background color (shown in the toolbox). Select Transparent to make the default layer transparent, with no color values—the new image will have a Layer 1 instead of a Background layer.



*You can also right-click the background of an image to choose a background color (gray, black, or a custom color).*

### Open a file

You can open and import images in various file formats. The available formats appear in the Open dialog box, the Open As dialog box, and the Import submenu.



*To open a file from Elements Organizer, select it, click Editor in the task bar.*

- 1 Do one of the following
  - Choose File > Open. Locate and select the file you want to open. If the file does not appear, choose All Formats from the Files Of Type menu. Click Open.

## Workspace and environment

- Click the Open drop-down (above the tool box). The Open drop-down is a list of recently opened files.
  - Drag an image from a folder on your computer or storage device, and drop it in the Editor.
- 2 In the dialog box that appears, set format-specific options, and continue opening the file.

There may be instances when Photoshop Elements cannot determine the correct format of a file. For example, transferring a file between Mac OS® and Windows can cause the format to be mislabeled. In such cases, you must specify the correct format in which to open the file.

## Open a file in an Application Frame (Mac OS)

- 1 Drag a file from any location on your computer into the Application Frame. You can also drag photos from the Photo Browser and any storage device connected to your computer.
- 2 To drag additional images into the Application Frame to open them, enable floating document windows (see [View and arrange multiple windows](#)). Convert open images into floating document windows to view the Application Frame.

## Open a recently edited file

- ? Choose File > Open Recently Edited File, and select a file from the submenu.

### Note:

To specify the number of files that are available in the Open Recently Edited File submenu, choose Edit > Preferences > Saving Files, and enter a number in the Recent File List Contains text box.

## Specify the file format in which to open a file

- ? Choose File > Open As, and select the file you want to open. Then choose the desired format from the Open As menu, and click Open.

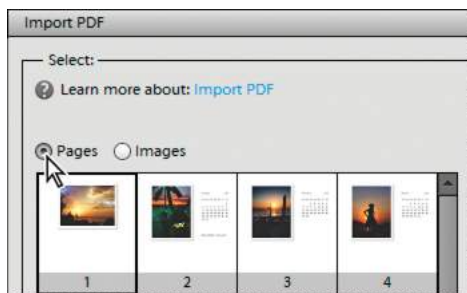
### Note:

If the file does not open, then the chosen format may not match the file's true format, or the file may be damaged.

## Open a PDF file

Portable Document Format (PDF) is a versatile file format that can represent both vector and bitmap data and can contain electronic document search and navigation features. PDF is the primary format for Adobe® Acrobat®.

With the Import PDF dialog box, you can preview the pages and images in a multipage PDF file, then decide if you want to open them in the Photoshop Editor. You can choose to import full pages (including text and graphics), or you can import just the images from a PDF file. If you import only the images, the resolution, size, and color mode of the images remains unchanged. If you import pages, you can change the resolution and color mode.



Importing pages from a PDF file



## Workspace and environment

Each page is shown as a thumbnail. To increase the size, choose an option from the Thumbnail Size menu.

- 1 Choose File > Open.
- 2 Select a PDF file, and click Open. You can change which types of files are shown by selecting an option from the Files Of Type menu.
- 3 To import just the images from a PDF file, choose the Images option from the Select area, in the Import PDF dialog box. Select the image or images you want to open. (To select multiple images, hold Ctrl (Windows) or Command (Mac OS) and click each image). If you do not want to import pages, skip to step 5.
- 4 To import pages from a PDF file, choose the Pages option from the Select area in the Import PDF dialog box, and then do any of the following:
  - If the file contains multiple pages, select the page or pages you want to open, and click OK. (To select multiple pages, press Ctrl (Windows) or Command (Mac OS) and click each page.)
  - Under Page Options, accept the existing name, or type a new filename in the Name box.
  - Select Anti-aliased to minimize the jagged edges as the image is rasterized (bitmapped).
  - Specify the Width and Height. Enable Constrain Proportions to avoid image distortion due to change in size.
  - For Resolution, accept the default (300 ppi) or type a new value. A higher resolution increases the file size.
  - Choose an option from the Mode menu (RGB to keep the photos in color, or Grayscale to automatically make them black and white). If the file has an embedded ICC (International Color Consortium) profile, you can choose the profile from the menu.
- 5 Select Suppress Warnings to hide any error messages during the import process.
- 6 Click OK to open the file.

## Place a PDF file in a new layer


You can place pages or images from PDF files into a new layer in an image. Because the placed artwork is rasterized (bitmapped), you cannot edit text or vector data in placed artwork. The artwork is rasterized at the resolution of the file into which it is placed.

- 1 In Photoshop Elements, open the image into which you want to place the artwork.
- 2 Choose File > Place, select the file you want to place, and click Place.
- 3 If you are placing a PDF file that contains multiple pages, select the page you want to place from the provided dialog box, and click OK.

The placed artwork appears inside a bounding box at the center of the Photoshop Elements image. The artwork maintains its original aspect ratio; however, if the artwork is larger than the Photoshop Elements image, it is resized to fit.

- 4 (Optional) Reposition the placed artwork by positioning the pointer inside the bounding box of the placed artwork and dragging.
- 5 (Optional) Scale the placed artwork by doing one or more of the following:
  - Drag one of the handles at the corners or sides of the bounding box.
  - In the Tool Options bar, enter values for W and H to specify the width and height of the artwork. By default, these options represent scale as a percentage. However, you can enter a different unit of measurement—in (inches), cm (centimeters), or px (pixels). To constrain the proportions of the artwork, click the Constrain Proportions box. This option is on when the icon has a white background.

## Workspace and environment

- 6 (Optional) Rotate the placed artwork by doing one of the following:
  - Position the pointer outside the bounding box of the placed artwork (the pointer turns into a curved arrow), and drag.
  - In the Tool Options bar, click and drag the pointer in the Angle option.
- 7 (Optional) Skew the placed artwork by holding down Ctrl (Command in Mac OS) and dragging a side handle of the bounding box.
- 8 To blend edge pixels during rasterization, select the Anti-alias option. To produce a hard-edged transition between edge pixels during rasterization, deselect the Anti-alias option.
- 9 To commit the placed artwork to a new layer, click Commit .

## Process multiple files

The Process Multiple Files command applies settings to a folder of files. If you have a digital camera or a scanner with a document feeder, you can also import and process multiple images. (Your scanner or digital camera's software driver may need an acquire plug-in module that supports these actions.)

When processing files, you can leave all the files open, close and save the changes to the original files, or save modified versions of the files to a new location (leaving the originals unchanged). If you are saving the processed files to a new location, you may want to create a new folder for the processed files before starting the batch.

### Note:

*The Process Multiple Files command does not work on multiple page files.*

- 1 Choose File > Process Multiple Files.
- 2 Choose the files to process from the Process Files From pop-up menu:
  - Folder** Processes files in a folder you specify. Click Browse to locate and select the folder.
  - Import** Processes images from a digital camera or scanner.
  - Opened Files** Processes all open files.
- 3 Select Include All Subfolders if you want to process files in subdirectories of the specified folder.
- 4 For Destination, click Browse and select a folder location for the processed files.
- 5 If you chose Folder as the destination, specify a file-naming convention and select file compatibility options for the processed files:
  - For Rename Files, select elements from the pop-up menus or enter text into the fields to be combined into the default names for all files. The fields let you change the order and formatting of the components of the filename. You must include at least one field that is unique for every file (for example, file name, serial number, or serial letter) to prevent files from overwriting each other. Starting Serial Number specifies the starting number for any serial number fields. If you select Serial Letter from the pop-up menu, serial letter fields always start with the letter "A" for the first file.
  - For Compatibility, choose Windows, Mac OS, and UNIX® to make filenames compatible with the Windows, Mac OS, and UNIX operating systems.
- 6 Under Image Size, select Resize Images if you want each processed file resized to a uniform size. Then type in a width and height for the photos, and choose an option from the Resolution menu. Select Constrain Proportions to keep the width and height proportional.
- 7 To apply an automatic adjustment to the images, select an option from the Quick Fix panel.

## Workspace and environment

- 8 To attach a label to the images, choose an option from the Labels menu, then customize the text, text position, font, size, opacity, and color. (To change the text color, click the color swatch and choose a new color from the Color Picker.)

**Note:**

*The Watermark option enables you to add a permanent visual watermark to images. For more information, see [Add permanent watermarks to a batch of photos](#).*

- 9 Select Log Errors That Result From Processing Files to record each error in a file without stopping the process. If errors are logged to a file, a message appears after processing. To review the error file, open with a text editor after the Batch command has run.
- 10 Click OK to process and save the files.

## Close a file

- 1 Do one of the following in Photoshop Elements:
  - Choose File > Close.
  - Choose File > Close All.
- 2 Choose whether or not to save the file:
  - Click Yes to save the file.
  - Click No to close the file without saving it.



*Select the Apply to All option, to apply the current action to all the files that are being closed. For example, if you choose Apply to All and click Yes to save the first file, all other open files are saved and then closed.*

# Rulers, grids, and guides

## About rulers, grids, and guides

In Expert mode, rulers, grids, and guides help you position items (such as selections, layers, and shapes) precisely across the width or length of an image. In Quick mode, only grids are available.

When visible, rulers appear along the top and left side of the active window. Markers in the ruler display the pointer's position when you move it. Changing the ruler origin (the 0, 0 mark on the top and left rulers) lets you measure from a specific point on the image. The ruler origin also determines the grid's point of origin.

Use the View menu to show or hide the rulers (Expert mode only), the grid, or the guide. The View menu also helps you to enable or disable the snapping of items to the grid or guide.

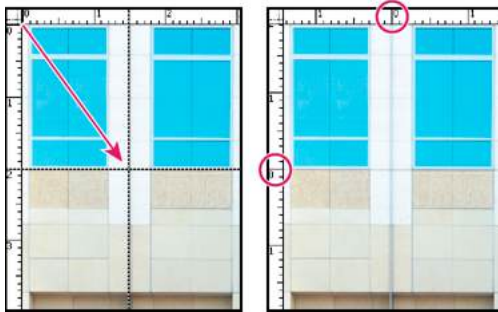
## Change the rulers' zero origin and settings

? In Expert mode, do one of the following:

- To change the rulers' zero origin, position the pointer over the intersection of the rulers in the upper-left corner of the window, and drag diagonally down onto the image. A set of cross hairs appears, marking the new origin on the rulers. The new zero origin will be set where you release the mouse button.

**Note:**

To reset the ruler origin to its default value, double-click the upper-left corner of the rulers.



Dragging to create a new ruler origin

- To change the rulers' settings, double-click a ruler, or choose Edit > Preferences > Units & Rulers. For Rulers, choose a unit of measurement. Click OK.

**Note:**

Changing the units on the Info panel automatically changes the units on the rulers.

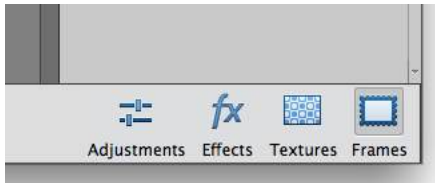
## Change the guides and grid settings

- 1 Choose Edit > Preferences > Guides & Grid.
- 2 Under the Guides or Grids area:
  - Choose a preset color, or click the color swatch to choose a custom color.
  - Choose the line style for the grid. Choose Lines for solid lines, or choose Dashed lines or Dots for broken lines.
- 3 For Gridline Every, enter a number value, and then choose the unit of measurement to define the spacing of major grid lines.
- 4 For Subdivisions, enter a number value to define the frequency of minor grid lines, and click OK.

## Enhanced Quick Mode

The **Quick** mode groups basic photo-fixing tools in one place, to quickly fix the exposure, color, sharpness, and other aspects of an image. From Photoshop Elements 12, in addition to correcting your photos, you can also transform your photos into professional-looking objects of art using **Effects**, **Textures**, and **Frames** panels, available next to the **Adjustments** panel.

## Workspace and environment



Each panel has ten thumbnails. Each thumbnail is a live preview. Clicking a thumbnail applies the effect, texture, or frame, to your image. Names for these effects, textures, and frames is displayed when you hover the mouse pointer on the thumbnail.

## Effects



Eleven available effects each have five variations. Transform your photo by applying an effect. The clickable thumbnails for available **Effects** are live previews, to understand how the effect looks on the image before applying it. Effects range from **Black & White** effect to **Vintage** looks to **Cross-process** presets.

**Auto Smart Looks** [Link](#) Analyzes the image available, and, based on the content of the image, provides options with different effects applied. Available variations:

- Auto1
- Auto2
- Auto3
- Auto4
- Auto5

## Workspace and environment



*Effects are applied as a new layer with layer mask. You can edit the layer mask in **Expert** mode to remove/reduce effect from certain areas.*

The following list provides a brief description of each of the available effects:

**Auto Smart Looks** [Link](#) Analyzes the image available, and, based on the content of the image, provides options with different effects applied. Available variations:

- Auto1
- Auto2
- Auto3
- Auto4
- Auto5

**Tint** Provides a color tint (such as golden, sepia, green) to the image. Available variations:

- Copper
- Golden
- Sepia
- Green
- Blues

**Seasons** Applies a season effect to the image. Available variations:

- Spring
- Summer
- Autumn
- Winter
- Snow

**Pencil Sketch** Applies an effect to make the image appear like a pencil sketch. Available variations:

- Soft Lines
- Pencil Sketch
- Charcoal
- Stippling
- Colored Pencil

**Toy Camera** Applies an effect that makes the image appear as it is a photograph taken by a toy camera. Available variations:

- Toy Camera
- Lomo Blue
- Lomo Contrast
- Lomo Green
- Holga

**Workspace and environment**

**Black & White** Applies a Black & White effect to the image. Available variations:

- Simple B & W
- Silver
- Old School
- Platinum
- Tinted Black

**Lithograph** Applies a lithograph effect to the image. Available variations:

- Sepia
- Black
- Copper
- Blue
- Green

**Cross Process** Applies the effect of processing of photographic film in a chemical solution intended for a different type of film. Available variations:

- Deep Blue
- Orange Wash
- Blue Wash
- Green Wash
- Purple Wash

**Split Tone** Applies the effect of tinting the highlights in a black and white image one color and the shadows another color. Available variations:

- Split Tone
- Blue Tone
- Red Tone
- Green Tone
- Grey Tone

**Vintage** Applies a vintage effect to the image. Available variations:

- Vintage Leak
- Faded Vintage
- Vintage Color
- Sepia Glow
- Heavy Vintage

**Light Leaks** Applies the effect of light on the negative of a picture that has leaked into the light-tight chamber of a camera. Available variations:

- Diffused Colors
- Burnt Edges
- Soft Leak

## Workspace and environment

- White Leak
- Yellow Streak

## Textures



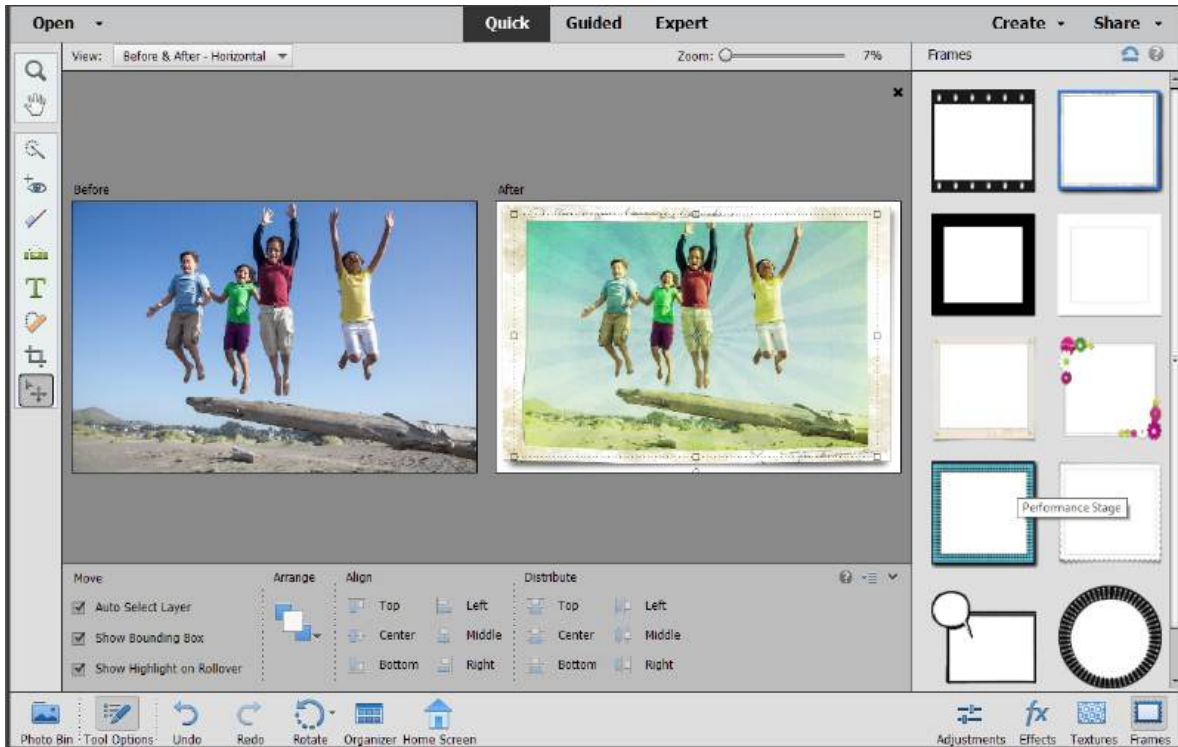
Use the **Textures** panel to choose from ten textures you can apply to your photo. Textures simulate various surfaces or backgrounds that the photo could be printed on. For example, old paper look, cracked paint texture, rough blue grid, chrome feel.



*Textures are applied as a new layer with layer mask. You can edit the layer mask in **Expert** mode to remove/reduce texture from certain areas (face/skin).*



## Frames



Use the **Frames** panel to choose and apply from ten available frames for your photo. The frame is automatically fitted in best possible way. You can also move or transform the image and frame. This can be done by using the move tool and double-clicking the frame. You can change the background color from white to any other choice in **Expert** mode by modifying the **Color Fill** layer

### Apply an Effect, Texture, or Frame

- 1 Open a photograph in **Photoshop Elements Editor**, and switch to the **Quick** mode.
- 2 Three panels - **Effects**, **Textures**, and **Frames** - are available, in addition to the **Adjustments** panel. Click the icon for any of the panels.
- 3 The **Panel** bar displays live preview thumbnails of the open image. Click a thumbnail to apply the **Effect**, **Texture**, or **Frame**.
- 4 (Optional) Switch to the **Expert** mode, and modify the effect, texture, or frame that you used on the image. The modification applied in the **Quick** mode is available in a separate layer.

## File information

## About file information (metadata)

When you take a photo with your digital camera, each image file includes information such as the date and time the photo was taken, the shutter speed and aperture, the specific camera model, and so on. All of this information is called *metadata*, and you can view it and add to it in the Properties panel of the Elements Organizer and the File Info dialog box in the Photoshop Elements.

You can add file information, such as a title, keyword tags, and descriptions, to help identify your images as you manage and organize your collection. As you edit your images, Photoshop Elements automatically keeps track of the file's edit history and adds this information to the file's metadata.

In addition, opened images are automatically scanned for *Digimarc* watermarks. If a watermark is detected, Photoshop Elements displays a copyright symbol in the image window's title bar and includes the information in the Copyright Status, Copyright Notice, and Copyright Info URL sections of the File Info dialog box.

You can add visual watermarks to images to indicate them as your own work. Visual watermarks are not tracked in file information. For information about how to create visual watermarks, see the following articles:

- [Adding permanent watermarks to a batch of photos](#)
- [Create a watermark using text layering](#)
- [Create a watermark brush](#)



For a video about creating a watermark, see [www.adobe.com/go/lrvid927\\_pse\\_en](http://www.adobe.com/go/lrvid927_pse_en).

## View or add file information

The File Info dialog box displays camera data, caption, and copyright and authorship information that has been added to the file. Using this dialog box, you can modify or add information to files saved in Photoshop Elements. The information you add is embedded in the file using XMP (Extensible Metadata Platform). XMP provides Adobe applications and workflow partners with a common XML framework that standardizes the creation, processing, and interchange of document metadata across publishing workflows. If you have metadata that you repeatedly enter for different files, you can create metadata templates to expedite the adding of information to files.

You cannot edit the information displayed for the Camera Data metadata category.

### Note:

*Tags added to a file in the Photo Browser appear as keywords in the File Info dialog box. Some file formats, such as PDF and BMP, do not support tags as keywords.*

- 1 With an image open, choose File > File Info. (You can also right-click a thumbnail in the Photo Bin and choose File Info.)
- 2 Click the Description tab on the top of the dialog box to display specific information. In Description, you can add or modify the document title, author information, keywords, and copyright information. Type in the appropriate text boxes and click OK to embed the information. For copyright status, choose from the Copyright Status drop-down list.

## Use the Info panel

In the Expert mode, the Info panel displays file information about an image and shows the color value beneath the pointer. Depending on the tool in use, the Info panel also provides other useful information.



*Make sure the Info panel is visible in your work area if you want to view information while dragging in the image.*

- 1 Choose Window > Info (F8) to display the Info panel.
- 2 Select a tool.
- 3 Move the pointer into the image, or drag within the image to use the tool. The following information may appear, depending on which tool you're using:
  - The numeric values for the color beneath the pointer
  - The *x*- and *y*-coordinates of the pointer.
  - The width (W) and height (H) of a marquee or shape as you drag, or the width and height of an active selection.
  - The *x*- and *y*-coordinates of your starting position (when you click in the image).
  - The change in position along the *x*-coordinate and *y*-coordinate as you move a selection, layer, or shape.
  - The angle (A) of a line or gradient, the change in angle as you move a selection, layer, or shape, or the angle of rotation during a transformation. The change in distance (D) as you move a selection, layer, or shape.
  - The percentage of change in width (W) and height (H) as you scale a selection, layer, or shape.
  - The angle of horizontal skew (H) or vertical skew (V) as you skew a selection, layer, or shape.

### Set color modes and units of measurement in the Info panel

- ? Do one of the following:
- To change the mode of color values displayed, choose a color mode from the pop-up menu. You can also choose Panel Options from the More menu in the Info panel, then choose a color mode for First Color Readout and/or Second Color Readout:
    - Grayscale** Displays the grayscale values beneath the pointer.
    - RGB Color** Displays the RGB (red, green, blue) values beneath the pointer.
    - Web Color** Displays the hexadecimal code for the RGB values beneath the pointer.
    - HSB Color** Displays the HSB (hue, saturation, brightness) values beneath the pointer.
  - To change the unit of measurement displayed, choose a unit of measurement from the pop-up menu. You can also choose Panel Options from the More menu in the Info panel. Choose a unit of measurement from the Mouse Coordinates option, and click OK.

### Display file information in the Info panel or status bar

You can change the information displayed in the Info panel or the status bar. (The leftmost section of the status bar, which is located at the bottom of the document window, displays the current magnification. The section next to the leftmost one displays information about the current file.)

- 1 In the Info panel, choose Panel Options from the More menu.
- 2 Select a view option:
  - Document Sizes** Displays information on the amount of data in the image. The number on the left represents the printing size of the image—approximately the size of the saved, flattened file in PSD format. The number on the right indicates the file's approximate size, including layers.
  - Document Profile** Displays the name of the color profile used by the image.

**Document Dimensions** Displays the size of the image in the currently selected units.

**Scratch Sizes** Displays RAM and scratch disk space utilized to process the image. The number on the left indicates the amount of memory currently being used by Photoshop Elements to display all open images. The number on the right indicates the amount of RAM available to Photoshop Elements to process images.

**Efficiency** Displays the percentage of time actually spent performing an operation instead of reading from or writing to the scratch disk. If the value is below 100%, Photoshop Elements is using the scratch disk and, therefore, is operating more slowly.

**Timing** Shows how long it took to complete the last operation.

**Current Tool** Shows the name of the active tool.

## Save or delete metadata templates

If you have metadata that you repeatedly enter, you can save the metadata entries in metadata templates. The templates can be used for entering information, and they save you the effort of retyping metadata in the File Info dialog box. In the Photo Browser, you can search for metadata to locate files and photos.

? Open the File Info dialog box (File > File Info) and do one of the following:

- To save metadata as a template, click the drop-down button in the row of buttons in the File Info dialog box, and select Export. Enter a template name, and click Save.
- To delete a metadata template, click Show Templates Folder. Browse and select the template you want to delete, and press Delete.

## Use a saved metadata template

- 1 Choose File > File Info, click the drop-down button in the row of buttons in the File Info dialog box, and select Import.
- 2 Select an import option and click OK.
- 3 Choose a template from the list of saved metadata templates and click Open.

# Presets and libraries

## About presets

In the Expert mode, pop-up panels appear in the Tool Options bar and provide access to predefined libraries of brushes, color swatches, gradients, patterns, layer styles, and custom shapes. The items in each library are called *presets*. When closed, pop-up panels display a thumbnail image of the currently selected preset.

You can change the display of a pop-up panel to view presets by their names, as thumbnail icons, or with both names and icons.

You can use the Presets Manager to load different preset libraries. Presets are stored in separate library files that can be found in the Presets folder in the Photoshop Elements application folder.

## Use preset tool options

- 1 Select the tool you want to use.
- 2 In the Tool Options bar, open the pop-up panel. (Only certain tools have pop-up panels.)
- 3 Do any of the following:
  - To view and select currently loaded preset libraries, click the panel menu icon.
  - To select a preset, click an item in the library.
  - To save a brush, open the pop-up panel menu, choose the Save Brush command, then enter a name in the dialog box provided and click OK.
  - To save a gradient or pattern, open the panel menu, choose the New Gradient or New Pattern command, then enter a name in the dialog box provided and click OK.
  - To rename a brush, gradient, or pattern in a panel, open the pop-up panel menu, choose the Rename command, then enter a new name and click OK.
  - To delete a brush, gradient, or pattern from a panel, select an item, open the pop-up panel menu and choose the Delete command. You can also hold down Alt (Option key in Mac OS) and click a brush or gradient.
  - To save a library of brushes, gradients, or patterns, open the pop-up panel menu. From the menu, choose the Save Brushes, Save Gradients, or Save Patterns command, then enter a name for the library file, and click Save.
  - To load a library of brushes, gradients, or patterns, open the pop-up panel menu, choose the Load command, then select the library file you want to add and click Load.

**Note:**

*Using the Load command adds the brush library to the brushes you have available. If you choose a preset library of brushes, the preset library replaces your current set of brushes.*

- To add assets from a library to an existing library, click Append. Select the library file you want to add and click Append.
- To replace the current set of gradients in a panel, open the pop-up panel menu, choose a library file from the bottom section of the menu, and click OK. You can also choose the Replace command, browse to select a library file, and click Load.
- To replace the current set of brushes or patterns in a panel, choose a library from the Brushes menu.

**Note:**

*To replace the current set of brushes, gradients, or patterns, you can also choose Preset Manager from the pop-up panel menu and use the Preset Manager to load a different library of brushes, gradients, or patterns.*

- To load the default set of brushes, gradients, or patterns, open the pop-up panel menu and choose the Reset command.

## Change the display of items in a pop-up panel menu

- 1 Do one of the following:
  - To change the display of one panel, open the pop-up panel menu by clicking the menu icon in the upper-right corner of the pop-up panel.
  - To change the display for all panels, choose Edit > Preset Manager to open the Preset Manager, and then click the More button.

## Workspace and environment

2 Select a view option:

**Text Only** Displays the name of each item.

**Small Thumbnail or Large Thumbnail** Displays a thumbnail of each item.

**Small List or Large List** Displays the name and thumbnail of each item.

**Stroke Thumbnail** Displays a sample brush stroke and brush thumbnail. (This option is available for brushes only.)

**Note:**

*Not all of the above options are available for all pop-up panels.*

## Use the Preset Manager

In the Expert mode, the Preset Manager (Edit > Preset Manager) lets you manage the libraries of preset brushes, color swatches, gradients, styles, effects, and patterns included in Photoshop Elements. For example, you can create a set of favorite brushes, or you can restore the default presets.

Each type of library is a file with its own file extension and default folder. Preset files are installed on your computer inside the Presets folder in the Photoshop Elements program folder.

**Note:**

*You can delete a preset in the Preset Manager by selecting the preset and clicking Delete. You can always use the Reset command to restore the default items to a library.*



*Dragging a preset to a new position in the Preset Manager*

## Load a library

1 In the Preset Manager, choose Brushes, Swatches, Gradients, Styles, Patterns, or Effects, from the Preset Type menu.

2 Do one of the following:

- Click Add, select a library from the list, and then click Load. If you want to load a library located in another folder, navigate to that folder, then select the library. By default, preset files are installed on your computer inside the Presets folder in the Photoshop Elements program folder.
- Click the More button and choose a library from the bottom section of the menu.

3 Click the Done button when you're finished.

## Restore the default library or replace the currently displayed library

? In the Preset Manager, click the More button and choose a command from the menu:

**Reset** Restores the default library for that type.

## Save a subset of a library

1 In the Preset Manager, Shift-click to select multiple contiguous presets or Ctrl-click (Command-click in Mac OS) to select multiple noncontiguous presets. Only the selected presets are saved in the new library.

2 Click Save Set, then enter a name for the library. If you want to save the library in a folder other than the default, navigate to the new folder before saving.

## Rename a preset

- 1 In the Preset Manager, do one of the following:
  - Select a preset in the list, and click Rename.
  - Double-click a preset in the list.
- 2 Enter a new name for the preset. If you selected multiple presets, you are prompted to enter multiple names.

## Multitouch support

If the hardware and operating system of your computer supports the Touch functionality, you can scroll and zoom in on an image. You can also tap to find, sort, and enhance your photos in the Organizer and Quick Edit mode. Multitouch is supported in all three modes: Quick, Guided, and Expert.

### Flicking

Scrolls the image horizontally or vertically. Touch the screen with one finger (two fingers on the trackpad for a Mac) and move the finger left or right, and up or down.

### Pinching in or out

Zooms in or out of the image. To zoom out, place two fingers on the image (trackpad on a Mac) and pinch. Similarly, to zoom in, pinch, and move the two fingers apart.

## Scratch disks, plug-ins, and application updates

### About scratch disks

When your system does not have enough RAM to perform an operation, Photoshop Elements uses scratch disks. A scratch disk is any drive or partition of a drive with free memory. By default, Photoshop Elements uses the hard drive on which the operating system is installed as its primary scratch disk.

You can change the primary scratch disk, or designate additional scratch disks. When the primary disk is full, additional scratch disks are used. Set your fastest hard disk as your primary scratch disk. Ensure that the disk has plenty of defragmented space available.

For best performance, use the following guidelines when assigning scratch disks:

- Do not create scratch disks on the same physical drive as Photoshop Elements or any large files you are editing.
- Do not create scratch disks on the same physical drive as the one used for the operating system's virtual memory.
- Create scratch disks on a local drive, not a network location.
- Create scratch disks on conventional (non-removable) media.
- RAID disks/disk arrays are good choices for dedicated scratch disk volumes.
- Defragment drives with scratch disks regularly. Or better yet, use an empty drive or a drive with plenty of unused space, to avoid fragmentation issues.

## Change scratch disks

Photoshop Elements needs contiguous hard drive space to create a scratch disk. Frequently defragmenting your hard drive ensures that there is contiguous space available, especially the disk containing your scratch disk. Adobe recommends that you use a disk tool utility, such as Windows Disk Defragmenter, to defragment your hard drive on a regular basis. See your Windows documentation for information on defragmentation utilities.

- 1 In Windows, choose Edit > Preferences > Performance. In Mac, choose, Photoshop Elements > Preferences > Performance.
- 2 Select the desired disks from the Scratch Disks listing (you can assign up to four scratch disks).
- 3 Select a scratch disk and use the arrow keys next to the Scratch Disks list to rearrange the order in which scratch disks will be used.
- 4 Click OK, and restart Photoshop Elements for the change to take effect.

## About plug-in modules

Adobe Systems and other software developers create plug-ins to add functionality to Photoshop Elements. A number of importing, exporting, and special-effects plug-ins come with your program; they are inside the Photoshop Elements plug-ins and optional plug-ins folders.

Once installed, plug-in modules appear as:

- Options added to the Import or Export menu
- Filters added to the Filter menu, or,
- File formats in the Open and Save As dialog boxes.

If you install a large number of plug-ins, Photoshop Elements may not be able to list them all in their appropriate menus. If so, newly installed plug-ins appear in the Filter > Other submenu. To prevent a plug-in or folder of plug-ins from loading, add a tilde character (~) at the beginning of the plug-in name, folder, or directory. The program ignores files marked with a tilde character, while starting. To view information about installed plug-ins, choose Help > About Plug-In and select a plug-in from the submenu.

### **Note:**

*To use an optional plug-in module, copy the plug-in module from the optional plug-ins folder to the relevant subfolder in the plug-ins folder. Then, install the plug-in module, and relaunch Photoshop Elements.*

You can select an additional plug-ins folder in which to load compatible plug-ins stored with another application. You can also create a shortcut for a plug-in stored in another folder on your system. You can then add the shortcut or alias to the plug-ins folder to use that plug-in with Photoshop Elements.

## Install plug-in modules

- ? Do one of the following:
- Use the plug-in installer, if provided.
  - Follow the installation instructions that came with the plug-in module.
  - Make sure the plug-in files are uncompressed, and then copy them to the appropriate plug-ins folder in the Photoshop Elements folder.



## Select an additional plug-ins folder

You can select an additional plug-ins folder in which to load compatible plug-ins stored with another application.

- 1 In Windows, choose Edit > Preferences > Plug-Ins. In Mac, choose Photoshop Elements > Preferences > Plug-Ins.
- 2 In the Preferences dialog, select Additional Plug-Ins Folder, select a folder from the list, and click Choose.
- 3 To display the contents of a folder, double-click the directory. The path to the folder appears in the preferences window.

**Note:**

*Do not select a location inside the plug-ins folder for Photoshop Elements.*

- 4 Restart Photoshop Elements to load the plug-ins.

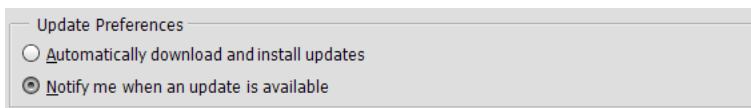
## Load default plug-ins only

When Photoshop Elements starts, all plug-ins that are pre-installed, third-party, or located in additional plug-ins folders, are loaded. To load only the preinstalled plug-ins Photoshop Elements was shipped with, press and hold the Shift key while starting the software. When asked, click yes on the dialog that requests confirmation to skip loading optional and third-party plug-ins.

## Application Updates

**Note:**

*Application Update options are not available in the Windows Application Store version of Photoshop Elements.*



*Application update options in the Preferences dialog*

You get to decide when an application update is installed. In Photoshop Elements, Premiere Elements, and Elements Organizer, you have the option to set what to do when an application update is available from Adobe.

To access the update dialog, press Ctrl/Cmd + K to open the **Preferences** dialog, browse to the **Application Updates** tab, and then make a choice:

- **Automatically download and install updates:** Downloads an available update and installs it when you next restart your application.
- **Notify me when an update is available:** Notifies the user about an available update in the application. You can choose to delay an update or use the notification to start the update process.

## Undo, redo, and cancel actions

## Undo, redo, or cancel actions

Many operations in both the Elements Organizer and Photoshop Elements can be undone or redone. For example, you can restore all or part of an image to its last saved version. Low amounts of available memory limit your ability to use these options.

- 1 To undo or redo an operation, Choose Edit > Undo or choose Edit > Redo.
- 2 To cancel an operation, hold down the Esc key until the operation in progress has stopped.

## Using the History panel while editing

The History panel (F10 or Window > History) lets you jump to any recent state of the image created during the current work session. Each time you apply a change to pixels in an image, the new state of that image is added to the History panel.

For example, if you select, paint, and rotate part of an image, each of those states is listed separately in the panel. You can then select any of the states, and the image reverts to how it looked when that change was first applied. You can then work from that state.

Actions, such as zooming and scrolling, do not affect pixels in the image and do not appear in the History panel. Nor do program-wide changes, such as changes to panels, color settings, and preferences.



A Original state B State C Selected state

Note the following guidelines when using the History panel:

- By default, the History panel lists 50 previous states. Older states are automatically deleted to free more memory for Photoshop Elements. You can set the number of states in the application settings (Preferences > Performance > History States). The maximum number of states is 1000.
- The original state of the photo is always displayed at the top of the History panel. You can always revert an image to its original state by clicking this top state. Clicking the original state is also handy for comparing before and after versions of your editing.
- When you close and reopen the document, all states from the last working session are cleared from the panel.
- States are added to the bottom of the list. That is, the oldest state is at the top of the list, the most recent one is at the bottom.
- Each state is listed with the name of the tool or command used to change the image.
- Selecting a state dims the subsequent states (steps that were performed after the selected step). This way you can easily see which changes will be discarded if you continue working from the selected state.
- Selecting a state and then changing the image eliminates all states that came after it. Likewise, deleting a state deletes that state and all states (edits) after it.

## Revert to a previous state of an image

In Quick and Expert modes, do any of the following:

- Click the name of the state in the History panel.
- Click the Undo or Redo buttons in the taskbar.
- Choose Undo or Redo from the History panel menu or the Edit menu.

To set the keyboard command for Step Forward and Step Backward, choose Edit > Preferences > General in Windows (Photoshop Elements > Preferences > General in Mac), and choose from the Step Back/Fwd menu.

## Delete one or more states from the Undo History panel

Do one of the following:

- To delete a state, click the name of the state, and choose Delete from the History panel menu. States following the one you selected are also deleted.
- To delete the list of states from the History panel, without changing the image, choose Clear History from the panel menu or choose Edit > Clear > Clear History. Clearing is useful for freeing up memory, especially if you get an alert that Photoshop&nbsp;Elements is low on memory.

**Note:** Clearing the History panel cannot be undone.

## Clear memory used by the clipboard and the History panel

You can delete items copied to the clipboard or states in the Undo History panel to free up memory.

In Expert mode, do one of the following:

- To clear memory used by the clipboard, choose Edit > Clear > Clipboard Contents.
- To clear memory used by the Undo History panel, choose Edit > Clear > Clear History or choose Clear History from the History panel flyout menu.
- To clear the memory used in both the clipboard and the History panel simultaneously, choose Edit > Clear > All.

**Note:** Clearing the History panel or clipboard cannot be undone.

# Viewing images

## Viewing images in Expert or Quick modes

The Hand tool, the Zoom tools, the Zoom commands, and the Navigator panel let you view different areas of an image at different magnifications.

You can magnify or reduce your view using various methods. The window's title bar displays the zoom percentage (unless the window is too small for the display to fit).

If you want to view another area of an image, either use the window scroll bars or select the Hand tool and drag to pan over the image. You can also use the Navigator panel.



## Workspace and environment

To use the Hand tool while another tool is selected, hold down the spacebar as you drag within the image.



Dragging the Hand tool to view another area of an image.

## Zoom in or out

? Do one of the following:

- Select the Zoom tool from the toolbar, and click either the Zoom In or Zoom Out button in the Tool Options bar. Click the area you want to magnify. Each click magnifies or reduces the image to the next preset percentage, and centers the display around the point you click. When the image has reached its maximum magnification level of 3200% or minimum reduction level of 1 pixel, the magnifying glass appears empty.

### Note:

You can drag a Zoom tool over the part of an image you want to magnify. Make sure that the Zoom In button is selected in the Tool Options bar. To move the zoom marquee around the image, begin dragging a marquee, and then hold down the spacebar while dragging the marquee to a new location.

- Drag the Zoom slider in the Tool Options bar.
- Choose View > Zoom In or View > Zoom Out.
- Enter the desired magnification level in the Zoom text box, in the Tool Options bar.



When using a Zoom tool, hold down Alt to switch between zooming in and zooming out.

## Display an image at 100%

? Do one of the following:

- Double-click the Zoom tool in the toolbox.
- Select the Hand tool or a Zoom tool and click the 1:1 button in the Tool Options bar.
- Choose View > Actual Pixels, or right-click the image and choose Actual Pixels.
- Enter 100% in the status bar and press Enter.

## Fit an image to the screen

? Do one of the following:

- Double-click the Hand tool in the toolbox.
- Select a Zoom tool or the Hand tool, and then click the Fit Screen button in the Tool Options bar. Or, right-click the image and choose Fit On Screen.
- Choose View > Fit On Screen.

These options scale both the zoom level and the window size to fit the available screen space.

## Resize the window while zooming

? With a Zoom tool active, select Resize Windows To Fit in the Tool Options bar. The window changes size as you magnify or reduce the view of the image.

When Resize Windows To Fit is deselected, the window maintains a constant size regardless of the image's magnification. This can be helpful when you are using smaller monitors or working with tiled images.

## Using the Navigator panel

The Navigator panel lets you adjust the image's magnification and area of view. Typing a value in the text box, clicking the Zoom Out or Zoom In button, or dragging the zoom slider changes the magnification. Drag the view box in the image thumbnail to move the view of an image. The view box represents the boundaries of the image window. You can also click in the thumbnail of the image to designate the area of view.

### **Note:**

*To change the color of the view box, choose Panel Options from the Navigator panel menu. Choose a color from the Color menu or click the color swatch to open the Color Picker and select a custom color. Click OK.*

## Open multiple windows of the same image

In Expert mode, you can open multiple windows to display different views of the same file. A list of open windows appears in the Window menu, and thumbnails of each open image appear in the Photo Bin. Available memory may limit the number of windows per image.

? Choose View > New Window For *[image filename]*. Depending on the position of the first window, you may have to move the second window to view both simultaneously.



*You can use the New Window command when you're working with a zoomed image to see what the image will look like at 100% size in a separate window.*

## View and arrange multiple windows

? In Expert mode, do one of the following:

- To display windows stacked and cascading from the upper left to the lower right of the screen, choose Window > Images > Cascade.
- To display windows edge-to-edge, choose Window > Images > Tile. As you close images, the open windows are resized to fill the available space.
- To view all open images at the same magnification as the active image, choose Window > Images > Match Zoom.

## Workspace and environment

- To view the same section (upper-left corner, center, lower-right corner, and so on) of all open photos, choose Window > Images > Match Location. The view in all windows shifts to match the active (frontmost) image. The zoom level does not change.
- For more options to arrange images, in the Taskbar, click Layout, and choose a new layout from the pop-up menu.

**Note:**

*The Window > Images options are enabled only when Allow Floating Documents In Expert Mode is selected in preferences.*

## Close windows

- ? In Expert mode, do one of the following:
- Choose File > Close to close the active window.
  - Click the Close button on the title bar of the active window.
  - Right-click a thumbnail in the Photo Bin and choose Close.
  - Choose File > Close All to close all open windows.

# Chapter 3: Fixing and enhancing photos

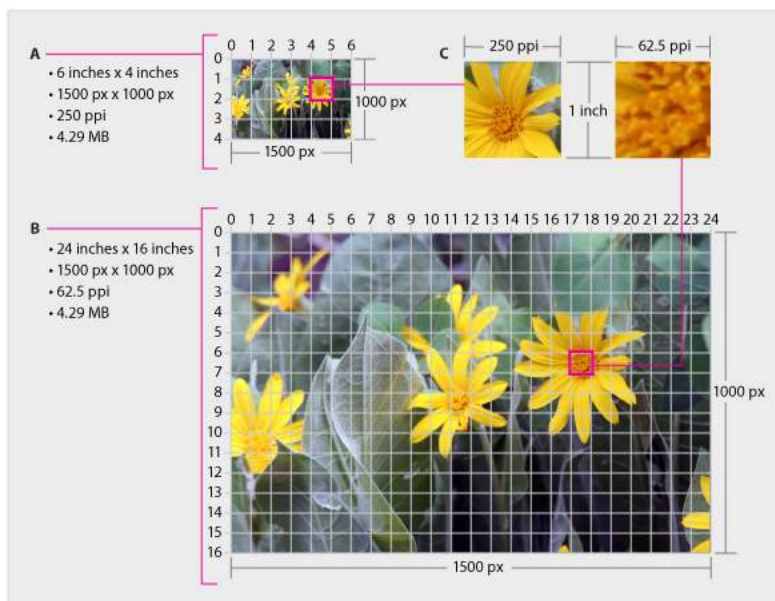
## Resize images

### About image size and resolution

The image size (or pixel dimensions) of an image is a measure of the number of pixels along an image's width and height. For example, your digital camera may take a photo that is 1500 pixels wide and 1000 pixels high. These two measurements indicate the amount of image data in a photo and determine the file size.

Resolution is the amount of image data in a given space. It is measured in pixels per inch (ppi). The more pixels per inch, the greater the resolution. Generally, the higher the resolution of your image, the better the printed image quality. Resolution determines the fineness of detail you can see in an image.

Although a digital image contains a specific amount of image data, it doesn't have a specific physical output size or resolution. As you change the resolution of an image, its physical dimensions change, and as you change the width or height of an image, its resolution changes.



Two images (A and B) with same image data and file size but different image size and resolution; C shows that a higher resolution means better quality

You can see the relationship between image size and resolution in the Image Size dialog box (choose Image > Resize > Image Size). As you change one value, the other two values change accordingly.

## Fixing and enhancing photos



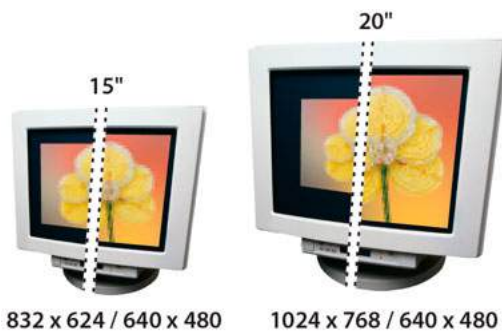
*Constrain Proportions lets you change image size without altering any image data*

The Constrain Proportions option lets you maintain the aspect ratio (the ratio of image width to image height). If you select this option and change the image size and resolution, the image does not stretch or shrink.

The Resample Image option lets you change the size of an image without changing the resolution. If you need to print at a specific resolution, or at a smaller or larger resolution than the current image allows, resample the image. However, resampling can degrade image quality.

## About monitor resolution

Your monitor's resolution is described in pixel dimensions. For example, if your monitor resolution is set to 1600 x 1200 and your photo's pixel dimensions are the same size, at 100%, the photo will fill the screen. The size an image appears onscreen depends on a combination of factors: the pixel dimensions of the image, the monitor size, and the monitor resolution setting. In Photoshop Elements, you can change the image magnification onscreen, so you can easily work with images of any pixel dimensions.



*A 620 x 400-pixel image displayed on monitors of different sizes and resolutions*

When preparing images for onscreen viewing, you should consider the lowest monitor resolution that your photo is likely to be viewed on.

## Display the image size of an open file

- Click-hold the file information box at the bottom of the document. The box displays the width and height of the image (in pixels, and in the unit of measurement currently selected for the rulers), the number of color channels, and the image resolution (ppi).



## View the print size onscreen

? Do one of the following:

- Choose View > Print Size.
- Select the Hand tool or Zoom tool, and click Print Size in the Tool Options bar.
- The magnification of the image is adjusted to display its approximate printed size, as specified in the Document Size section of the Image Size dialog box. Keep in mind that the size and resolution of your monitor affect the onscreen print size.

## Change print dimensions and resolution without resampling

You might need to change the print dimensions and resolution if you are sending the image to a print shop that requires files to be at a specific resolution.

If you are printing directly from Photoshop Elements, you don't have to perform this procedure. Instead, you can choose a size in the Print dialog box and Photoshop Elements applies the appropriate image resolution.

**Note:**

*To change only the print dimensions or the resolution, and adjust the total number of pixels in the image proportionately, you must resample the image.*

- 1 Choose Image > Resize > Image Size.
- 2 Make sure that Resample Image is deselected. If deselected, you can change the print dimensions and resolution without changing the total number of pixels in the image, but the image may not keep its current proportions.

**Note:**

*Resample Image must be selected in order to use the Constrain Proportions and Scale Style functions.*

- 3 To maintain the current aspect ratio, select Constrain Proportions. This option automatically updates the width as you change the height, and vice versa.
- 4 Under Document Size, enter new values for the height and width. If desired, choose a new unit of measurement.
- 5 For Resolution, enter a new value. If desired, choose a new unit of measurement, and then click OK.



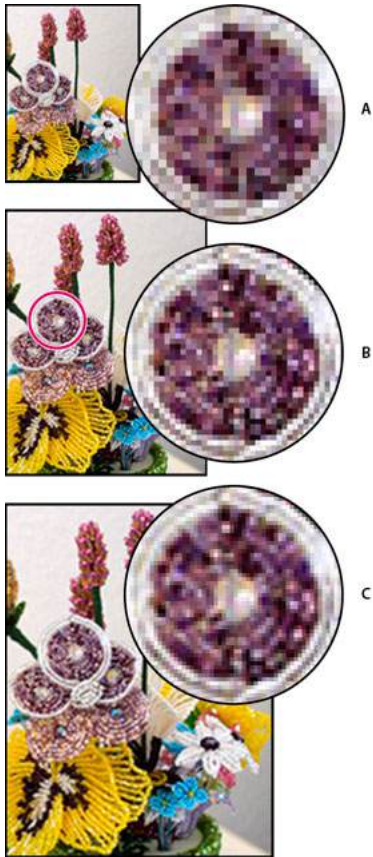
*To return to the original values displayed in the Image Size dialog box, use Alt (Option in Mac OS) + click Reset.*

## Resample an image

Changing the pixel dimensions of an image is called resampling. Resampling affects not only the size of an image onscreen, but also its image quality and its printed output—either its printed dimensions or its image resolution. Resampling can degrade image quality. When you downsample, meaning that you decrease the number of pixels in your image, information is removed from the image. When you upsample, or increase the number of pixels in your image, new pixels are added based on the color values of existing pixels, and the image loses some detail and sharpness.

To avoid the need for upsampling, scan or create the image at the resolution required for your printer or output device. If you want to preview the effects of changing pixel dimensions onscreen or print proofs at different resolutions, resample a duplicate of your file.

## Fixing and enhancing photos



*Resampling an image  
A Image downsampled B Original image C Image upsampled*



If you're preparing images for the web, it's useful to specify image size in terms of the pixel dimensions.

- 1 Choose Image > Resize > Image Size.
- 2 Select Resample Image, and choose an interpolation method:
  - Nearest Neighbor** Fast, but less precise. This method is recommended for use with illustrations containing edges that are not anti-aliased, to preserve hard edges and produce a smaller file. However, this method can create jagged edges, which become apparent when distorting or scaling an image or performing multiple manipulations on a selection.
  - Bilinear** Medium-quality.
  - Bicubic** Slow, but more precise, resulting in the smoothest tonal gradations.
  - Bicubic Smoother** Use when you're enlarging images.
  - Bicubic Sharper** Use when you're reducing the size of an image. This method maintains the detail in a resampled image. It may, however, oversharpen some areas of an image. In this case, try using Bicubic.
- 3 To maintain the current aspect ratio, select Constrain Proportions. This option automatically updates the width as you change the height, and vice versa.

## Fixing and enhancing photos

- 4 In Pixel Dimensions, enter values for Width and Height. To enter values as percentages of the current dimensions, choose Percent as the unit of measurement.

The new file size of the image appears next to Pixel Dimensions, with the old file size in parentheses.

- 5 Click OK to change the pixel dimensions and resample the image.



*For best results in producing a smaller image, downsample and apply the Unsharp Mask (Enhance > Unsharp Mask). To produce a larger image, rescan the image at a higher resolution.*


## Cropping

### Crop an image

The **Crop** tool removes the part of an image surrounding the selection. Crop to remove distracting background elements and create a focus on your desired object in the image. When you crop an image, by default, the resolution remains the same as the original image.



*Crop an image to remove some of the distracting background.*



- 1 Select the **Crop** tool .
- 2 To select a crop ratio other than that of the original photo, select one of the following options from the drop-down list on the left of the Tool Options panel or specify new custom values in the **Width** and **Height** fields in the options bar:



**No Restriction** Lets you resize the image to any dimension.

**Use Photo Ratio** Displays the original aspect ratio of the photo when you crop. The **Width** and **Height** fields show the values that are used for the cropped image. The **Resolution** field allows you to change the image resolution.

**Note:**


*When you specify values for the **Width** and **Height** of the crop tool, the drop-down list displays **Custom** as the selected option.*

- 3 Drag over the part of the image you want to keep. When you release the mouse button, the crop marquee appears as a bounding box with handles at the corners and sides.
- 4 (Optional) Adjust the crop marquee by doing any of the following:
  - To change the aspect ratio, choose values from the drop-down list on the left in the Tool Options panel.
  - To move the marquee to another position, place the pointer inside the bounding box and click-drag, or use the arrow keys to move the marquee.
  - To resize the marquee, drag a handle. When you choose **No Restriction** from the drop-down list, you can constrain the proportions while scaling by holding down Shift as you drag a corner handle.
  - To swap **Width** and **Height** values, click the **Swap** icon  in the options bar.
  - To rotate the marquee, position the pointer outside the bounding box (the pointer turns into a curved arrow ) and drag. (You can't rotate the crop marquee for an image in **Bitmap** mode.)

**Note:** You can change the color and opacity of the crop shield (the cropped area surrounding the image) by changing the **Crop** tool preferences. Choose **Edit > Preferences > Display & Cursors** and specify a new **Color and Opacity** value in the **Crop Tool** area of the **Preferences** dialog box. In case you don't want to see a colored shield while cropping, deselect **Use Shield**.
- 5 Click the green **Commit** button  located in the lower-right corner of the marquee, or double-click the bounding box to finish the cropping. To cancel the cropping operation, click the red **Cancel** button  or press Esc.

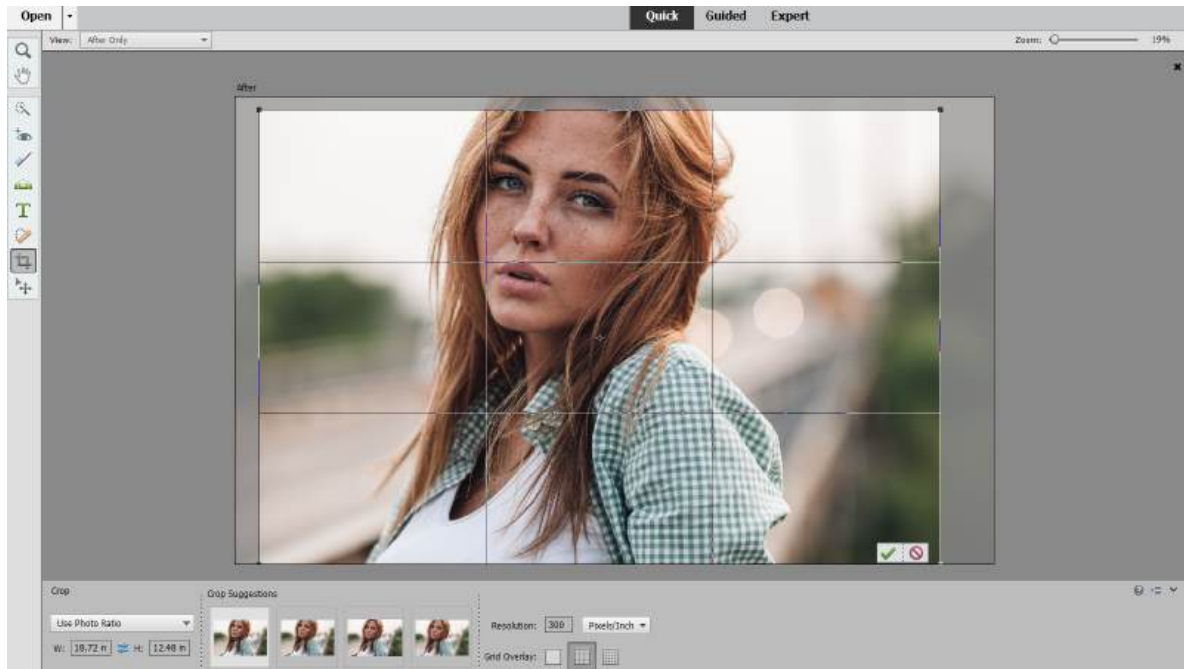
## Crop to a selection boundary

The **Crop** tool removes the areas that fall outside the current selection. When you crop to a selection boundary, Photoshop Elements trims the image to the bounding box that contains the selection. (Irregularly shaped selections, such as those made by using the **Lasso** tool, are cropped to a rectangular bounding box that contains the selection.) When you use the **Crop** command without making a selection, Photoshop Elements trims the image by 50 pixels from each visible edge.

- 1 Use any selection tool, such as the **Rectangular Marquee** tool , to select the part of the image you want to keep.
- 2 Choose **Image > Crop**.

## Automatic cropping suggestions

The **Crop** tool and technique is an essential part of the photo editing workflow. From Photoshop Elements 13 onwards, the **Crop** tool automatically displays four ready-to-use suggestions. You can choose the best crop for your needs from one of them. You can also continue to crop as much as you want to, after taking one of the four suggestions or rejecting all four suggestions.



*Crop an image*

### To use the automatic cropping suggestions:

- 1 Open a photograph in Photoshop Elements.
- 2 Select the **Crop** tool. Four thumbnails displaying the automatic suggestions are visible in the **Tool Options** panel.
- 3 Click a thumbnail that you think is the best fit. However, you can look at more suggestions when you select a different aspect ratio from the drop-down list in the Tool Options panel.



*Hover over the **Crop Suggestions** in the Tool Options panel to preview the crop suggestion.*

### Use grids for better cropping results

**Grid Overlay** Creates a grid guide on the image. Use the grid to position objects before you crop the image.

### Perspective Crop tool

The Perspective Crop tool lets you transform the perspective of an image while cropping it. This is useful when you have an image with some distortion. Distortion occurs when an object is photographed from a non-straight angle or when wide-angle lenses are used to photograph a large expanse of an object. For example, when you take a picture of a tall building from the ground level, the edges of the building appear closer to each other at the top than they do at the bottom.

- 1 Open an image in Photoshop Elements.
- 2 In Expert mode, from the Modify section of the toolbar, select the Perspective Crop tool.
- 3 Draw a marquee or boundary around the object that you want to correct the perspective of and crop the image to that area.



*Marquee drawn using the Perspective Crop tool.*

- 4 Use the corners of the selection to modify the shape of the marquee. Hover over any corner and when the pointer turns white, click and move the corner.

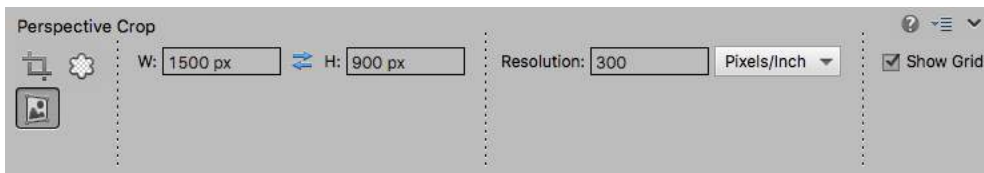


*For best results, move the corners to align the vertical edge of the marquee with a pattern or object in the photo to appear vertical.*




*Modify the shape of the marquee to align the vertical lines in the image.*

- 5 You can also provide values for the width (W), height (H), and the Resolution fields in the **Tools Options** panel. The final image is transformed to the specified height, width, and resolution.



*Perspective Crop tool options*

- 6 Click  to transform the perspective and crop the image to the region of the marquee.



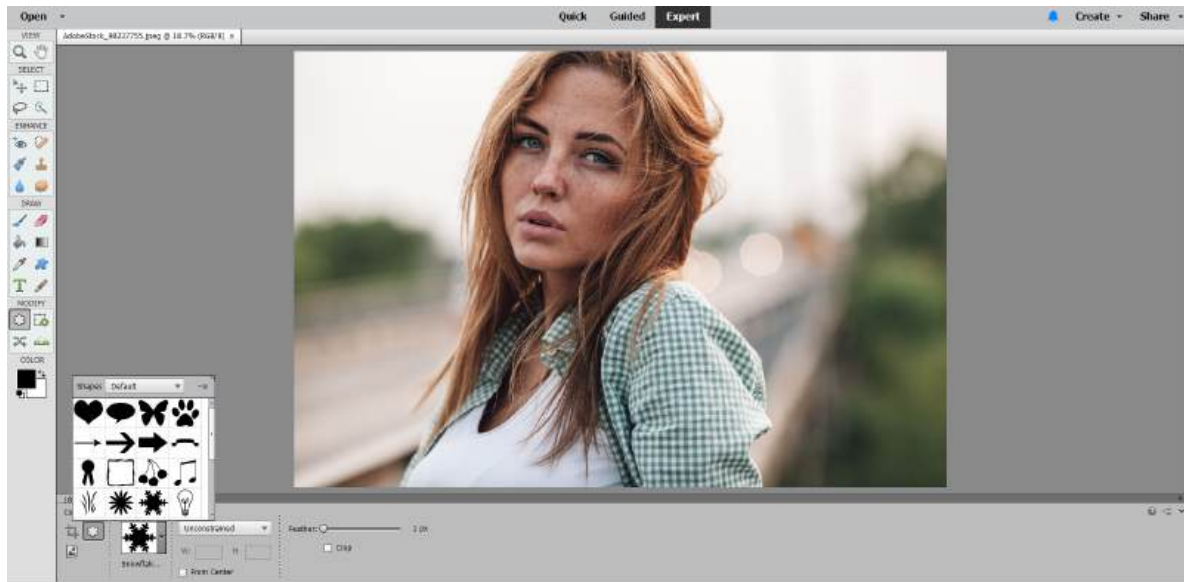
*Perspective-corrected image.*

## Use the Cookie Cutter tool

The **Cookie Cutter** tool crops a photo into a shape that you choose. Select a shape and drag it on your photo to crop the photo in that shape. You can also move and resize the bounding box to get the desired area you want to crop.

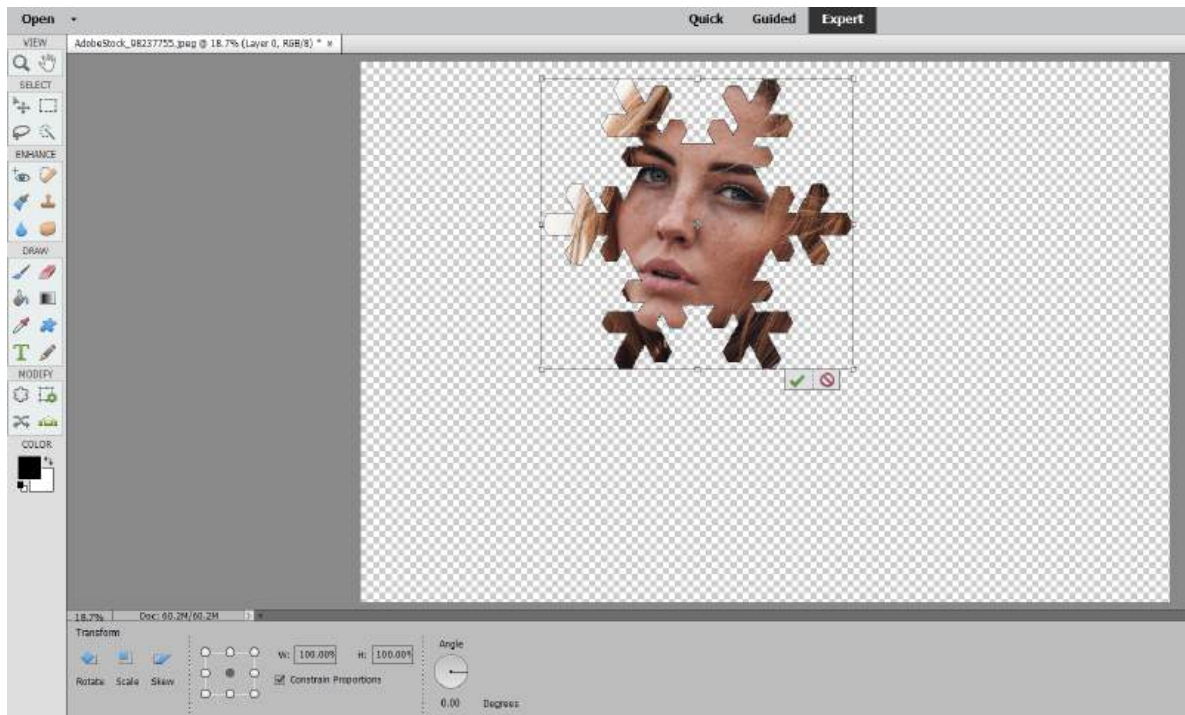




## Fixing and enhancing photos



Use the Cookie Cutter tool to clip a photo into a fun shape.

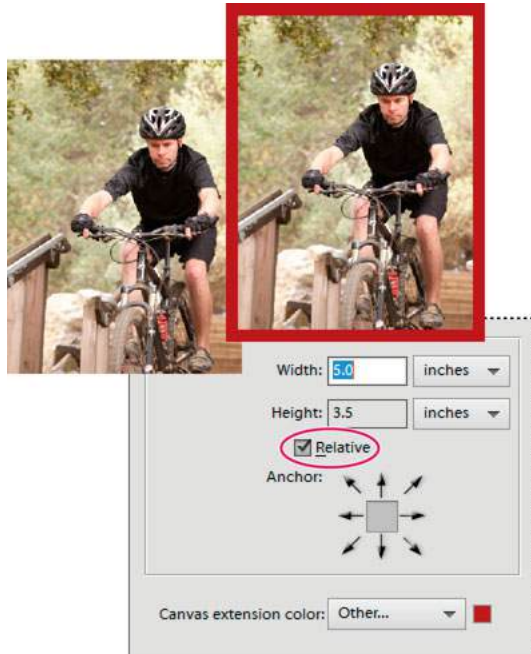
- 1 In the Expert mode, select the Crop tool.
- 2 Select the **Cookie Cutter** icon in the **Tool Options** panel and select a shape. To view other libraries, select a different library from the **Shapes** drop-down.
- 3 Double-click a shape to select it.
- 4 Drag within the image to create the shape boundary and move it to the desired location in the image.



- 5 Click the **Commit** button , or press **Enter** to finish the cropping. To cancel the cropping operation, click the **Cancel** button  or press Esc.

## Change the size of the canvas

The canvas is the workspace around an existing image, within the image window. It is the full editable area of an image. You can increase or decrease the size of the canvas, on any side of an image. Added canvas appears in the currently selected background color on the **Background** layer (by default), or selected canvas extension color from the **Canvas size** window. In other layers, the added canvas is transparent.



*Increasing the size of the canvas makes room for a colored border.*

- 1 Choose **Image > Resize > Canvas Size**.
- 2 Do one of the following:
  - In the **Width** and **Height** fields, enter the full dimensions of the new canvas. Choose the units of measurement you want from the adjacent drop-downs.
  - Select **Relative**, and enter the amount by which you want to increase or decrease the size of the canvas. Enter a negative number to decrease the size of the canvas. Use this option to increase the canvas by a specified amount, such as 2 inches on each side.
- 3 Click an arrow on the **Anchor** icon to indicate the position you want on the canvas.
- 4 To change the color of the added canvas, choose an option from the **Canvas Extension Color** menu and click OK.

## Straighten an image

Camera shake can cause an image to be improperly aligned. For example, the horizon in the picture of a sunset may not be perfectly horizontal. In Photoshop Elements, you can realign the photo to cause the horizon to be perfectly horizontal. You can use the **Straighten** tool (P) to realign an image vertically or horizontally. You can also choose to automatically resize or crops the canvas to accommodate straightening of the image.

- In Quick mode, with the Straighten tool (P) active, simply draw a line along the horizon (when visible). When not visible, draw a line that you consider must represent the horizontal axis of the photo. The photo is straightened, and depending on the option you chose, any empty edges created are automatically filled.

## Manually straighten an image in Expert mode

1 Select the **Straighten** tool.

2 Choose from the available option buttons:

**Grow Or Shrink Canvas To Fit** Resizes the canvas to fit the rotated image. Straightening causes corners of the image to fall outside the current canvas. The straightened image contains areas of blank background, but no pixels are clipped.

**Crop To Remove Background** Crops the image to remove any blank background area that becomes visible after straightening. Some pixels are clipped.

**Crop To Original Size** Keeps the canvas the same size as the original image. The straightened image includes areas of blank background and some pixels are clipped.



*Straightening and cropping to remove the background*

### **Note:**

*The three straighten options are enabled when the Rotate All Layers options is enabled.*

3 To straighten the image, do one of the following:

- To align horizontally, draw a horizontal line along an edge. For example, you can have the image of a train with an improperly aligned horizon. Draw a horizontal line parallel to the train.



- To align vertically, draw a vertical line along an edge. For example, you can have the image of a tower that is improperly aligned. Draw a vertical line parallel to the tower.



### Automatically fill empty edges

The **Straighten** tool has an enhanced option to automatically fill the edges with relevant image data intelligently, instead of filling in background color or transparent pixels.

The Autofill edges option is available only in the Grow or Shrink and Original Size modes. Before you draw a line to enable image straightening, select **Autofill edges**. When you draw the line, any gaps created along the edges of the photo are automatically and intelligently filled.

### Manually straighten an image in Quick mode

1 Select the **Straighten** tool.

2 Choose from the available option buttons:

**Maintain Canvas Size** Resizes the canvas to fit the rotated image. Straightening causes corners of the image to fall outside the current canvas. The straightened image contains areas of blank background, but no pixels are clipped.

**Maintain Image Size** Resizes the image to remove any blank background area that becomes visible after straightening. Some pixels are clipped.

3 To straighten the image, do one of the following:

- To align horizontally, draw a horizontal line along an edge. For example, you can have the image of a train with an improperly aligned horizon. Draw a horizontal line parallel to the train.
- To align vertically, draw a vertical line along an edge. For example, you can have the image of a tower that is improperly aligned. Draw a vertical line parallel to the tower.

### Automatically fill empty edges

The **Straighten** tool has an enhanced option to automatically fill the edges with relevant image data intelligently, instead of filling in background color or transparent pixels.

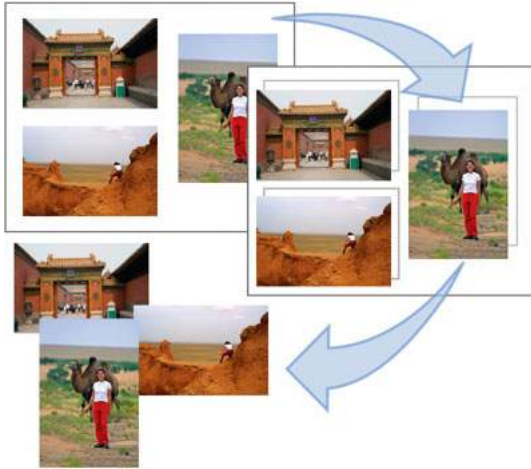
Before you draw a line to enable image straightening, select **Autofill edges**. When you draw the line, any gaps created along the edges of the photo are automatically and intelligently filled.

### Automatically straighten an image

- To automatically straighten the image and leave the canvas around the image, choose **Image > Rotate > Straighten Image**. The straightened image contains areas of blank background, but no pixels are clipped.
- To automatically straighten and crop the image, choose **Image > Rotate > Straighten And Crop Image**. The straightened image does not contain areas of blank background, but some pixels are clipped.

## Divide a scanned image containing multiple photos

When you scan several pictures in one file, you can automatically divide and straighten the scanned image into its component photos. To do this, the photos must have a clear separation between them.



*Separating images scanned from one page into three separate images*

- ? Choose **Image > Divide Scanned Photos**. Photoshop Elements automatically divides the image and places each photo in a separate file.



*For images with white around the border (images of light skies, snow, and so on), this command works best when you cover the image on the scanner with a piece of dark paper.*

## Process camera raw image files

### About camera raw image files

In digital photography, a picture is captured by a camera's image sensor in an image file. An image file is generally processed and compressed, before being stored on your camera's memory card. However, cameras can also store a picture without processing or compressing it—as a raw file. Think of camera raw files as photo negatives. You can open a raw file in Photoshop Elements, process it, and save it, rather than relying on the camera to process the file. Working with camera raw files lets you set the proper white balance, tonal range, contrast, color saturation, and sharpness.

To use raw files, set your camera to save files in its own raw file format. When you download the files from the camera, they have filename extensions like NEF, CR2, CRW, or other raw formats. Photoshop Elements can open raw files only from [supported cameras](#).

Photoshop Elements does not save your changes to the original raw file (non-destructive editing). After processing the raw image file using the features of the Camera Raw dialog box, You can choose to open a processed raw file in Photoshop Elements. You can then edit the file and save it in a Photoshop Elements supported format. The original raw file remains unaltered.

## Process Versions

A Process Version is a method of deciphering the raw file format. The default version used is **Process Version 2012**. This method of deciphering the raw file format provides you with ways to work with the most recent and improved features in the raw file format. Photoshop Elements contains three Process Versions (one current, and two legacy versions). The complete list of versions is:

- Process Version 2012 (default, used from Adobe Photoshop Elements 11)
- Process Version 2010 (used in Adobe Photoshop Elements 10)
- Process Version 2003 (used in Adobe Photoshop Elements 9, or earlier)

### What Process Version is applied to my raw image?

When you open a raw file that has not been opened in an earlier edition of Photoshop Elements, the default Process Version 2012 is used. However, if you open a raw file opened in an earlier version of Photoshop Elements, an older Process Version is used.

To check the Process Version applied to your raw image, in the Camera Raw 9.1 dialog box, click the Camera Calibration tab. The Process field displays the current Process Version being used.

**Note:** If not using Process Version 2012, an icon displayed below the raw image indicates that an older version is being used.

### Can I switch between Process Versions?

Yes. In the Camera Raw 9.1 dialog box, click the Camera Calibration tab, and select the Process Version you want to use from the Process drop-down list.

### Which version is best for you?

Process Version 2012 enables you to work with the latest enhancements in the raw format. However, if you have many raw images that were opened with previous editions of Photoshop Elements (and hence using older Process Versions), you may choose to apply an older Process Version to your newer raw images. This helps with consistency while processing past and present images, and helps maintain your older workflow.

### What are the differences in the Process Versions?

- **Basic tab.** In Process Version 2012, the Highlights, Shadows, and Whites sliders replace the Recovery, Fill light, and Brightness sliders.
- **Detail tab:**
  - In Process Version 2012, the Color Detail slider has been introduced. This slider remains disabled until the Color slider is modified.
  - In Process Version 2012, Luminance Detail and Luminance Contrast have been added. These sliders remain disabled until the Luminance is modified.

**Note:** When switching to an older Process Version, the newer sliders compatible with the latest Process Versions are disabled.

## Fixing and enhancing photos



Camera Raw dialog box

A View options B Click the Basic or Detail tab to access different controls C RGB values D Histogram E Image settings F More menu G Tools H Zoom levels I Bit depth options

## Open and process camera raw files



- 1 In the Edit workspace, choose File > Open.
- 2 Browse to select one or more camera raw files, and click Open.

The histogram in the Camera Raw dialog box shows the tonal range of the image at the current settings. As you make settings adjustments, the histogram is updated automatically.

- 3 (Optional) Adjust the image view using the controls, such as the Zoom tool, and options, such as Shadows and Highlights, which reveal clipping in the preview area. (See [Camera raw controls](#).)

### Note:

Selecting Preview displays a preview of the image with the settings changes you make. Deselecting Preview displays the camera raw image at the original settings of the current tab combined with the settings in the hidden tabs.

- 4 To rotate the image 90° counterclockwise or 90° clockwise, click the Rotate Image buttons  .
- 5 To apply the settings used in the previous camera raw image or the default settings for your camera, choose an option from the Settings menu (Settings menu > Previous Conversion). Using the same options is useful, for example, if you want to quickly process images with similar lighting conditions. (See [Set custom camera settings](#).)
- 6 (Optional) Set options to adjust the white balance. (See [White balance controls for camera raw](#).)



You can monitor the RGB values of pixels in your image as you adjust them in the Camera Raw dialog box. Position the Zoom tool, Hand tool, White Balance tool, or Crop tool over the preview image to display the RGB values directly beneath the pointer.

- 7 Make tonal adjustments using the Exposure, Brightness, Contrast, and Saturation sliders. (See [Tonal and image adjustments in camera raw files](#).)

To undo your manual adjustments and make the adjustments automatically, select Auto. To restore all options to their initial settings, press Alt (Option in Mac OS) and click Reset.

**8** Do one of the following:

- To open a copy of the camera raw image file (with the camera raw settings applied) in Photoshop Elements, click **Open Image**. You can edit the image and save it in a Photoshop Elements-supported format. The original camera raw file remains unaltered.
- To cancel the adjustments and close the dialog box, click Cancel.
- To save the adjustments to a DNG file, click Save Image. (See [Save changes to camera raw images.](#))

**Note:**

*The Digital Negative (DNG) format is Adobe's proposed standard format for camera raw files. DNG files are useful for archiving camera raw images because they contain the raw camera sensor data and data specifying how the image should look. Camera raw image settings can be stored in DNG files instead of in sidecar XMP files or the camera raw database.*

## Adjust sharpness in camera raw files

The Sharpness slider adjusts the image sharpness to provide the edge definition you want. The Sharpness adjustment is a variation of the Adobe Photoshop Unsharp Mask filter. This adjustment locates pixels that differ from surrounding pixels based on the threshold you specify, and increases the pixels' contrast by the amount you specify. When opening a camera raw file, the Camera Raw plug-in calculates the threshold to use based on the camera model, ISO, and exposure compensation. You can choose whether sharpening is applied to all images or to previews.

- 1 Zoom the preview image to at least 100%.
- 2 Click the Detail tab.
- 3 Move the Sharpness slider to the right to increase sharpening and to the left to decrease it. A value of zero turns off sharpening. In general, set the Sharpness slider to a lower value for cleaner images.



*If you don't plan to edit the image extensively in Photoshop Elements, use the camera raw Sharpness slider. If you do plan to edit the image extensively in Photoshop Elements, turn off camera raw sharpening. Then use the sharpening filters in Photoshop Elements as the last step after all other editing and resizing are complete.*

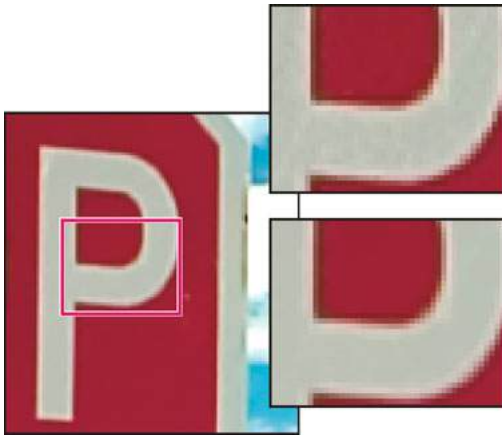
## Reducing noise in camera raw images

The Detail tab in the Camera Raw dialog box contains controls for reducing image noise—the extraneous visible artifacts that degrade image quality. Image noise includes luminance (grayscale) noise, which makes an image look grainy, and chroma (color) noise, which is visible as colored artifacts in the image. Photos taken at high ISO speeds or with less sophisticated digital cameras can have noticeable noise.

Moving the Luminance Smoothing slider to the right reduces grayscale noise, and moving the Color Noise Reduction slider to the right reduces chroma noise.

When making Luminance Smoothing or Color Noise Reduction adjustments, preview images at 100% for a better view.





*Moving the Luminance Smoothing slider to the right reduces grayscale noise.*

## Save changes to camera raw images

You can save changes you've made to a camera raw file. The Camera Raw dialog box saves the camera raw image with your changes in a .dng file. Saving the file does not automatically open it in Photoshop Elements. (To open a camera raw file, use the Open command. Then you can edit and save the file like any other image.)

- 1 In the Camera Raw dialog box, apply adjustments to one or more camera raw images.
- 2 Click the **Save Image** button.
- 3 In the Save Options dialog box, specify where to save the file and how to name the file if you're saving more than one camera raw file.

Additional options:

- **Embed Fast Load Data:** Embeds a much smaller copy of the raw image in the DNG file, to enhance the speed at which the raw image is previewed.
- **Use Lossy Compression:** Reduces the file size of your DNG file, and causes loss of quality. Recommended only for the raw images that are to be stored for archival purposes, and will never be used for printing or production (other use).
- **Embed Original Raw File:** Stores all the original camera raw image data in the DNG file.

- 4 Click **Save**.

## Open a camera raw image in the Edit workspace

After you process a camera raw image in the Camera Raw dialog box, you can open the image and edit it in the Edit workspace.

- 1 In the Camera Raw dialog box, apply adjustments to one or more camera raw images.
- 2 Click the Open Image button. The Camera Raw dialog box closes, and the photo opens in the Edit workspace.

## Settings and controls

## Camera raw controls

**Zoom tool** Sets the preview zoom to the next preset zoom value when you click within the preview image. Alt-click (Option-click in Mac OS) to zoom out. Drag the Zoom tool in the preview image to zoom in on a selected area. To return to 100%, double-click the Zoom tool.

**Hand tool** Moves the image in the preview window if the preview image is set at a zoom level higher than 100%. Hold down the spacebar to access the Hand tool while using another tool. Double-click the Hand tool to fit the preview image in the window.

**White Balance tool** Sets the area you click to a neutral gray tone to remove color casts and adjust the color of the entire image. The Temperature and Tint values change to reflect the color adjustment.

**Crop tool** Removes part of an image. Drag the tool within the preview image to select the portion you want to keep, and then press Enter.

**Straighten tool** You can use the Straighten tool to realign an image vertically or horizontally. This tool also resizes or crops the canvas to accommodate straightening the image.




**Red Eye removal** Removes red eye in flash photos of people and green or white eye in pets.

**Open Preferences dialog** Opens the Camera Raw Preferences dialog.

**Rotate buttons** Rotates the photo either counterclockwise or clockwise.

## Set custom camera settings

When you open a camera raw file, Photoshop Elements reads information in the file to see which model of camera created it, and then applies the appropriate camera settings to the image. If you are always making similar adjustments, you can change the default settings of your camera. You can also change settings for each model of camera you own, but not for multiple cameras of the same model.

- To save the current settings as the default for the camera that created the image, click  icon choose **Save New Camera Raw Default**.
- To use the Photoshop Elements default settings for your camera, click  icon choose **Reset Camera Raw Default**.
- To clear the previous settings, click  icon choose **Clear Imported Settings**.

## Add blur, replace colors, and clone image areas

You can enhance your photos in Photoshop Elements by adding blur, replacing colors, or by cloning part of the photo. Use the Blur tool to add blur to your photo, the Brush tool to replace colors, and the Clone tool to clone part of the photo. You can select these tools from the Toolbox. For information about the Toolbox, see [Tools](#).


### Blur or soften edges

The Blur tool softens hard edges or areas in an image by reducing detail. Blurring a busy background can bring your subject more into focus. You can also use Blur filters for this purpose. For more information on Blur filter, see [Blur filters](#).

## Fixing and enhancing photos



Original photo (left), and photo after blurring the background (right).


- 1 In expert mode, select the Blur tool  from the Enhance section in the toolbox or press *R*.
- 2 Set options in the options bar:
  - Mode** Specifies how the pixels you blur, blend into other pixels in the image.
  - Brush** Sets the brush tip, from the brush pop-up menu. For more brush shapes, click the Brush drop-down inside the pop-up, and then select a brush thumbnail.
  - Size** Sets the size of the brush, in pixels. Drag the Size slider, or enter a size in the text box.
  - Strength** Specifies the amount of blur that is applied with each stroke.
  - Sample All Layers** Blurs all visible layers. If you deselect this option, the tool blurs only the active layer.
- 3 Drag over the part of the image you want to blur.

## Replace colors in an image

The Color Replacement tool simplifies replacing specific colors in your image. You can paint over a targeted color—for example, a yellow flower in an image—with a different color, like red. You can also use the Color Replacement tool to correct colors.



Replacing colors

- 1 In expert mode, select the Brush tool from the Draw section in the toolbox or press *B*.
- 2 Select the Color Replacement brush  from the Brush tool options bar.

## Fixing and enhancing photos

- 3 Choose a brush size from the Brush menu in the options bar.
- 4 For Tolerance, specify a low percentage to replace colors similar to the pixel you click, or raise the percentage to replace a broader range of colors.
- 5 For Mode, keep the blending mode set to Color.
- 6 For Limits, choose one of the following:
  - Discontiguous** Replaces the sampled color wherever it occurs under the pointer.
  - Contiguous** Replaces colors that are contiguous with the color immediately under the pointer.
- 7 Choose one of the following methods of sampling:
  - Continuous** Continuously samples color, as you drag the color replacement tool.
  - Once** Samples color only once, when you start dragging the color replacement tool.
  - Background Swatch** Replaces the area containing the background color, whenever you drag the color replacement tool over it.
- 8 Select **Anti-aliasing** to give a smooth edge to the areas you correct.
- 9 Do one of the following to choose a foreground color:
  - Select the foreground color by the Eyedropper tool:
    - On Windows, move the pointer on the color and press Alt+Click.
    - On Mac, move the pointer on the color and press Option+Click.
  - Set color in the toolbox by the Color Picker tool.
- 10 Drag within the image to replace in the targeted color.


## Clone images or areas in an image

The Clone Stamp tool paints with an image sample, which you can use to duplicate objects, remove image imperfections, or paint over objects in your photo. You can also clone part of an image to another image.

## Fixing and enhancing photos



Original photo (top), after adding starfish with the Clone Stamp tool (center), and after removing a person with the Clone Stamp tool (bottom).

- 1 In expert mode, select the Clone Stamp tool  from Enhance section in the toolbox or press S.
- 2 (Optional) Set options in the options bar:
  - Brush** Sets the brush tip. Click the arrow next to the brush sample, choose a brush category from the Brushes pop-up menu, and then select a brush thumbnail.
  - Sample All Layers** To sample (copy) data from all visible layers, select Sample All Layers. To sample data from only the active layer, deselect this option.
  - Size** Sets the size of the brush in pixels. Drag the Size slider, or enter a size in the text box.
  - Opacity** Sets the opacity of the paint you apply. A low opacity setting allows pixels under a paint stroke to show through. Drag the slider, or enter an opacity value.
  - Mode** Determines how the source or pattern blends with existing pixels. Normal mode lays new pixels over the original pixels.
  - Aligned** Moves the sampled area with the cursor as you begin to paint, regardless of how many times you stop and resume painting. Select this option if you want to eliminate unwanted areas, such as a telephone line across the skyline or a rip in a scanned photo. If Aligned is deselected, the Clone Stamp tool applies the sampled area from the initial sampling point each time you stop and resume painting. Deselect this option for applying multiple copies of the same part of an image to different areas within the same image or to another image.
- 3 Click **Clone Overlay**, and set the following options:
  - Show Overlay** Select show Overlay for the overlay to be visible inside brush size.
  - Opacity** To set the opacity of the overlay, enter a percentage value in the Opacity text box.
  - Clipped** To clip overlay to the brush size, enable the Clipped option.

## Fixing and enhancing photos

**Auto Hide** To hide the overlay while you apply the paint strokes, select Auto Hide.

**Invert Overlay** To invert the colors in the overlay, select Invert.

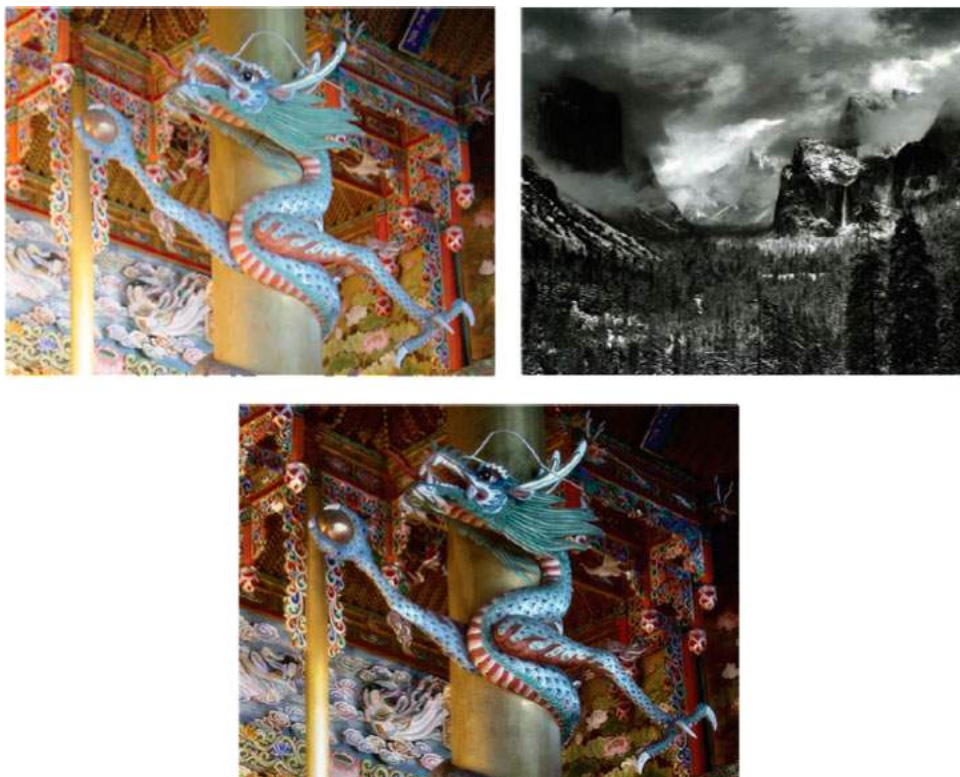
- 4 Position the pointer on the part of any open image you want to sample, and press Alt (Option in Mac OS) and click. The tool duplicates the pixels at this sample point in your image as you paint.
- 5 Do one of the following:
  - Drag or click to paint with the tool on the same image.
  - Drag or click to paint with the tool on the other targeted image.

## Photomerge Style Match

If you like the style of an image, you can apply its style properties to another image. You can work with a set of images, apply styles, and choose to update the image with the style that produces the best results.

### Note:

*When you apply styles multiple times, the effect is not cumulative. Only the last applied style is saved.*



*Image after the style of the style image is applied*

- 1 Open the image, and select Enhance > Photomerge > Photomerge Style Match
- 2 In the Style bin, add the images from which you want to transfer the style. Choose images that have strong stylistic properties and details.

### Note:

*You can also choose an image from the default style images displayed in the Style bin.*

## Fixing and enhancing photos

3 To apply the style of an image, double-click the style image in the Style bin or drag the image from the Style bin to the Style Image placeholder.

4 To refine the image, use the options in the Edit panel.

**Intensity** Controls the amount or intensity of the style to transfer. The maximum value implies that you want to transfer 100% style of the style image.

**Clarity** Improves the local contrast of a stylized image. The contrast of the slowly varying intensity regions is enhanced, bringing out crisp details in darkened regions.

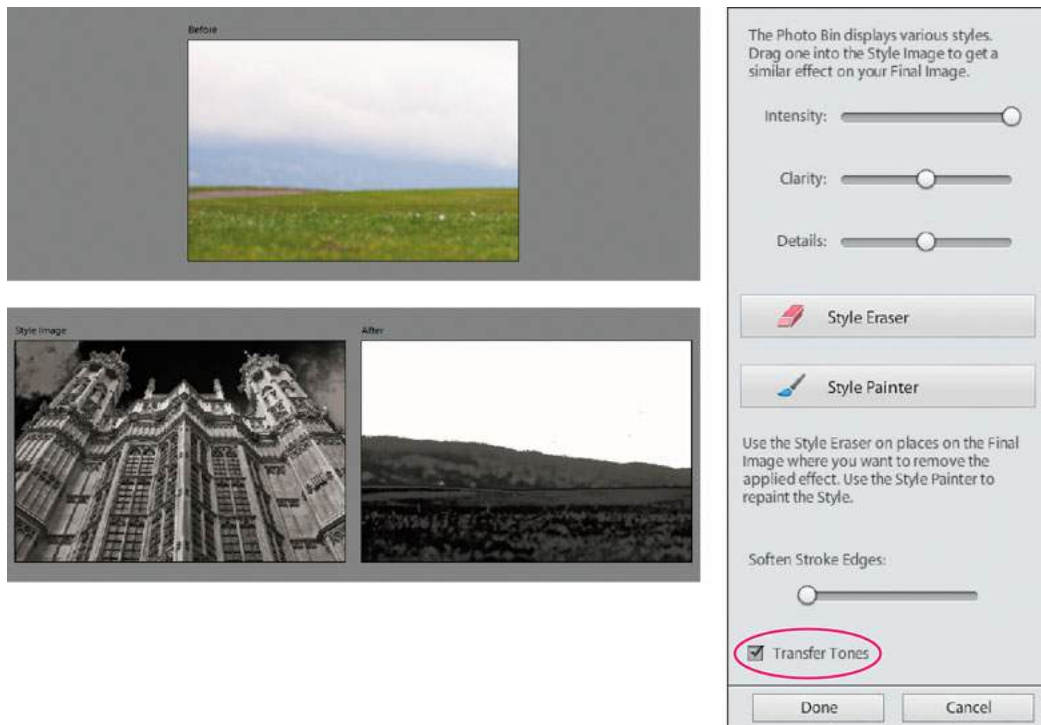
**Details** Improves the overall or global contrast of the image.

**Style Eraser** Removes the applied style from specific image areas.

**Style Painter** Adds the style back to areas from which you have removed the applied style.

**Soften Stroke Edges** Softens hard edges caused by to style erasing and painting.

**Transfer Tones** Transfers the tones of the style image. For example, if the style image is black and white or sepia, and the image to which you want to apply Photomerge Style Transfer is colored, selecting Transfer Tones transfers the style tone (black and white or sepia) to the colored image.



*Original colored image changed to black and white through Transfer Tones*

5 Click Done to update the image with the applied style.

## Adjust shadows and light

## Adjust color and tonality using the Smart Brush tools

The Smart Brush tool and the Detail Smart Brush tool apply tonal and color adjustments to specific areas of a photo. Certain effects can also be applied using these tools. You simply pick a preset adjustment and apply the correction. Both tools automatically create adjustment layers. This feature offers you flexibility in working with your photos because the original image layer is not altered. You can go back and tweak the adjustments and no image information is discarded.

When you apply the Smart Brush tool, it makes a selection based on color and texture similarly. The adjustment is simultaneously applied to the selected area. You can adjust shadows, highlights, colors, and contrasts. Apply colors of the objects in your image, add textures, apply various photographic effects.



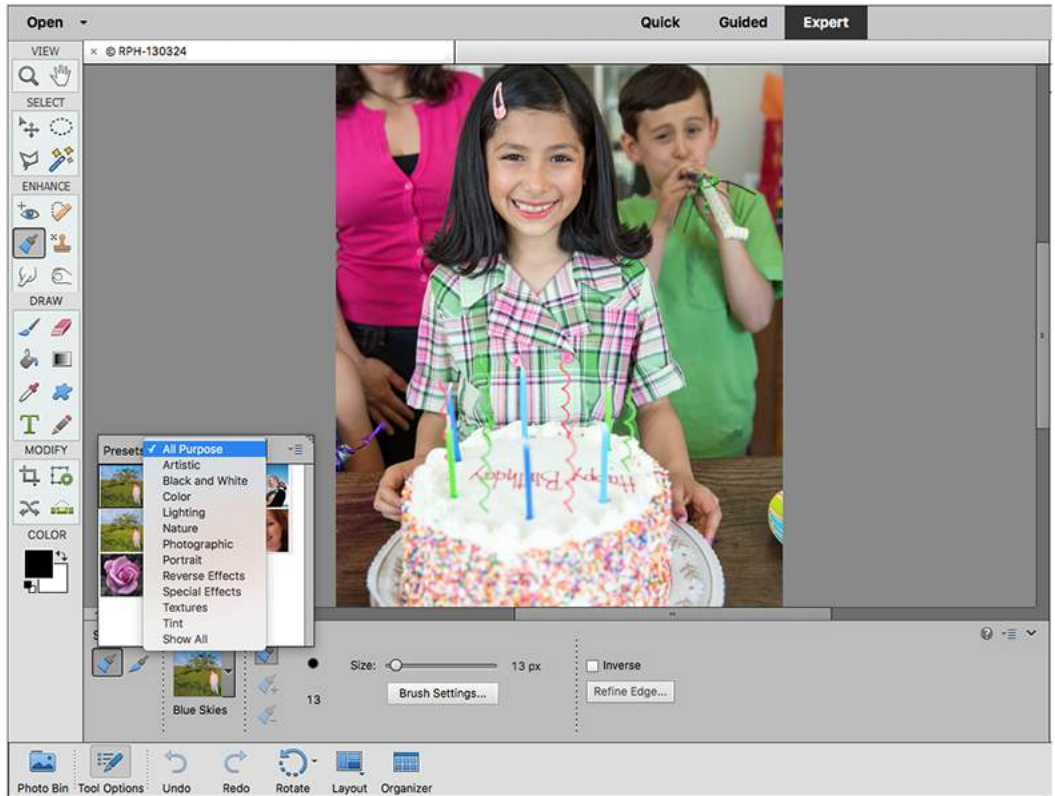
*Smart Brush tool applying an adjustment selection*

- 1 Select the Smart Brush tool.
- 2 Select an effect from the preset drop-down in the Tools Options bar, and then drag your mouse on the objects in the image to which you want to apply the effect.

You can apply various effects and patterns using smart brush from the available preset options.

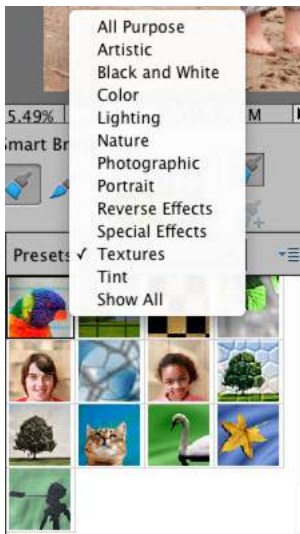


Fixing and enhancing photos



Available presets

However you cannot change the settings of an effect because the layer with the effect is a pixel layer and not an adjustment layer.



Textures option

## Fixing and enhancing photos

The Textures presets help provide the following effects to your images:

- Enhance dull and boring backgrounds.
- Create a Satin effect for clothes/textiles in an image.
- Add flowery patterns to dresses in an image.
- Add designer patterns to walls or backgrounds in an image.

The Detail Smart Brush tool enables you to paint the adjustment to specific areas of the photo just like a painting tool. This tool helps adjust fine details with pattern and effect presets. Painting and applying the preset in small areas is more precise. Click an effect from the drop-down list and paint over the area to apply the effect. You can choose from a range of brushes. It has settings for brush size and shape in the options bar.

It also works like a Selection tool; you can click Refine Edge in the options bar to modify the selection's shape and size. To remove an area from the selection, click the Remove area from Selection brush.

Both brush tools enable you to add to or subtract from the areas being adjusted. You can also have more than one adjustment preset applied to a photo. Each preset adjustment is applied to its own adjustment layer. You can tweak the settings for each correction separately.

When a correction is made, a pin appears where you first applied the adjustment. The pin provides a reference for the specific adjustment. A new pin appears when a different adjustment preset is applied. This feature makes it easier to modify a specific correction, especially if you apply different adjustments.



*Detail Smart Brush tool applying an adjustment stroke*

## Apply the Smart Brush tools

- 1 Select the Smart Brush tool or the Detail Smart Brush tool from the toolbox.

A pop-up panel opens displaying adjustment presets.

- 2 Select an effect from the preset drop-down in the Tools Options bar.



*Choose an option from the pop-up panel menu to view different sets of adjustments. For more information on configuring the pop-up panel, see [About presets](#).*

- 3 (Optional) Adjust the size and quality of the brush tool by doing one of the following:
  - If you selected the Smart Brush tool, open the Brush Picker in the options bar and adjust the settings.
  - If you selected the Detail Smart Brush tool, select a preset brush tip from the Brush presets pop-up panel. Then adjust the brush size setting in the options bar.
- 4 Paint or drag the tool in the image.

## Fixing and enhancing photos

The correction is applied on its own adjustment layer and a color pin appears where you first applied the brush tool.

**5** (Optional) Do any of the following:

- To add the current adjustment to more areas of the photo, paint or drag in the image. If necessary, make sure Add To Selection is selected.
- To remove parts of the current adjustment, select Subtract From Selection and paint in the image.
- To apply a different type of adjustment, select New Selection, select a preset from the pop-up panel, and then paint in the image.
- To smooth the edges of the selection, click Refine Edges in the options bar, adjust the settings in the dialog box, and then click OK. For more information, see [Smooth selection edges with anti-aliasing and feathering](#).

**Note:**

*If you use a different tool from the toolbox and then return to the Smart Brush tool or Detail Smart Brush tool, the last adjustment you applied is active.*

**6** (Optional) If you have multiple adjustments, do one of the following to select the adjustment you want to add to, subtract from, or modify:

- Click a pin.
- Right-click in the photo and choose the adjustment listed in the bottom portion of the menu.

### Modify Smart Brush tool correction settings

**1** Do any of the following:

- In the image, right-click a pin or an active selection and choose Change Adjustment Settings.
- In the Layers panel, double-click the layer thumbnail for the specific adjustment layer.
- Double-click a pin.

**2** Adjust the settings in the dialog box and then click OK.

### Change the Smart Brush tool correction preset

**1** Click a pin or active selection and then open the preset pop-up panel in the options bar.

**2** Choose an adjustment preset from the pop-up panel.



### Delete a Smart Brush tool correction

? Right-click a pin or an active selection and choose Delete Adjustment.

**Note:**

*In the Layers panel, you can also delete a Smart Brush tool correction by deleting the specific adjustment layer.*

### Smart Brush pop-up panel

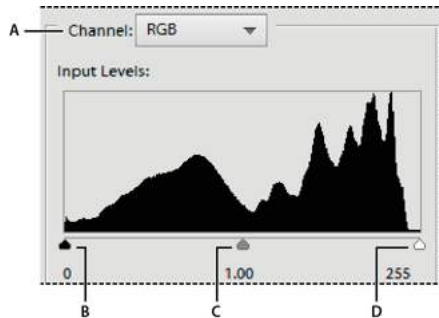
Photoshop Elements lets you apply many different preset adjustments using the Smart Brush tool  and the Detail Smart Brush tool . You pick an adjustment from the preset pop-up panel in the options bar. Like all pop-up panels, the Smart Brush preset pop-up panel can be configured. Use the panel menu to display the adjustments as thumbnails or in a list. You can also drag the picker out of the options bar so it floats where you want it in the workspace.

Specific sets of adjustments or all adjustments can be viewed by choosing from a menu near the upper-left area of the panel. The adjustments range from tonal and corrections.

## About Levels adjustments

The Levels dialog box is a powerful tonal and color-adjustment tool. You can make levels adjustments in the entire image or a selected portion. (To access the dialog box, choose Enhance > Adjust Lighting > Levels.)

You can do any of the following with the Levels dialog box:



Levels dialog box

A Channels to adjust color B Shadow values C Middle tones D Highlight values

- Set the shadow and highlight values to make sure that your image uses the full tonal range.
- Adjust the brightness of the image's middle tones without affecting the shadow and highlight values.
- Fix a color cast by making grays neutral. You can also enhance an image by adding a slight color cast, for example, by adding a warming effect on a sunset.
- Target shadow and highlight RGB values if you are preparing images for commercial printing.

When you work with Levels, you can work directly on the image pixels or through an adjustment layer. Adjustment layers give you flexibility in the following ways:

- You can modify an adjustment at any time by double-clicking the adjustment layer to reopen the Levels dialog box.
- You can reduce the effect of an adjustment by lowering the adjustment layer's opacity in the Layers panel.
- You can stack adjustment layers to make multiple adjustments without degrading the image because of too many successive adjustments.
- You can use the adjustment layer's layer mask to confine an adjustment to a portion of your image.

## Improve shadow and highlight detail

- 1 Choose Enhance > Adjust Lighting > Shadow/Highlights.
- 2 Drag any of the adjustment sliders or enter values in the text boxes, then click OK.

**Lighten Shadows** Brightens the dark areas of your photo and reveals more of the shadow detail that was captured in your image.

**Darken Highlights** Darkens the light areas of your photo and reveals more of the highlight detail that was captured in your image. Pure white areas of your photo don't have any detail and aren't affected by this adjustment.

**Midtone Contrast** Adds or reduces the contrast of the middle tones. Use this slider if the image contrast doesn't look right after you've adjusted shadows and highlights.

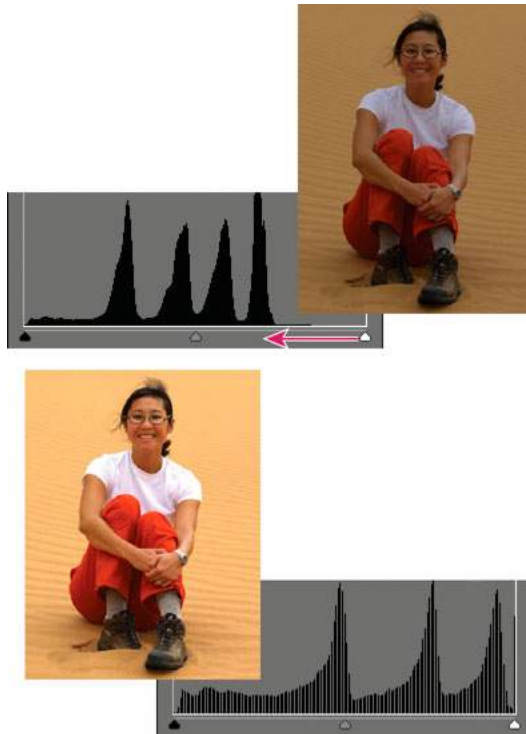
To reset the image to how it looked when you opened the dialog box, hold down Alt (Option in Mac OS) and click the Reset button.



*Before adjusting shadows and highlights (top) and after (bottom). Adjusting softens the face and reveals more detail behind sunglasses.*

## Adjust shadows and brightness using Levels

- 1 Do one of the following:
  - Choose Enhance > Adjust Lighting > Levels.
  - Choose Layer > New Adjustment Layer > Levels, or open an existing Levels adjustment layer.
- 2 Choose RGB from the Channel menu. When set to RGB, your adjustment affects all three (red, green, and blue) channels. If you are working on a grayscale image, it will only have the gray channel.
- 3 Set the shadow and highlight values by dragging the black and white Input Levels sliders (the left and right sliders directly under the histogram) to the edge of the first group of pixels on either end of the histogram. You can also enter values directly into the first and third Input Levels text boxes.



Dragging the highlight slider to the left lightens the photo.



Press **Alt** (Option in Mac OS) and drag the Shadow slider to see which areas will be clipped to black (level 0). Press **Alt** (Option in Mac OS) and drag the Highlight slider to see which areas will be clipped to white (level 255). Colored areas show clipping in individual channels.

- 4 To adjust the brightness of the middle tones without affecting the shadow and highlight values, drag the gray Input Levels (middle) slider. You can also enter values directly in the middle Input Levels text box. (A value of 1.0 represents the current unadjusted midtone value.) Click OK.

You can see the adjustment reflected in the Histogram panel.

**Note:**

You can click **Auto** to move the Highlight and Shadow sliders automatically to the brightest and darkest points in each channel. This is the same as using the **Auto Levels** command and may cause a color shift in your image.

## Adjust brightness and contrast in selected areas

The Brightness/Contrast command is best used on selected portions of an image. Use this command to adjust the brightness of an entire image or to reduce contrast results in an image. The Levels and Shadow/Highlight commands are better choices for making tonal adjustments.

- 1 Do one of the following:
  - Choose **Enhance > Adjust Lighting > Brightness/Contrast** to make adjustments directly to image pixels.
  - Choose **Layer > New Adjustment Layer > Brightness/Contrast** to make adjustments to a layer.

## Fixing and enhancing photos

- 2 Drag the sliders to adjust the brightness and contrast, then click OK.

Dragging to the left decreases the level; dragging to the right increases it. The number at the right of each slider displays the brightness or contrast value.

## Quickly lighten or darken isolated areas

The Dodge tool and the Burn tool lighten or darken areas of the image. You can use the Dodge tool to bring out details in shadows and the Burn tool to bring out details in highlights.



Original image (left), after using the Burn tool (top center), and after using the Dodge tool (bottom right)

- 1 Select the Dodge tool or the Burn tool. If you do not see these tools, look for the Sponge tool.


- 2 Set tool options in the options bar:

**Brushes pop-up menu** Sets the brush tip. Click the arrow next to the brush sample, choose a brush category from the Brushes pop-up menu, and then select a brush thumbnail.

**Size** Sets the size of the brush, in pixels. Drag the Size slider or enter a size in the text box.

**Range** Sets the image tonal range that the tool adjusts. Select Midtones to change the middle range of grays, Shadows to change the dark areas, and Highlights to change the light areas.

**Exposure** Sets the effect of the tool with each stroke. A higher percentage increases the effect.

 **Tip:** To dodge or burn an area gradually, set the tool to a low exposure value and drag several times over the area you want to correct.

- 3 Drag over the part of the image you want to modify.

## Quickly saturate or desaturate isolated areas

The Sponge tool saturates or desaturates areas of the image. You can use the Sponge tool to bring out or mute the color on an object or area.

- 1 Select the Sponge tool. If you do not see the Sponge tool, look for the Dodge or Burn tool.

## Fixing and enhancing photos

- 2 Set the tool options in the options bar.

**Brushes pop-up menu** Sets the brush tip. Click the arrow next to the brush sample, choose a brush category from the Brushes pop-up menu, and then select a brush thumbnail.

**Size** Sets the size of the brush, in pixels. Drag the Size slider or enter a size in the text box.

**Mode** Sets whether to saturate or desaturate.

**Flow** Sets the strength of the tool with each stroke. In Saturate mode, a higher percentage increases the saturation. In Desaturate mode, a higher percentage increases the desaturation.

# Retouch and correct photos

## Adjust facial features

The Adjust Facial Features workflow uses face-aware technology to identify and adjust facial characteristics of people in a photograph. You can take a portrait picture and adjust facial features like the jaw, nose, lips, and eyes by using simple sliders to increase or decrease an effect.

- 1 Open a photo in Photoshop Elements.



*For Adjust Facial Features to work well, ensure that there are one or more faces in the photograph that you are using.*

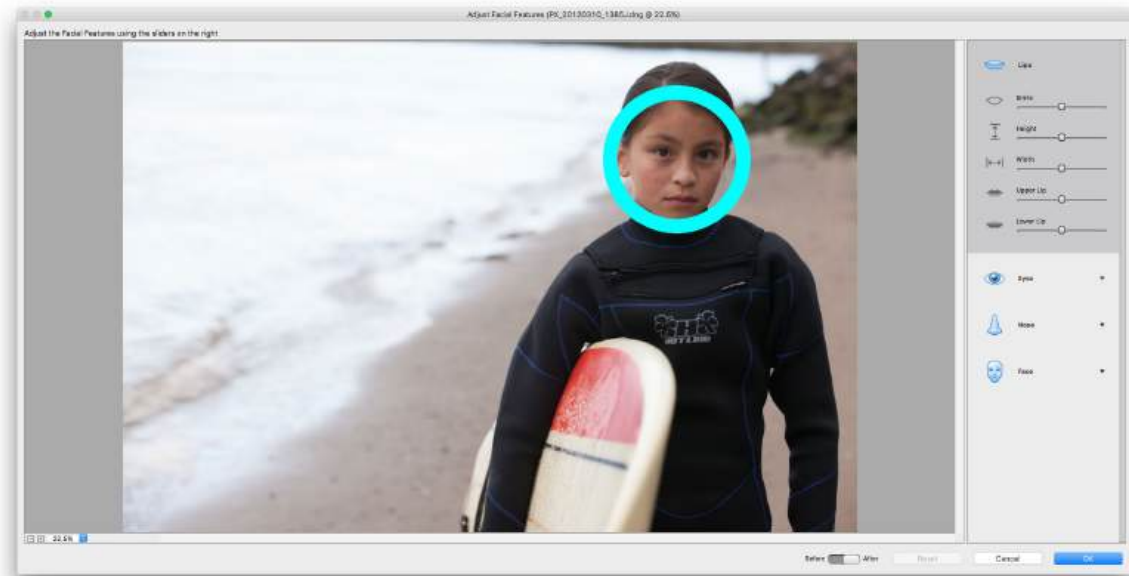
- 2 Click **Enhance > Adjust Facial Features**.
- 3 In the Adjust Facial Features dialog, you will notice that the face of the person is marked with a circular highlighter to indicate that the face-aware feature has found a face in the picture.



**More than one face in the picture?** *If there are more than one faces in the picture, there will be multiple circular highlighters indicating where Photoshop Elements was able to detect faces. Click a ring or a face to adjust the features of that face.*



## Fixing and enhancing photos



Select a face and adjust the facial characteristics of a person

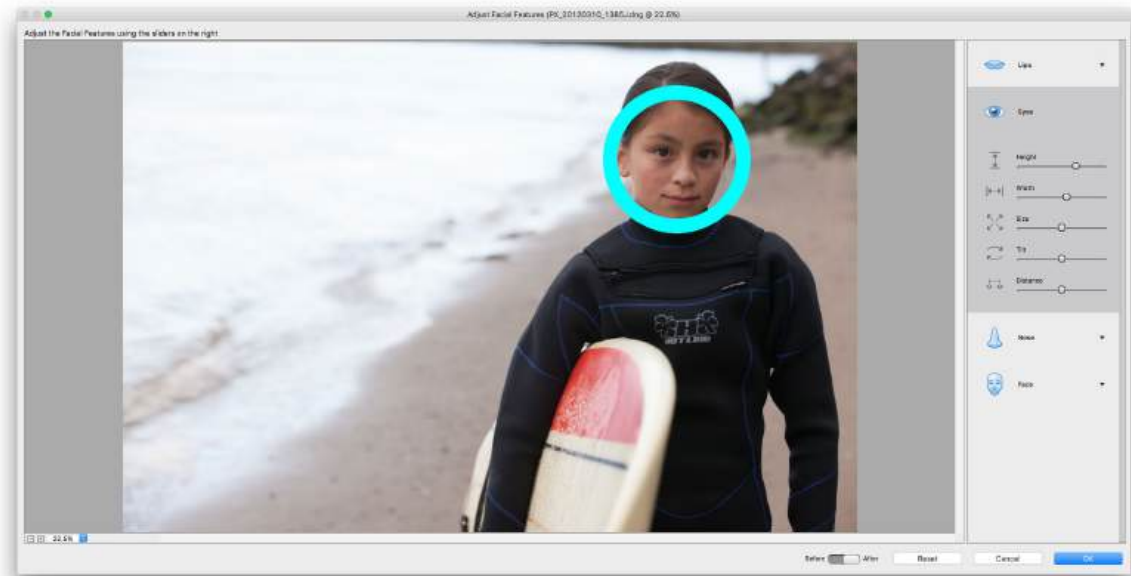
4 For a selected face, you can adjust the following features using the available sliders:

Feature	Characteristics
Lips	Smile, Height, Width, Upper lip, Lower lip
Eyes	Height, Width, Size, Tilt, Distance
Nose	Height, Width
Face	Width, Forehead height, Jawbone shape, Chin height



Click the Before/After toggle button to review the changes caused by moving the sliders left or right.

## Fixing and enhancing photos



*Move the sliders to make effect changes on the face.*

- 5 (Optional) To reset edits to a particular characteristic, double-click the slider. Modifications for that characteristic are canceled.
- 6 Do one of the following:
  - To cancel the set of modifications you have made to facial features, click Reset.
  - To apply the modifications made to the facial features, click OK.

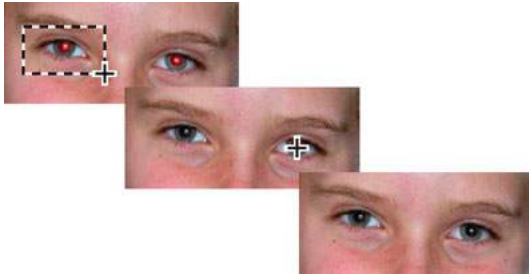
## Precisely remove red eye

Red eye is a common issue that occurs when your photo subject's retina is illuminated by your camera's flash. You'll see it more often when taking pictures in a darkened room because the subject's iris is wide open. To avoid red eye, use the camera's red-eye reduction feature, if available.




*To automatically fix red eye when you import photos into the **Elements Organizer**, select **Automatically Fix Red Eyes** in the **Get Photos** dialog box. You can also remove red eye from selected photos in the **Photo Browser**.*

## Fixing and enhancing photos



Correct red eye by selecting an eye (top) or clicking an eye (center).

- 1 To manually fix red eye, select the Eye tool  in Quick or Expert mode.
- 2 In the **Tool Options** bar, set the **Pupil Radius** and **Darken Amount**.
- 3 In the image, do one of the following:
  - Click a red area of an eye.
  - Draw a selection over the eye area.

When you release the mouse button, the red is removed from the eyes.

### **Note:**

You can also automatically fix red eye by clicking **Auto Correct** in the Eye tool options bar.

## Remove the Pet Eye effect

The Eye tool enables you to remove the reddish glow in the eyes, due to reflection of light (resulting from low ambient light or the use of a flash). For animals, the eyes glow white, green, red, or yellow, and the often-used red-eye removal tools may not fix the effect correctly.



Golden retriever with the pet eye effect (left), and after applying the Pet Eye tool (right)

### **To fix the Pet Eye effect:**

- 1 In the **Quick** or **Expert** mode, select the **Eye Tool**.
- 2 In the **Tool Options** bar, select the **Pet Eye** check box.

## Fixing and enhancing photos



### 3 Do one of the following:

- Draw a rectangle around the eye region.
- Click on the eye in the picture.

**Note:**

When you select the **Pet Eye** check box, the **Auto Correct** button is disabled.

## Open closed eyes

The Open Closed Eyes feature lets you open closed eyes in your photos. You can open a person's eyes by using the eyes from another photo from your computer or the Elements Organizer catalog.

### 1 Open a photo in Photoshop Elements.

### 2 Do one of the following in the Quick or Expert mode:

- Select the Eye  tool and then click the **Open Closed Eyes** button in the Tool Options bar.
- Select **Enhance > Open Closed Eyes**.

In the **Open Closed Eyes** dialog, you can see that the face of the person is marked with a circular highlighter to indicate that the face is detected in the picture.

### 3 (Optional) You are shown a few samples in the Try Sample Eyes list. You can choose a face that closely matches the main photo. Photoshop Elements uses the selected face to replace the closed eyes in the main photo.

### 4 Do one of the following:

- Click **Computer** to select a source photo from your computer.
- Click **Organizer** to select a source photo from the Elements Organizer.
- Click **Photo Bin** to select a source photo from the currently opened files.

**Note:**

You can select multiple source photos if you want. Photoshop Elements uses faces from these source photos to replace the closed eyes in the main photo. You can experiment with different eye replacements to find the best results.

### 5 Select a face in the main photo whose eyes need to be opened, and then click on any of the faces from the source photos. Try different faces to find the best results.

**Note:**

In case the source photo has a different skin tone, Photoshop Elements matches the skin tone around the eyes with the main photo.

### 6 (Optional) Click Before/After to compare the results with the original photo.

### 7 (Optional) Click **Reset** if you don't like the results. You can use a different source photo to try and get better results.

### 8 Click **OK**.



- 9 Save the photo with the changes.

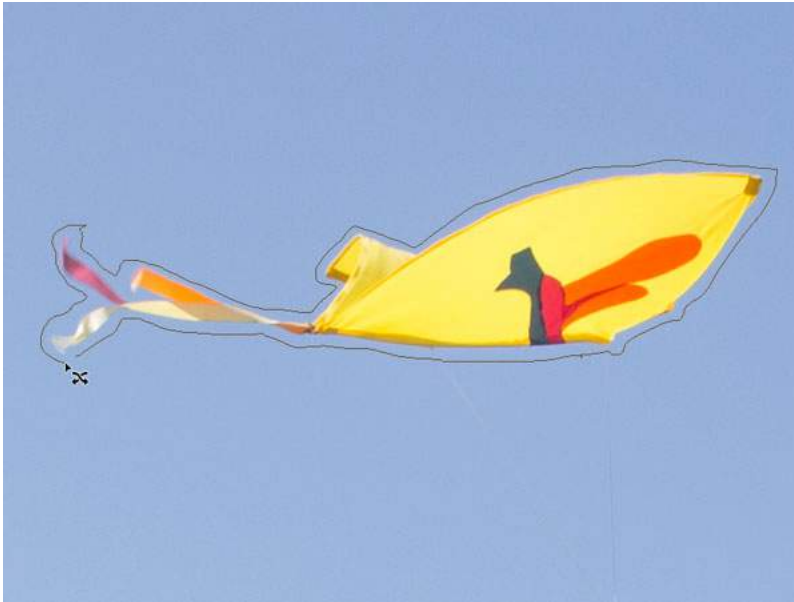
## Move and reposition objects

The **Content-Aware Move** tool allows you to select an object in your photograph and move the selection to a different location, or extend it.



*The original photograph (left); the kite has been positioned closer to the ground (middle); the kite has been moved higher into the sky (right).*

- 1 Select the **Content-Aware Move** tool .
- 2 Choose a mode to specify whether you want to move an object or create a copy of the object.
  - Move** Enables you to move objects to a different location in the image.
  - Extend** Enables you to replicate the object multiple times.
- 3 Choose the type of selection you want to make:
  - New** Drag your mouse around the object you want to move, or extend to create a new selection.
  - Add** Any selection you make adds to the previous selection.
  - Subtract** When you make a new selection over an existing selection, the overlapping portion is removed from the resulting selection.
  - Intersect** When you make a new selection over an existing selection, only the common area overlapping the new and old selection continues to be selected.
- 4 Drag the mouse pointer (  ) over the image, select the object you want to move or extend.



*Drag the mouse around the object you want to select*

- 5** When you have made a selection, move the object to a new location. To do this, click and drag the object to a new location.  
The area where the selection is moved from is automatically filled, based on the image content surrounding the area.
- 6** Transform your selection at the new location. Click one of the following options:
  - **Rotate** Enables you to rotate your selection to a different angle in the image.
  - **Scale** Enables you to adjust the size of your selection.
  - **Skew** Enables you to change the perspective of your selection in the image.
- 7** If the automatically-filled area does not appear correct, select the **Sample All Layers** check box and adjust the Healing slider.

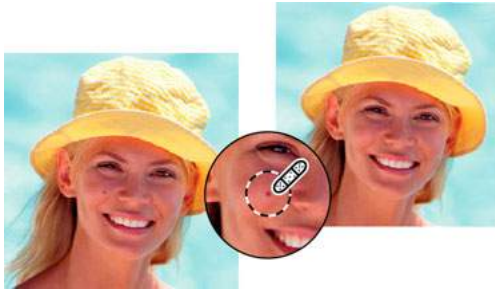
## Remove spots and unwanted objects

Photoshop Elements has several tools you can use to remove small flaws, such as spots or unwanted objects, from your images.


### Remove spots and small imperfections

The **Spot Healing Brush** quickly removes blemishes and other imperfections from your photos. You can either click once on a blemish, or drag to smooth away imperfections in an area.

## Fixing and enhancing photos



Easily remove spots or imperfections using the Spot Healing Brush tool.

- 1 Select the **Spot Healing Brush** tool .
- 2 Choose a brush size. A brush that is slightly larger than the area you want to fix works best so that you can cover the entire area with one click.
- 3 Choose one of the following **Type** options in the **Tool Options** bar.

**Proximity Match** Uses the pixels around the edge of the selection to find an image area to use as a patch for the selected area. If this option doesn't provide a satisfactory fix, choose **Edit > Undo**, and try the **Create Texture** option.

**Create Texture** Uses all the pixels in a selection to create a texture for fixing the area. If the texture doesn't work, try dragging through the area a second time.

**Note:**

Click **Sample All Layers** to apply your change to all layers of the image.

- 4 Click the area you want to fix in the image, or click and drag over a larger area.

## Remove unwanted objects with content-aware healing

You can remove unwanted objects or figures from your photos without destroying the photos. Using the **Content-Aware** option with the **Spot Healing Brush** tool, you can remove selected objects from a photo. Photoshop Elements compares nearby image content to seamlessly fill the selection, realistically maintaining key details such as shadows and object edges.

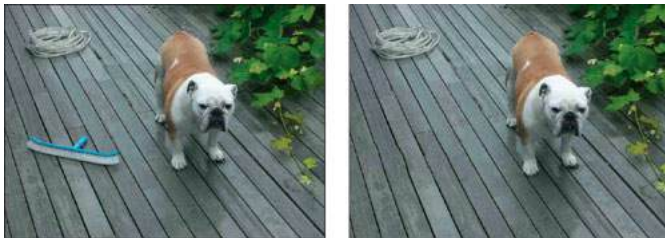



Image before and after an unwanted object (the brush) is removed with content-aware fill.

To remove an unwanted object:

- 1 Select the **Spot Healing Brush** tool .
- 2 Select **Content-Aware** in the **Tool Options** bar.
- 3 Paint over the object that you want to remove from the image.

## Fixing and enhancing photos

Spot healing works best on small objects. If the image you're working on is large and has a large unwanted object, make sure that you work with high-end computer configuration. You can see the [Photoshop Elements system requirements](#) for the recommended computer configuration.

If you experience problems with large images, try the following approaches:


- Draw smaller brush strokes at a time.
- Downsample the image.
- Increase the RAM allocated and relaunch the application.

## Fix large imperfections

The **Healing Brush** fixes large areas of imperfection when you drag over them. You can remove objects from a uniform background, such as an object in a field of grass.



Before and after using Healing Brush.

- 1 Select the **Healing Brush** tool .
- 2 Choose a brush size from the **Tool Options** bar and set healing brush options:
  - Mode** Determines how the source or pattern blends with existing pixels. Normal mode lays new pixels over the original pixels. Replace mode preserves film grain and texture at the edges of the brush stroke.
  - Source** Sets the source to use for repairing pixels. Sampled uses pixels from the current image. Pattern uses pixels from the pattern you specify in the **Pattern** panel.
  - Aligned** Samples pixels continuously without losing the current sampling point, even if you release the mouse button. Deselect **Aligned** to continue using the sampled pixels from the initial sampling point each time you stop and resume painting.
  - Sample All Layers** Choose Sample All Layers to sample data from the current layer, the current layer and below, or all visible layers.
- 3 Position the pointer in any open image and press Alt (Option in Mac OS) click to sample data.
 

**Note:**

*If you are sampling from one image and applying to another, both images must be in the same color mode unless one of the images is in Grayscale mode.*
- 4 Drag the image over the flaw to meld existing data with sampled data. The sampled pixels meld with the existing pixels each time you release the mouse button.



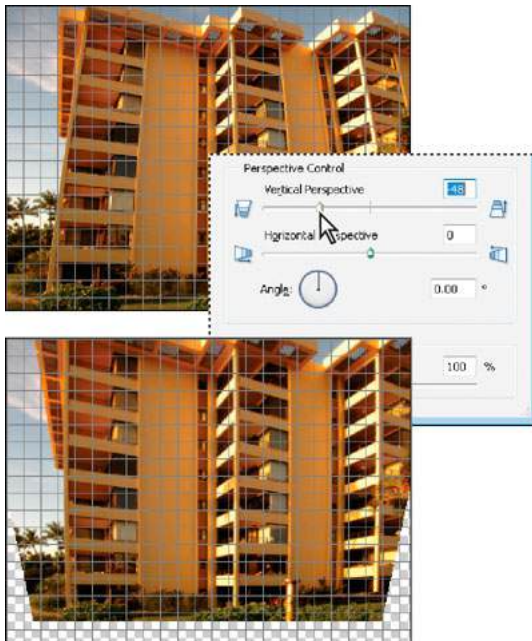


*If there is a strong contrast at the edges of the area you want to heal, make a selection before you use the **Healing Brush** tool. Make the selection bigger than the area you want to heal but precisely follow the boundary of contrasting pixels. When you paint with the **Healing Brush** tool, the selection prevents colors from bleeding from the outside.*

## Correct camera distortion

The **Correct Camera Distortion** dialog box enables you to fix common lens distortion problems, like darkened edges due to lens faults or improper lens shading. For example, in a picture of the sky taken in low light, the corners of the image are darker than the center. Changing the vignette amount and midtone settings fixes the distortion.

Adjust distortions due to vertical or horizontal camera tilt by using the perspective controls. Rotate an image or fix image perspective to adjust distortions. The filter image grid for **Correct Camera Distortion** helps you make easy and accurate adjustments.



*Correct camera distortion*

**1** Choose **Filter > Correct Camera Distortion**.

**2** Select **Preview** check box.

**3** Set any of the following options to correct your image, and then click OK:

**Remove Distortion** Corrects lens barrel or pincushion distortion. Type a number in the box, or move the slider to straighten horizontal and vertical lines that bend either away from or toward the center of the image.

**Vignette Amount** Sets the amount of lightening or darkening along the edges of an image. Type a number in the box, or move the slider to gradually shade the image.

**Vignette Midpoint** Specifies the width of area affected by the **Amount** slider. Move the slider, or type a lower number to affect more of the image. Type a higher number to restrict the effect to the edges of the image.

**Vertical Perspective** Corrects image perspective caused by tilting the camera up or down. Type a number in the box or use the slider to make vertical lines in an image parallel.

## Fixing and enhancing photos

**Horizontal Perspective** Type a number in the box or use the slider to correct perspective by making horizontal lines in an image parallel.

**Angle** Rotates the image to correct for camera tilt or to make adjustments after correcting perspective. Type a number in the box or drag the angle dial to rotate the image to the left (counterclockwise) or right (clockwise).

**Scale** Adjusts the image scale up or down. The image pixel dimensions aren't changed. Type a number in the box or use the slider to remove blank areas of the image caused by pincushion, rotation, or perspective corrections. Scaling up effectively results in cropping the image and interpolating up to the original pixel dimensions.

**Show Grid** Shows the grid when selected. Hides the grid when deselected.

**Zoom** Shows a closer view when you zoom in, and shows a more distant view when you zoom out.

**Color** Specifies the grid color.

## Automatically remove haze

You can now remove the dampening effect that environmental or atmospheric conditions have on your pictures, particularly photos of landscapes. Using the Auto Haze Removal feature, you can reduce the masking effect that haze, fog, or smog creates.

To use the Auto Haze Removal feature:

- 1 Open an picture in Photoshop Elements, in the Quick or Expert modes.
- 2 With the image open, choose Enhance > Auto Haze Removal.

The image is processed and the effects of haze or fog are reduced. Repeat Step 2, to further process the photograph.



*Auto Haze Removal works better on uncompressed/raw images.*

## Manually remove haze

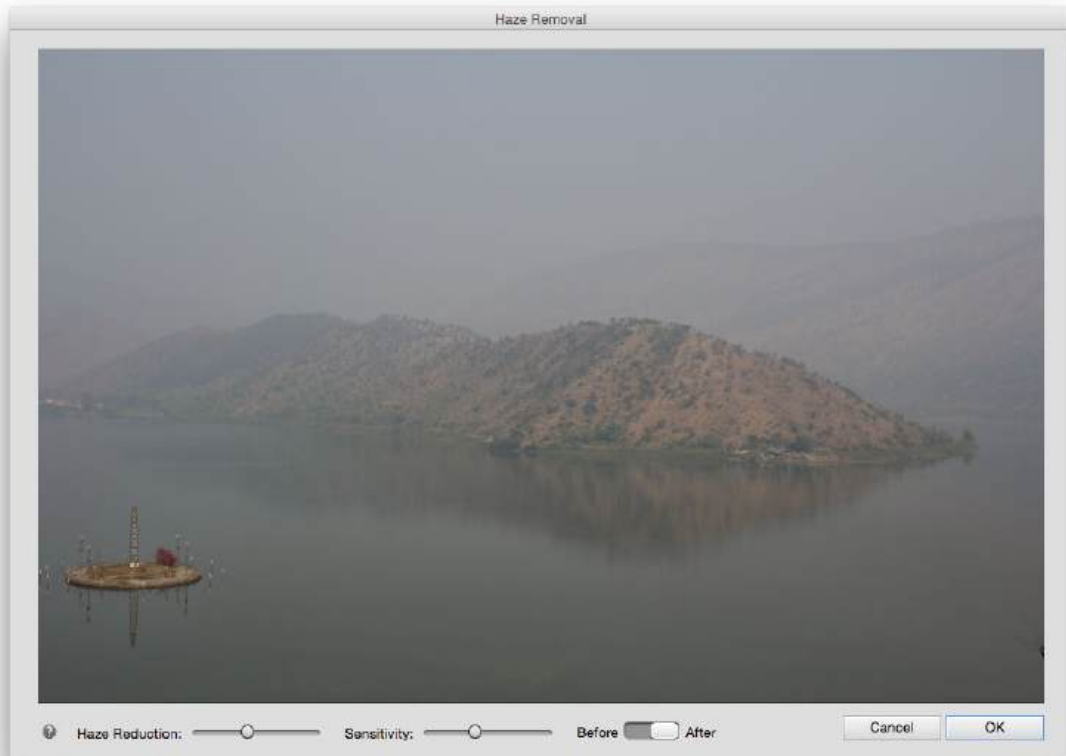


*A photograph taken under foggy conditions*

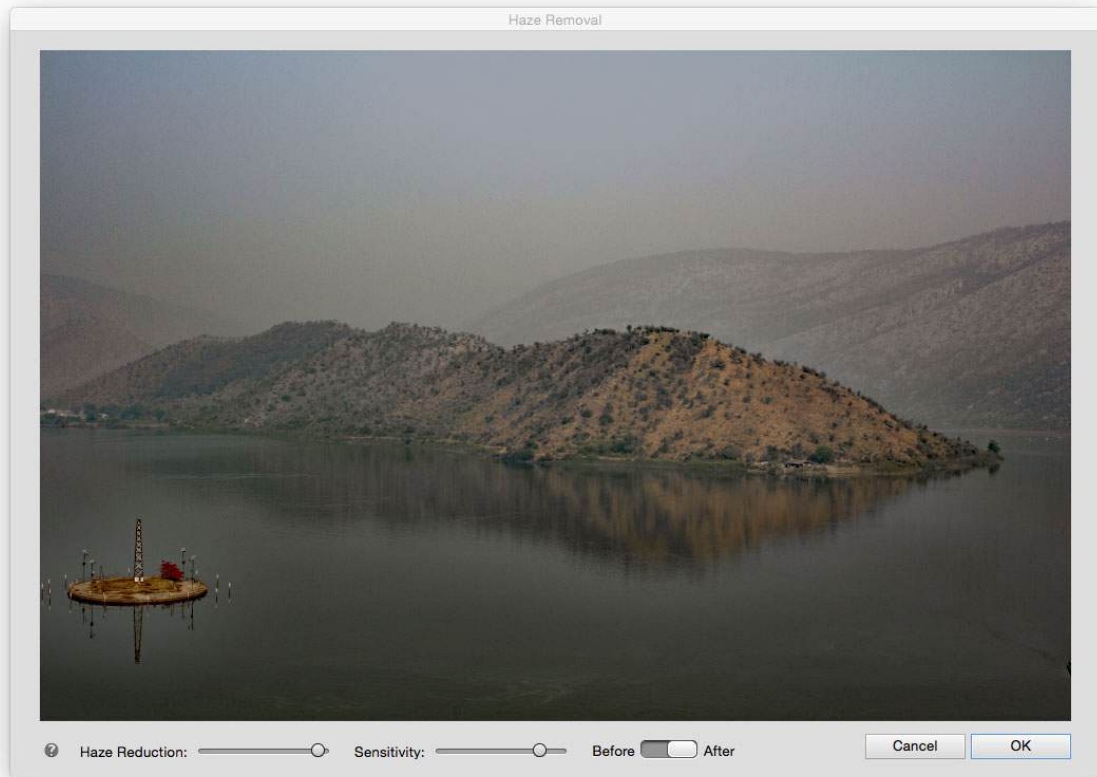


*Photograph treated with Haze Removal and additional exposure and contrast modifications*

- 1 Open an image in Photoshop Elements, in the Quick or Enhanced room.
- 2 Choose Enhance > Haze Removal.
- 3 Use the Haze Reduction and Sensitivity sliders to achieve the desired level of haze reduction.



*Low levels of haze removal applied*



*Haze removal applied until the picture is clearer*



*Remember that using too much of either of the sliders may result in an image with high levels of contrast or minor imperfections in the photograph getting magnified. Play with both sliders till you get the right result.*

- 4 Use the Before / After toggle button to see the effectiveness of the Haze Reduction feature on the photo.
- 5 When done, click OK. To cancel Haze Removal edits to the image, click Cancel.

## Sharpen photos

### Sharpening overview

Sharpening enhances the definition of edges in an image. Whether your images come from a digital camera or a scanner, most images can benefit from sharpening. When sharpening images, keep the following in mind:

- Sharpening cannot correct a severely blurred image.

## Fixing and enhancing photos

- Sharpen your image on a separate layer so that you can resharpen it later if you need to change the adjustment. Set the layer's blending mode to Luminosity to avoid color shifts along edges. If you find that highlights or shadows are lessened after you sharpen, use the layer blending controls to prevent sharpening in highlights and shadows.
- If you need to reduce image noise, do so before sharpening so that you don't intensify the noise.
- Sharpen your image multiple times in small amounts. Sharpen the first time to correct blur captured by a scanner or digital camera. After you've color corrected and resized your image, sharpen it again.
- If possible, judge your sharpening by outputting your image. The amount of sharpening needed varies depending on whether the image is printed or displayed on a web page.

## Sharpen an image

The Auto Sharpen command increases clarity or focus without the risk of oversharpening an image.

The Sharpen tool focuses soft edges in a photo to increase clarity or focus. Oversharpening a photo gives it a grainy look. You can avoid oversharpening by setting a lower Strength value in the options bar. It's best to make the sharpening subtle and increase it as necessary by dragging over the area several times, building up the sharpness each time.

The Adjust Sharpness dialog box has sharpening controls not available with the Sharpen tool or with Auto Sharpen. You can set the sharpening algorithm or control the amount of sharpening that occurs in shadow and highlight areas.

## Automatically sharpen an image

? Choose Enhance > Auto Sharpen.

## Sharpen areas of an image



*Original image (top), two faces sharpened correctly (bottom left), and two faces oversharpened (bottom right)*

**1** Select the Sharpen tool .

**2** Set options in the options bar:

**Mode** Determines how the paint that you apply blends with the existing pixels in the image.

**Brush** Sets the brush tip. Click the arrow next to the brush sample, choose a brush category from the Brushes menu, and then select a brush thumbnail.

**Size** Sets the size of the brush, in pixels. Drag the Size pop-up slider or enter a size in the text box.

## Fixing and enhancing photos

**Strength** Specifies the amount of sharpening that occurs with each stroke.

**Sample All Layers** Sharpens all visible layers. If this is deselected, the tool sharpens only the active layer.

**Protect Detail** Select Protect Detail to enhance details and minimize pixelated artifacts. Deselect this option if you want to produce more exaggerated sharpening effects

- 3 Drag over the part of the image you want to sharpen.

### Precisely sharpen an image

- 1 Choose Enhance > Adjust Sharpness.
- 2 Select Preview check box.
- 3 Set any of the following options to sharpen your image, and then click OK.

**Amount** Sets the amount of sharpening. Type a number in the box or drag the slider to increase or decrease the contrast between edge pixels, giving the appearance of greater sharpness.

**Radius** Determines the number of pixels surrounding the edge pixels affected by the sharpening. Type a number in the box or drag the slider to change the radius value. As you increase the radius, sharpening becomes more obvious.

**Remove** Sets the sharpening algorithm used to sharpen the image. Gaussian Blur is the method used by the Unsharp Mask filter. Lens Blur detects the edges and detail in an image, and provides finer sharpening of detail and reduced sharpening halos. Motion Blur attempts to reduce the effects of blur due to camera or subject movement. Select a blur option from the pop-up menu.

**Angle** Sets the direction of motion for the Motion Blur option of the Remove control. Type a number in the box or drag the angle dial to change the angle percentage to the left (counterclockwise) or right (clockwise).

**More Refined** Processes the file more slowly for more accurate blur removal.

### Use the Unsharp Mask filter

The Unsharp Mask filter reproduces a traditional film technique used to sharpen edges in an image. The Unsharp Mask filter corrects blur introduced during photographing, scanning, resampling, or printing. It is useful for images intended for both print and online viewing.

Unsharp Mask locates pixels that differ from surrounding pixels by the threshold you specify and increases the pixels' contrast by the amount you specify. For neighboring pixels within the specified radius, the lighter pixels get lighter, and the darker pixels get darker.

The effects of the Unsharp Mask filter are far more pronounced on-screen than in high-resolution printed output. If your final destination is printed output, experiment to determine what settings work best for your image.



*The Unsharp Mask filter adds contrast to reduce fuzziness.*

- 1 In the Edit workspace, select an image, layer, or area.
- 2 Choose Enhance > Unsharp Mask.



## Fixing and enhancing photos

3 Select the Preview option.

4 Set any of these options and click OK:

**Amount** Determines how much to increase the contrast of pixels. For high-resolution printed images, an amount between 150% and 200% is usually best.

**Radius** Specifies the number of pixels to sharpen around edges. For high-resolution images, a radius between 1 and 2 is usually recommended. A lower value sharpens only the edge pixels, whereas a higher value sharpens a wider band of pixels. This effect is much less noticeable in print than on-screen, because a 2-pixel radius represents a smaller area in a high-resolution printed image.

**Threshold** Determines how far different pixels must be from the surrounding area before they are considered edge pixels and sharpened. To avoid introducing noise (in images with flesh tones, for example), experiment with Threshold values between 2 and 20. The default Threshold value (0) sharpens all pixels in the image.

## Shake Reduction

When a camera or the photographer shakes while taking a picture, blurriness caused by the camera shake is introduced in the picture. It is not always possible to maintain high-shutter speeds to avoid camera shake. Taking pictures in low-light conditions may require the shutter to be open for long - resulting in shake-induced blur. Also, if the picture is taken from a moving vehicle, the image may turn out blurred due to shake caused by an uneven road.

You can reduce shake-induced blur in a photo using two methods: automatic and manual.

### Automatic Shake Reduction

- 1 Open a photograph from the Photo Bin.
- 2 Choose Enhance > Auto Shake Reduction.
- 3 (Optional) If you are not satisfied with the result, click Enhanced > Automatic Shake Reduction, to run the process again.
- 4 In case you are unable to achieve shake reduction with the automatic mode, try reducing shake with the [Manual Shake Reduction](#).

### Manual Shake Reduction

- 1 Open a photograph from the Photo Bin.
- 2 Click Enhance > Shake Reduction.
- 3 When the Shake reduction dialog starts, Photoshop Elements places a Shake Region on the image and starts to analyze the portion of the image for shake. When analysis is done, shake correction are applied across the photo.



*The Shake Reduction dialog*

- 4** Use the Sensitivity Slider to vary the shake threshold. Increasing the sensitivity may improve the resultant image.
- 5** Use the pin (📍) at the center of a Shake Region to move it around. When you move a Shake Region, the area under the region is re-analyzed for shake corrections, and the image is optimized again.
- 6** To further analyze the photograph and reduce blurriness, add more Shake Regions.
  - a** Do one of the following:
    - Use the mouse to draw a rectangular shape on any part of the photo.
    - Click the Shake Region icon (📏) in the Shake Reduction dialog.
  - b** Use the Sensitivity Slider to vary the shake threshold.

The new Shake Region is analyzed and corrections are applied.



*Draw Shake Reduction regions over areas of the image that have visible and prominent levels of blurring.*



The Shake Reduction dialog. The Shake Region at the lower-right corner is currently being processed, and the progress bar is visible.

**Note:**

If the Shake Region created does not have enough area or information to sample the amount of shake, a warning (⚠) appears within the Shake Region. Use the handles of the Shake Region to increase the size of the Shake Region.

**7** (Optional) If you do not want to use a Shake Region:

- To temporarily exclude the Shake Region from being used to analyze the photo, click the pin to indicate it is excluded (📌).
- To remove a Shake Region, select the pin of the region and click the delete icon (🗑) at the upper-right corner of the Shake Region.

**8** Use the Before/After toggle button to quickly view the original image and the current shake-corrected image.

**9** Click OK to continue.

## Transforming

### Rotate or flip an item

You can rotate or flip a selection, a layer, or an entire image. Make sure to choose the correction command depending on the item you want to rotate or flip.

**1** In the Edit workspace, select the photo, layer, selection, or shape you want to rotate or flip.

**2** Choose Image > Rotate, choose one of the following commands from the submenu, and then click OK:

**90° Left, Layer 90° Left, or Selection 90° Left** Rotates the photo, layer, or selection a quarter-turn counterclockwise. (Rotate Selection is only available when you have an active selection in an image.)

## Fixing and enhancing photos

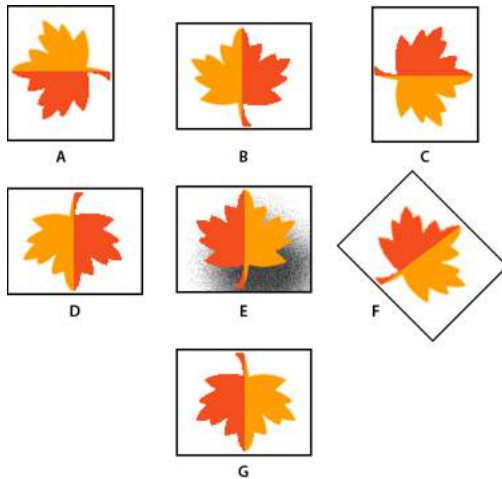
**90° Right, Layer 90° Right, or Selection 90° Right** Rotates the photo, layer, or selection a quarter-turn clockwise.

**180°, Layer 180°, or Selection 180°** Rotates the photo, layer, or selection a half-turn.

**Custom** Rotates the item by the amount you specify. If you select this option, enter the number of degrees you want to rotate the item by, and the direction in which you want to rotate the item.

**Note:** A positive number rotates the object clockwise, and a negative number rotates the object counterclockwise.

**Flip Horizontal, Flip Layer Horizontal, or Flip Selection Horizontal** Flips the photo, layer, or selection horizontally.



*Rotating an image*

## Freely rotate an item

With the Free Rotate Layer and Free Rotate Selection commands, you can rotate an item by any amount.

## Fixing and enhancing photos







Use the Free Rotate Layer command to straighten the image, and click the Commit button to apply the rotation.

- 1 In the Edit workspace, select the layer or selection you want to rotate.
- 2 Choose Image > Rotate > Free Rotate Layer or Selection. A bounding box appears in the image.

**Note:**

*If you select an image that is a Background layer (such as a photo imported from a camera or scanner), you are given the option of turning it into a regular layer so that you can transform it.*

- 3 (Optional) To change the point around which the item rotates, click a square on the reference point locator  in the options bar.
- 4 Do one of the following to specify the rotation amount:
  - Click and drag the rotate handle at the bottom of the bounding box. The cursor will change to concentric arrows when it's hovering over the handle. To constrain the rotation to 15° increments, hold down Shift as you drag.
  - Type an angle of rotation between -180 (maximum counterclockwise rotation) and 180 (maximum clockwise rotation) in the Set Rotation text box  of the options bar.
- 5 Do one of the following:
  - To apply the transformation, double-click inside the bounding box, click the Commit button , or press Enter.
  - To cancel the transformation, click the Cancel button , or press Esc.



## Scale an item

- 1 In the Edit workspace, select the photo, layer, selection, or shape you want to scale.
- 2 Choose Image > Resize > Scale.

**Note:**

*If you select a photo that is a Background layer (such as a photo imported from a camera or scanner), you are given the option of turning it into a regular layer so that you can transform it.*

## Fixing and enhancing photos

- 3 Do any of the following to specify the scale amount:
  - To maintain the relative proportions (avoiding image distortion) as you scale, select Constrain Proportions, and then drag a corner handle. Alternatively, press Alt (Option in Mac OS) as you drag a corner handle.
  - To scale only the height or the width, drag a side handle.
  - Enter a percentage for the Width, Height, or both in the options bar.
- 4 Do one of the following:
  - To apply the transformation, double-click inside the bounding box, click the Commit button  or press Enter.
  - To cancel the transformation, click the Cancel button  or press Esc.



## Skew or distort an item

Skewing applies a vertical or horizontal slant to an item. Distorting stretches or squishes an item.

- 1 In the Edit workspace, select the photo, layer, selection, or shape you want to transform.
- 2 Choose Image > Transform > Skew or Image > Transform > Distort. If you are transforming a shape with the Shape tool selected, choose Image > Transform Shape > Skew or Image > Transform Shape > Distort.

**Note:**

*If you select a photo that is a Background layer (such as a photo imported from a camera or scanner), you are given the option of turning it into a regular layer so that you can transform it.*

- 3 Drag a handle to skew or distort the bounding box.
- 4 Do one of the following:
  - To apply the transformation, double-click inside the bounding box, click the Commit button , or press Enter.
  - To cancel the transformation, click the Cancel button , or press Esc.

## Apply perspective to an item

Applying perspective creates the appearance of objects existing in three dimensions.





*Original image (left) and image after perspective applied (right).*

- 1 In the Edit workspace, select the item you want to transform.
- 2 Choose Image > Transform > Perspective. If you are transforming a shape with the Shape tool selected, choose Image > Transform Shape > Perspective.

**Note:**

## Fixing and enhancing photos

*If you select a photo that is a background layer (such as a photo imported from a camera or scanner), you are given the option of turning it into a regular layer so that you can transform it.*

- 3 Drag a corner handle on the bounding box to apply perspective.
- 4 Do one of the following:
  - To commit the transformation, double-click inside the bounding box, click the Commit button , or press Enter.
  - To cancel the transformation, click the Cancel button , or press Esc.








## Freely transform an item

The Free Transform command lets you apply transformations (rotating, scaling, skewing, distorting, and perspective) in one step. Instead of choosing different commands, you simply hold down a key on your keyboard to switch between transformation types.

- 1 In the Edit workspace, select the item you want to transform.
- 2 Choose Image > Transform > Free Transform. If you are transforming a shape, choose Image > Transform Shape > Free Transform Shape.

### Note:

*If you select a photo that is a Background layer (such as a photo imported from a camera or scanner), you are given the option of turning it into a regular layer so that you can transform it.*

- 3 (Optional) To change the point around which the item rotates, click a square on the reference point locator  in the options bar.
- 4 Do one or more of the following to transform the object:
  - To scale, drag any handle of the bounding box. To scale the width and height proportionally, either press Shift as you drag a corner handle, or select Constrain Proportions in the options bar, and then drag a corner handle.
  - To rotate, move the pointer outside of the bounding box and drag. When positioned outside the bounding box, the pointer becomes a curved, two-sided arrow . Press Shift and drag to constrain the rotation to 15° increments.
  - To distort, press Ctrl (Command in Mac OS), and drag any handle. When positioned over a handle, the pointer becomes a gray arrowhead .
  - To skew, press Ctrl+Shift (Command+Shift in Mac OS) and drag a handle in the middle of any side of the bounding box. When positioned over a side handle, the pointer becomes a gray arrowhead with a small double arrow .
  - To apply perspective, press Ctrl+Alt+Shift (Command+Option+Shift), and drag a corner handle. When positioned over a corner handle, the pointer becomes a gray arrowhead .
- 5 Do one of the following:
  - To commit the transformation, double-click inside the bounding box, and then click the Commit button , or press Enter.
  - To cancel the transformation, click the Cancel button , or press Esc.

## Apply a transformation to a Background layer

Before you can apply transformations to the Background layer, you need to convert it into a regular layer.

- 1 In the Edit workspace, select the Background layer in the Layers panel.
- 2 Convert the background.
- 3 Apply the transformation.

## Auto Smart Tone

The **Auto Smart Tone** feature uses an intelligent algorithm to modify the tonal value of your image. The **Auto Smart tone** feature applies a correction to your photograph. In addition to this, you have a joystick control that you can move around on the image to fine-tune the results.

As you move the joystick across different regions of your photo, Photoshop Elements analyzes the tonal quality of area being sampled. A tonal correction is then applied to the entire photo. Thus, moving the joystick to different regions of the photo will produce different results. In the photo (below), moving the joystick to the brighter parts (bright sky or grass) causes the overall image to turn brighter. This is evident in the images in the top-right and bottom-right corner.

The **Auto Smart Tone** tool is available in the **Quick** and **Expert** modes.



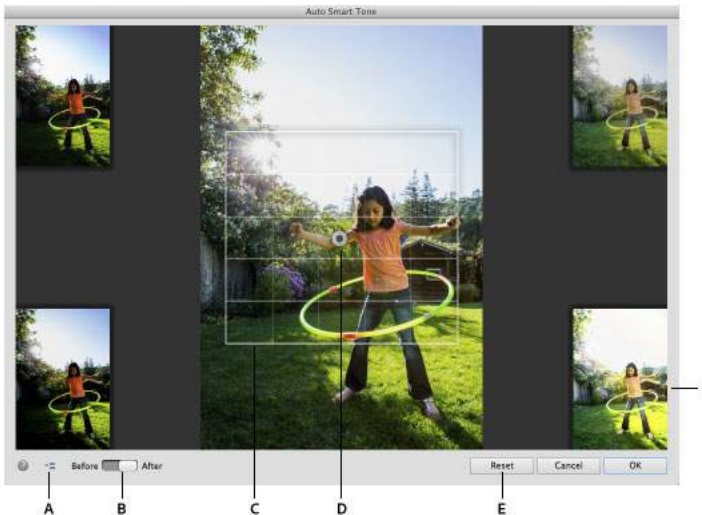


Thumbnails on the left of the main image: Moving the joystick to the darker regions (foliage or shade) causes the overall image to turn darker.  
 Thumbnails on the right of the main image: Moving the joystick to the brighter parts (bright sky or grass) causes the overall image to turn brighter.

## Apply Auto Smart Tone to a photograph

- 1 With an image open, click **Enhance > Auto Smart Tone**.

A default tonal correction is applied automatically.



**A** Options for the Auto Smart Tone feature **B** Toggle, to view a before-after image **C** Bounding box, within which you can move the joystick  
**D** Joystick, that can be dragged in the bounding box **E** Reset button, returns the joystick to the original location suggested by Auto Smart Tone  
**F** One of the four automatically-generated live preview thumbnails

- 2 Move the joystick control that appears on the image, to fine-tune the resulting image.
- 3 To see how the image will appear when you move the joystick control in a specific direction, view the thumbnail images that appear at the four corners of the photograph.

## Auto Smart Tone Learning

While using the **Auto Smart Tone** feature, you can select the **Learn from this Correction** option. When you select this option, Photoshop Elements keeps learning from your editing actions. The algorithm learns from the tonal ranges of an image, before and after you applied the **Auto Smart Tone** tool. This helps the **Auto Smart Tone** feature make better automatic tonal suggestions for a new image.

Thus, each time you use the feature on an image, the algorithm suggests tonal treatment (placement of the joystick control) based on corrections you have applied to previous images. The more images you correct tonally through this feature, the more intelligent it becomes at predicting the kind of changes you would prefer on a new image. The feature uses this learning to provide you with similar corrections on images of the same type.

## Resetting Auto Smart Tone learning

To reset the learning that the **Auto Smart Tone** feature has learned from your usage and actions, in the **Preferences** dialog, click **General > Reset Auto Smart Tone Learning**.

## Recomposing

The Recompose tool facilitates intelligent resizing of photos without changing important visual content such as people, building, animals, and more. Normal scaling affects all pixels uniformly when resizing an image. Recompose affects pixels in areas that don't have important visual content. Recompose enables you to upscale or downscale images to improve a composition, fit a layout, or change the orientation.

If you want to preserve or remove specific areas when scaling an image, Recompose enables you to protect content intelligently during resizing.

### Note:

*Recompose can also be performed without using the protect areas option. For example, to recompose a photo without marking any areas for protection or removal, drag the image handles.*



Before Recompose (left) and after Recompose



A Photo selected for Recompose B Areas marked for protection (green) and for removal (red) C Photo after Recompose

### Recompose a photo in Guided mode

- 1 Open a photo in the photo bin that you want to resize, and select the Guided mode.
- 2 Select **Guided** > **Special Edits** > **Recompose**.
- 3 Mark the areas you want to protect using the Protect brush. Right-click the photo, and select one of the following modes:

**Use Normal Highlight** This mode is similar to painting. Mark all the regions that require protection. For example, protecting a circle using Normal Highlight requires marking or painting the entire circle.

**Use Quick Highlight** You can quickly highlight the required regions for protection. Encircle the subject to highlight the required regions. For example, to highlight the area within a circle, trace the boundary of the circle. Quick Highlight ensures that the area within the circle is marked for protection.



*You can specify the size of the brush and the photo.*

Green indicates the areas marked for protection.

**4** To erase portions of unwanted marked areas (green), right-click the photo, and select Clear Protect Highlights.

**5** Mark the areas you want to remove (areas that are unimportant) using the Remove brush tool.

Red indicates the areas marked for removal.



*Right-click the photo, and select Clear All Highlights to erase protected and unprotected marked areas.*

**6** To erase portions of unwanted marked areas (red), right-click the photo, and select Clear Remove Highlights.

**7** Drag the image handles or select a size from the Preset drop-down, to Recompose your photo.

## Recompose a photo in Expert mode

**1** Open a photo in the photo bin that you want to resize, and select Image > Recompose, or click the Recompose tool.

**2** Mark the areas you want to protect using the Protect brush. Right-click the photo, and select one of the following modes:

- Use Normal Highlight
- Use Quick Highlight



*You can specify the size of the brush and the photo.*

Green indicates the areas marked for protection.

**Note:**

*Recompose can also be performed without using the protect areas option. For example, to recompose a photo without marking any areas for protection or removal, drag the image handles ↔.*

**3** Do one of the following to erase portions of unwanted marked areas (green):

- Erase using the Eraser tool.
- Right-click the photo, and select Clear Protect Highlights.

**4** Mark the areas you want to remove (areas that are unimportant) using the Remove brush tool.

Red indicates the areas marked for removal.



*Right-click the photo, and select Clear All Highlights to erase protected and unprotected marked areas.*

## Fixing and enhancing photos

- 5 Do one of the following to erase portions of unwanted marked areas (red):
- Erase using the Eraser tool.
  - Right-click the photo, and select Clear Remove Highlights.



*You can specify the size of the brush and the photo.*

- 6 Drag the handles of the image to Recompose your photo. On completion, click the Commit Current Operation icon.

## Recompose options


You can use the following options while using the Recompose tool.

**Size** Enables you to define the brush size.

**Preset** Used to specify the ratio that you want to use for resizing. Preset works on the photo ratio and not the dimensions of the photo. For example, if you use a preset ratio 3x5, the image is resized using this ratio. If you want to scale the photo using the same ratio, hold the Shift key and drag the corner handles. A preset that crops the image in the 16:9 ratio has been added to the Preset menu. *note: If you don't hold down the Shift key, the image is resized in any ratio.*

**Threshold** Used to set the Recompose threshold. Setting the threshold to 100% indicates a 100% Recompose. If it is set to 0%, then the behavior of Recompose tool is similar to the Transform tool.

**Highlight Skin Tones** Identifies and highlights skin tones for protection. You can preserve regions that contain skin tones. Click the Highlight Skin Tones icon to view the suggested skin tones region. To erase the identified regions that contain skin tones, use the Protect Eraser tool, or right-click the image and select Clear Protect Highlights.

**Swap height and width** Used to swap the values specified for height and width. For example, you have specified the following values: H: 10 and W: 15. Click the Swap Height and Width icon  to interchange these values. The new values are: H: 15 and W: 10.

# Using actions to process photos

## Actions overview

An action is a series of steps (tasks) that you play back on a photo. These steps can be menu commands, panel options, tool actions, and so on. For example, an action that creates a snapshot effect, is a series of steps that changes the size of the image, applies an effect to the image, creates a border that extends below the image, and then saves the file in the desired format.

A set of actions is available in Photoshop Elements, in the Actions panel (Window > Actions). You can play one or more of these actions on a photograph. Action files cannot be created in Photoshop Elements. However, you can load more action files (.atn files) that have been created in Adobe Photoshop.

Actions that share a theme are grouped into Action Sets.

*Note:*

*Photoshop actions that contain steps that are unsupported in Photoshop Elements will fail to play. Not all action that are created in Photoshop can be played in Photoshop Elements.*

## Play an action file on an image

- 1 Open an image that you want to process using an action.
- 2 If the Actions panel is not open, click Window > Actions.
- 3 In the Actions panel, click an action, or click the triangle next to an Action Set.
- 4 Click the Play button to apply the action to the image, or click the Actions panel menu, and then click Play.

## Manage action files

**Add actions** In the Actions panel, click the panel menu icon, and then choose Load Actions. Specify a .atn file, and access the added actions from the Actions panel.

**Remove actions** In the Actions panel, select an action or action set, and then click the Delete button. Click Ok to confirm deletion of the action.

**Reset actions** In the Actions panel, click the panel menu icon, and then choose Reset Actions. All actions available in Photoshop Elements by default are restored.

# Chapter 4: Adding shapes and text

## Add text

You can add text and shapes of different color, styles, and effects to an image. Use the Horizontal Type and Vertical Type tools to create and edit text. You can create single-line text or paragraph text.

### About text



Use the Horizontal Type (**T**) and Vertical Type (**⌫**) tools to create and edit text. The new text you type is entered in a new text layer. You can create single-line text or paragraph text. Each line of single line text you enter is independent—the length of a line grows or shrinks as you edit it, but it doesn't wrap to the next line. To create a new line of text, press Enter. Paragraph text wraps within the paragraph boundaries you specify.



Single-line text (top of image) and paragraph text (bottom of image).



You can use the type mask tools (Alt/Option-click the Type tool to change the current tool) to create a selection in the shape of text. You can then create different effects and cutouts with the text.

Clicking in an image with a type tool puts the tool in edit mode so you can enter and edit text. You must commit changes to the type before you can perform other operations, like selecting menu commands. The Type tool is in edit mode when you see the Confirm button  and Reject button  below the text.

#### Note:

When you add text to an image that's in indexed color mode, Photoshop Elements does not create a new text layer. The text you type appears as masked text.

## Add text

- 1 From the toolbar, select the Horizontal Type tool **T** or the Vertical Type tool **⌫**.
- 2 Do one of the following:
  - To create a single line of text, click in the image to set an insertion point for the type.

## Adding shapes and text

- To create paragraph text, drag a rectangle to create a textbox for the type.


The small line through the I-beam marks the position of the type baseline. For horizontal type, the baseline marks the line on which the type rests; for vertical type, the baseline marks the center axis of the type characters.

**3** (Optional) Select type options, such as font, style, size, and color, in the tool options bar.

**4** Type the characters you want. If you did not create a textbox, press Enter to create a new line.

The text appears in its own layer. To view the layers, in the Expert mode, press F11.

**5** Commit the text layer by doing one of the following:

- Click the Commit button .
- Press the Enter key on the numeric keypad.
- Click in the image, outside the textbox.
- Select a different tool in the toolbox.

## Type tool options

In the options bar, set the following Type tool options:

**Font Family** Applies a font family to new or existing text.

**Font Style** Applies font styles, such as bold, to new or existing text.

**Font Size** Applies a font size to new or existing text.

**Color menu** Applies a color to new text or selected text.

**Leading menu** Sets the space between lines of new or selected text.

**Tracking** Sets the space between the characters of new or selected text.

**Faux Bold** Applies a bold style to new or existing text. Use this option if your font doesn't have a true bold style that you can select from the Font Style menu.

**Faux Italic** Applies an italic style to new or existing text. Use this option if your font doesn't have a true italic or oblique style that you can select from the Font Style menu.

**Underline** Applies an underline to new text or selected existing text.

**Strikethrough** Applies a line through new text or selected existing text.

**Align Text** Specifies text alignment. If text orientation is horizontal, lets you align text: left, center, or right. For vertical orientation text: top, center, or bottom.

**Toggle Text Orientation** Changes vertical text to horizontal and horizontal text to vertical.

**Warp text** Warps text on the selected layer.

**Anti-aliased** Applies anti-aliasing to make text appear smoother.




## Adding shapes and text

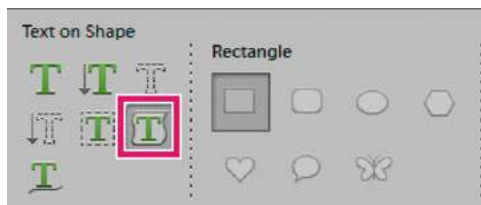


Applying anti-aliasing  
A Anti-aliasing off B Anti-aliasing on

## Use the Text on Shape tool

You can add text to the shapes available in the Text on Shape tool.

- 1 Select the Text on Shape tool . To quickly change the current text tool, press Option and click the current tool.




Text on Shape tool

- 2 From the available shapes, select the shape on which you want to add text. Drag the cursor on the image to create the shape.
- 3 To add text to the image, hover the mouse over the path until the cursor icon changes to depict text mode. Click the point to add text.

Modify text in the same way that you modify normal text.




Click and enter text.

- 4 After adding text, click Commit . For some of the shapes the text has to be written inside. You can move the text around the path or by inside/outside by holding Cmd while clicking and dragging the mouse (The text appears in a small arrow). You can drag that cursor into a selected area, the text path is allowed inside/outside an area.

## Adding shapes and text

### Use the Text on Selection tool

Add text on the outline of a path created from a selection. When you commit a selection, the selection is converted to a path on which you can type text.

? Select the Text on Selection tool . To quickly change the current text tool, press Option and click the current tool.



*Text on Selection tool*

2. Place the cursor on the object in the image and drag the cursor till you get your desired selection. You can adjust the size of your selection using the Offset slider.



*Make selection.*

When you confirm the selection, the selection is converted to a path.

3. To add text to the image, hover the mouse over the path when cursor icon changes to depict text mode. Click the point to add text.




*Add text.*

After you add text, you can modify it like regular text.

4. After you have completed adding text, click the Commit . Cancel to start your workflow again.

## Use the Text on Custom Path tool

You can draw and add text along the custom path.

- 1 Select the Text on Custom Path tool . To quickly change the current text tool, press Option and click the current tool.




*Text on Custom Path tool*

- 2 Draw a custom path over the image. You can commit/cancel the drawn path to redraw from the tool options bar.
- 3 To refine or redraw the path, click Modify in the tool options bar. Use the nodes that appear on the path to modify it.
- 4 After you have completed creating a path, click the mouse at any point along the path to add text. Modify text in the same way that you modify normal text.



*Add text.*



- 5 After adding text, click the Commit .

## Create and use masked type

The Horizontal Type Mask tool and Vertical Type Mask tool create a selection in the shape of text. You can have fun with text selection borders by cutting text out of an image to show the background, or pasting the selected text into a new image. Experiment with different options to personalize your images and compositions.



*Horizontal type mask used to create a filled selection.*

- 1 Using the Expert mode, select the layer on which you want the selection to appear. For best results, don't create the type selection border on a text layer.
- 2 Select the Horizontal Type Mask tool  or the Vertical Type Mask tool .
- 3 Select additional type options (See [Type tool options](#)), and enter your text.




The type selection border appears in the image on the active layer.

## Edit text

### Edit type in a type layer

After you create a text layer, you can edit the text and apply layer commands to it. You can insert new text, change existing text, and delete text in text layers. If any styles are applied to a text layer, all text inherits the attributes of those styles.


You can also change the orientation (either horizontal or vertical) of a text layer. When a text layer is vertical, the type lines flow from top to bottom. When a text layer is horizontal, the type lines flow from left to right.

- 1 Do one of the following:
  - Select the Horizontal Type tool  or the Vertical Type tool  (or select the Move tool  and double-click the text).
  - In the Expert mode, select the text layer in the Layers panel.

When you click in an existing text layer, the Type tool changes at the insertion point to match the orientation of the layer.

- 2 Position the insertion point in the text, and do one of the following:
  - Click to set the insertion point.
  - Select one or more characters you want to edit.
  - Enter text as desired.

## Adding shapes and text

- 3 Commit the text layer by doing one of the following:
  - Click the Commit button  in the options bar.
  - Click in the image.
  - Select a different tool in the toolbox.

## Select characters

- 1 Select a type tool.
- 2 Select the text layer in the Layers panel, or click in the text flow to automatically select a text layer.
- 3 Position the insertion point in the text, and do one of the following:
  - Drag to select one or more characters.
  - Double-click to select a single word.
  - Triple-click to select an entire line of text.
  - Click a point in the text and then Shift-click to select a range of characters.
  - Choose Select > All to select all the characters in the layer.
  - To use the arrow keys to select characters, hold down Shift and press the Right Arrow or Left Arrow key.

## Choose a font family and style

A font is a set of characters—letters, numbers, or symbols—that share a common weight, width, and style. When you select a font, you can select the font family (for example, Arial) and its type style independently. A type style is a variant version of an individual font in the font family (for example, regular, bold, or italic). The range of available type styles varies with each font.

If a font doesn't include the style you want, you can apply faux (fake) versions of bold and italic. A faux font is a computer-generated version of a font that approximates an alternative typeface design.



- 1 If you're changing the existing text, select one or more characters whose font you want to change. To change the font of all characters in a layer, select the text layer in the Layers panel, and then use the buttons and menus in the options bar to change the font type, style, size, alignment, and color.
- 2 In the options bar, choose a font family from the Font Family pop-up menu.
- 3 Do one of the following:
  - Choose a font style from the Font Style pop-up menu in the options bar.
  - If the font family you chose does not include a bold or italic style, click the Faux Bold button, Faux Italic button, or both.

### **Note:**

*The type you enter gets its color from the current foreground color; however, you can change the type color before or after you enter text. When editing existing text layers, you can change the color of individual characters or all type in a layer.*

## Choose a font size

The type size determines how large the type appears in the image. The physical size of the font depends on the resolution of the image. A capital letter in 72-point text is approximately 1-inch high in an image that is 72 ppi. Higher resolutions reduce a given text point size because the pixels are packed more tightly in higher resolution images.


- 1 If you're changing existing text, select one or more characters whose size you want to change. To change the size of all the characters in a layer, select the text layer in the Layers panel.
- 2 Select the Horizontal Type tool  or the Vertical Type tool .
- 3 In the options bar, enter or select a new value for Size. You can enter a size larger than 72 points. The value you enter is converted into the default unit of measurement. To use an alternate unit of measurement, enter the unit (in, cm, pt, px, or pica) after the value in the Size text box.



*The default unit of measurement for type is points. However, you can change the unit of measurement in the Units & Rulers section of the Preferences dialog box. Choose Edit > Preferences > Units & Rulers, and then select a unit of measurement for Type.*

## Change text color

You can change the type color before or after you enter text. When editing existing text layers, you can change the color of individual characters or all type in a layer. You can also apply a gradient to text in a text layer.

- 1 Do one of the following:
  - To change the color of text before you type it, select a type tool.
  - To change the color of existing text, select a type tool and then drag to select the text.
- 2 To choose a color from a list of color swatches, click the the Color menu in the options bar. To select a color and add it to the palette, click .

## Apply style to text

You can apply effects to text. Any effect from the Effects panel can be applied to text in a layer.

Lorem ipsum dolor

Lorem ipsum dolor

Lorem ipsum dolor

*Before (top) and after (middle and bottom) applying styles to text.*


- 1 For new text, write and commit the text you want to apply a style to. Then, select from the available presets in the Tool Options bar.
- 2 For existing text, select a layer that contains text.
- 3 Open the Effects panel, and double-click the thumbnail of a style you want to apply to the text.

## Warp type


Warping allows you to distort type to conform to a variety of shapes; for example, you can warp type in the shape of an arc or a wave. Warping applies to all characters in a text layer—you cannot warp individual characters. Also, you can't warp faux bold text.




*Text layer with warp applied*

- 1 In the Edit workspace, select a text layer.
- 2 Do one of the following:
  - Select a type tool, and click the Warp button  in the tool options bar.
  - Choose Layer > Type > Warp Text.
- 3 Choose a warp style from the Style pop-up menu. The style determines the basic shape of the warped text.
- 4 Select an orientation for the warp effect—Horizontal or Vertical.
- 5 (Optional) Specify values for additional warping options to control the orientation and perspective of the warp effect:
  - Bend to specify the amount of warp.
  - Horizontal Distortion and Vertical Distortion to apply perspective to the warp.
- 6 Click OK.

## Unwarp type

- 1 Select a text layer that has warping applied to it.
- 2 Select a type tool, and click the Warp button  in the options bar; or choose Layer > Type > Warp Text.
- 3 Choose None from the Style pop-up menu, and click OK.

## Change the orientation of a type layer

- ? Do one of the following:
  - Select the text and then click the Toggle Text Orientation button  in the options bar.
  - Select a text layer and then choose Layer > Type > Horizontal, or choose Layer > Type > Vertical.

## Create shapes

## About shapes

In Photoshop Elements, shapes are vector graphics, which means they are made up of lines and curves defined by their geometric characteristics instead of pixels. Vector graphics are resolution-independent—that is, they can be scaled to any size and printed at any resolution without losing detail or clarity. You can move, resize, or change them without losing the quality of the graphic. Because computer monitors display images on a pixel grid, vector data is displayed on-screen as pixels.

Shapes are created in shape layers. A shape layer can contain a single shape or multiple shapes, depending on the shape area option you select. You can choose to have more than one shape in a layer.

You can change the color of a shape by editing its fill layer and applying layer styles to it. Shape tools provide an easy way to create buttons, navigation bars, and other items used on web pages.



Vector objects created with the shape tools in Photoshop Elements

## Draw a rectangle, square, or rounded rectangle

- 1 Select the Rectangle tool or Rounded Rectangle tool. You can also select the Rectangle and Rounded Rectangle tools from the Tool Options bar.

**Note:**

*Press Alt/Option and click a shape tool to cycle through all the available tools.*

- 2 (Optional) In the Tool Options bar, you can set the following options:

**Unconstrained** Lets you set the width and height of a rectangle by dragging.

**Square** Constrains a rectangle to a square.

**Fixed Size** Draws a rectangle at the exact size you specified in the Width and Height text boxes.

**Proportional** Draws a rectangle in proportion to the specified Width and Height values.

**Radius** Specifies the radius of the rounded corner. Smaller values result in sharper corners.

**From Center** Draws a rectangle from the center of where you begin drawing (usually a rectangle is drawn from the upper-left corner).


**Snap** Snaps edges of a rectangle to the pixel boundaries.

**Simplify** Converts the shape drawn into a raster graphic. Once converted to raster form, shrinking or expanding the shape may result in jagged edges and pixelated appearance.

- 3 Drag within your image to draw the shape.



## Draw a circle or ellipse

- 1 In the Edit workspace, select the Ellipse tool .

*Note:*

*Press Alt/Option and click a shape tool to cycle through all the available tools.*

- 2 (Optional) In the Tool Options bar, you can set the following options:

**Unconstrained** Lets you set the width and height of an ellipse by dragging.

**Circle** Draws a perfect circle instead of an ellipse.

**Fixed Size** Draws an ellipse at the exact size you specified in the Width and Height text boxes.



**Proportional** Draws a proportional ellipse based on the numbers you type in the Width and Height text boxes.

**From Center** Draws an ellipse from the center of where you begin drawing (usually an ellipse is drawn from the upper-left corner).

**Simplify** Converts the shape drawn into a raster graphic. Once converted to raster form, shrinking or expanding the shape may result in jagged edges and pixelated appearance.

- 3 Drag in your image to draw the ellipse.

## Draw a multisided shape

- 1 Select the Polygon tool  or the Star tool .

*Note:*

*Press Alt/Option and click a shape tool to cycle through all the available tools.*

- 2 (Optional) In the Tool Options bar, you can set the following options:

**Smooth Corners** Renders a polygon with smooth corners.

**Indent Sides By** Specifies the depth of the star's indentations. This option is available for the Star tool only.

**Smooth Indents** Renders a star-shaped polygon with smooth indents. This option is available for the Star tool only.

**Simplify** Converts the shape drawn into a raster graphic. Once converted to raster form, shrinking or expanding the shape may result in jagged edges and pixelated appearance.

- 3 In the Sides box, specify the number of sides for the polygon.

- 4 Drag within your image to draw the polygon.

## Draw a line or arrow

- 1 Select the Line tool .

- 2 (Optional) In the Tool Options bar, you can set the following options:

**Arrow head** Renders a line with arrowheads. To specify the end that the arrows are rendered on, choose from Select At the Start, At the End, or At Both Ends.

## Adding shapes and text



Choose options for an Arrow head.

**Arrowheads Width and Length** Specify the proportions of the arrowhead as a percentage of the line width (10% to 1000% for Width, and 10% to 5000% for Length).


**Concavity** Defines the amount of curvature on the widest part of the arrowhead, where the arrowhead meets the line. Enter a value for the concavity of the arrowhead (from -50% to +50%).

**Simplify** Converts the shape drawn into a raster graphic. Once converted to raster form, shrinking or expanding the shape may result in jagged edges and pixelated appearance.

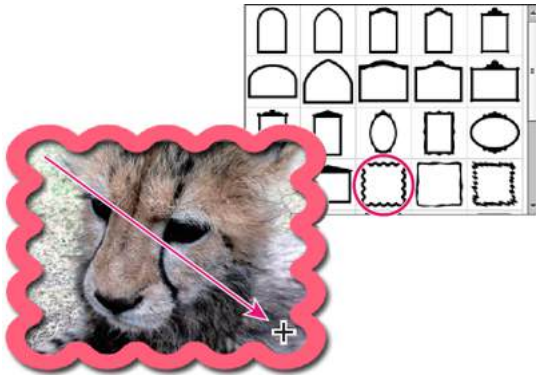
- 3 In the Width box, specify the width of the line in pixels.
- 4 Drag within your image to draw the line.

## Draw a custom shape

The Custom Shape tool provides many different shape options for you to draw. When you select the custom shape tool, you can access these shapes in the options bar.

- 1 Select the Custom Shape tool .
- 2 In the options bar, select a shape from the Custom Shape picker pop-up. Click the arrow at the top right of the panel to list the shapes you can choose from and how to display them.
- 3 (Optional) In the Tool Options bar, you can set the following options:
  - Unconstrained** Lets you set the width and height of a rectangle, rounded rectangle, ellipse, or custom shape by dragging.
  - Defined Proportions** Draws a custom shape based on the proportions with which it was created.
  - Defined Size** Draws a custom shape based on the size at which it was created.
  - Fixed Size** Draws a custom shape as a fixed shape based on the values you enter in the Width and Height text boxes.
  - From Center** Draws a custom shape from the center.
  - Simplify** Converts the shape drawn into a raster graphic. Once converted to raster form, shrinking or expanding the shape may result in jagged edges and pixelated appearance.
- 4 Drag within your image to draw the shape.

## Adding shapes and text



The Custom Shape tool has ready-made frames that you can drag around a photo.

## Create multiple shapes in the same layer

- 1 Select a shape layer in the Layers panel (Expert mode) or create a new shape layer.
- 2 If you want to create a different type of shape, select a different shape tool.
- 3 Select a shape area option to determine how shapes should overlap, and then drag within the image to draw new shapes:

**Add** Adds an additional shape to the existing shape. The combined shape will cover the entire area of the shapes you drew using the Add option.


**Subtract** Removes the area where shapes overlap. The rest of the shapes' areas are preserved.

**Intersect** Shows only the area where shapes intersect. The other areas will be removed.


**Exclude** Removes the overlapping areas in the new and existing shapes.

## Editing shapes


### Select or move a shape

Use the Shape Selection tool  to select shapes with one click. If you convert a shape into a bitmap element by simplifying the shape layer, the Shape Selection tool will no longer select the shape (use the Move tool instead).

If a layer contains multiple shapes, you can reposition all the shapes together using the Move tool. However, if you want to reposition a specific shape in a layer, you must use the Shape Selection tool.

- 1 Use the Shape Selection tool  to select shapes:
- 2 To select the shape, click it.
- 3 To move the shape, drag it to a new location.

### Transform a shape

- 1 Select the Shape Selection tool , and then select the Show Bounding Box option.

## Adding shapes and text

### 2 Do one of the following:

- Click the shape you want to transform, and then drag an anchor to transform the shape.
- Select the shape you want to transform, choose Image > Transform Shape, and then choose a transformation command.

## Change the color of all shapes in a layer

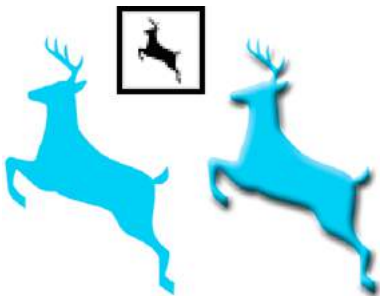
- 1 In the Expert mode, double-click the thumbnail of the shape layer in the Layers panel.
- 2 Select a new color and click OK.

### **Note:**



*If the color of a shape doesn't change when you pick a new color, check to see if the layer has a layer style (represented by a style icon in the Layers panel). Some layer styles override the base color of a shape.*

## Apply a layer style to a shape

You can apply effects—such as drop shadows and bevels—to shapes quickly and easily using layer styles. Keep in mind that a layer style is applied to all shapes in a layer. For example, if you apply a drop shadow style to a layer that contains multiple shapes, all of the shapes will display a drop shadow.



*Before (left) and after (right) applying a layer style to a custom shape.*

- 1 Select a layer that contains a shape or in the Layers panel, click the New button  and draw a shape.
- 2 Open the the Effects panel , click the Styles tab.
- 3 Double-click the thumbnail you want to apply to the shape.

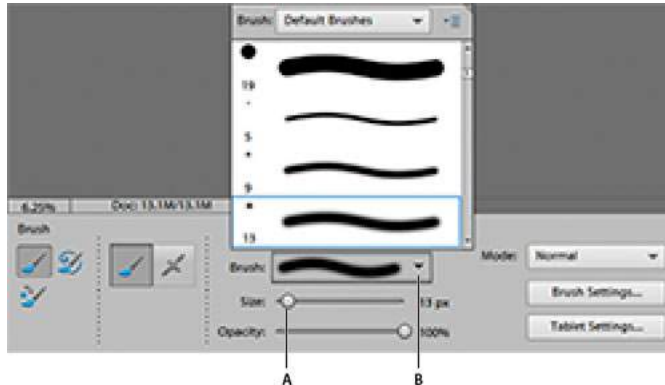
## Painting overview

The painting tools change the color of pixels in an image. The Brush tool and the Pencil tool work like traditional drawing tools by applying color with brush strokes. The Gradient tool, Fill command, and Paint Bucket tool apply color to large areas. Tools like the Eraser tool, Blur tool, and Smudge tool modify the existing colors in an image.

The power of painting in Adobe Photoshop Elements is in the options that you can set to specify how a tool applies or modifies color. You can apply color gradually, with soft edges, with large brush strokes, with various brush dynamics, with different blending properties, and with brushes of different shapes. You can simulate spraying paint with an airbrush.

## About painting tools

Photoshop Elements provides various tools for applying and editing color. When you select a painting tool, the Tool Options bar displays various preset brush tips and settings for brush size, paint blending, opacity, and airbrush effects. You can create new brush presets and save them in brush libraries. You can customize the brush and settings for any of the painting and editing tools and manage them using the Preset Manager.



Brush options in the Tool Options bar

A Brush size slider and text box B Brush pop-up panel and brush thumbnail C More menu

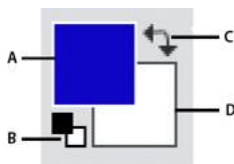
The Brush tool paints smooth, anti-aliased lines. Other painting tools include the Pencil tool for making hard-edged lines and the Eraser tool for erasing color pixels from layers. The Paint Bucket tool and Fill command fill areas of your image with color or patterns. The pattern Stamp tool paints with one of the predefined patterns or a pattern that you design.

The Impressionist Brush tool affects existing color by applying stylized brush strokes. The Smudge tool also affects existing image colors by simulating the action of dragging a finger through wet paint.

The Detail Smart Brush tool automatically creates an adjustment layer as you paint. It doesn't alter the original image layer. You can paint and change the adjustments as many times as you want without degrading your original photo. See [Adjust color and tonality using the Smart Brush tools](#).

## About foreground and background colors

You apply the foreground color when you paint with the Brush or Pencil tools, and when you fill selections with the Paint Bucket tool. The color you apply to the Background layer with the Eraser tool is called the *background color*. You can see and change the foreground and background colors in the two overlapping boxes at the bottom of the toolbox. The top box is the foreground color, and the bottom box is the background color. The foreground and background colors are also used together by the Gradient tool and some special effects filters.



Foreground and background color boxes in toolbox

A Foreground color box B Click to use default colors (black and white) C Click to switch the foreground and background colors D Background color box

You can change the foreground or background color in the toolbox by using the Eyedropper tool, the Color Swatches panel, or the Color Picker.

## About blending modes

Blending modes control how pixels in an image are affected by a painting or editing tool. It's helpful to think in terms of the following colors when visualizing a blending mode's effect:

- The base color is the original color in the image.
- The blend color is the color applied by the painting or editing tool.
- The result color is the color resulting from the blend.



*The Multiply blending mode (top), Screen blending mode (center), and Luminosity blending mode (bottom) applied to the starfish layer.*

You can choose any of the following blending modes from the Mode menu in the Tool Options bar:

**Normal** Edits or paints each pixel to make it the result color. This is the default mode. (Normal mode is called *Threshold* when you're working with an image in bitmap or indexed-color mode.)

**Dissolve** Edits or paints each pixel to make it the result color. However, the result color is a random replacement of the pixels with the base color or the blend color, depending on the opacity at any pixel location. This mode works best with the brush tool and a large brush.

**Behind** Edits or paints only on the transparent part of a layer. This mode works only on layers with Lock Transparency deselected, and is analogous to painting on the back of transparent areas on a sheet of glass.

**Clear** Edits or paints each pixel and makes it transparent. You must be on a layer with Lock Transparency deselected in the Layers panel to use this mode.

**Darken** Looks at the color information in each channel and selects the base or blend color—whichever is darker—as the result color. Pixels lighter than the blend color are replaced, and pixels darker than the blend color do not change.

**Multiply** Looks at the color information in each channel and multiplies the base color by the blend color. The result color is always a darker color. Multiplying any color by black produces black. Multiplying any color by white leaves the color unchanged. When you're painting with a color other than black or white, successive strokes with a painting tool produce progressively darker colors. The effect is similar to drawing on the image with multiple felt-tipped pens.

**Adding shapes and text**

**Color Burn** Looks at the color information in each channel and darkens the base color to reflect the blend color. Blending with white produces no change.

**Linear Burn** Looks at the color information in each channel and darkens the base color to reflect the blend color by decreasing the brightness. Blending with white produces no change.

**Darker Color** Compares the total of all channel values for the blend and base color and displays the lower value color. Darker Color does not produce a third color, which can result from the Darken blend, because it chooses the lowest channel values from both the base and the blend color to create the result color.

**Lighten** Looks at the color information in each channel and selects the base or blend color—whichever is lighter—as the result color. Pixels darker than the blend color are replaced, and pixels lighter than the blend color do not change.

**Screen** Looks at each channel's color information and multiplies the inverse of the blend and base colors. The result color is always a lighter color. Screening with black leaves the color unchanged. Screening with white produces white. The effect is similar to projecting multiple photographic slides on top of each other.

**Color Dodge** Looks at the color information in each channel and brightens the base color to reflect the blend color. Blending with black produces no change.

**Linear Dodge (Add)** Looks at the color information in each channel and brightens the base color to reflect the blend color by increasing the brightness. Blending with black produces no change.

**Lighter Color** Compares the total of all channel values for the blend and base color and displays the higher value color. Does not produce a third color, which can result from the Lighten blend, because it chooses the highest channel values from both the base and blend color to create the result color.

**Overlay** Multiplies or screens the colors, depending on the base color. Patterns or colors overlay the existing pixels while preserving the highlights and shadows of the base color. The base color is mixed with the blend color to reflect the lightness or darkness of the original color.

**Soft Light** Darkens or lightens the colors, depending on the blend color. The effect is similar to shining a diffused spotlight on the image. If the blend color is lighter than 50% gray, the image is lightened. If the blend color is darker than 50% gray, the image is darkened. Painting with pure black or white produces a distinctly darker or lighter area but does not result in pure black or white.

**Hard Light** Multiplies or screens the colors, depending on the blend color. The effect is similar to shining a harsh spotlight on the image. If the blend color is lighter than 50% gray, the image is lightened. This is useful for adding highlights to an image. If the blend color is darker than 50% gray, the image is darkened. This is useful for adding shadows to an image. Painting with pure black or white results in pure black or white.

**Vivid Light** Burns or dodges the colors by increasing or decreasing the contrast, depending on the blend color. If the blend color (light source) is lighter than 50% gray, the image is lightened by decreasing the contrast. If the blend color is darker than 50% gray, the image is darkened by increasing the contrast.

**Linear Light** Burns or dodges the colors by decreasing or increasing the brightness, depending on the blend color. If the blend color (light source) is lighter than 50% gray, the image is lightened by increasing the brightness. If the blend color is darker than 50% gray, the image is darkened by decreasing the brightness.

**Pin Light** Replaces the colors, depending on the underblend color. If the blend color (light source) is lighter than 50% gray, pixels darker than the blend color are replaced, and pixels lighter than the blend color do not change. If the blend color is darker than 50% gray, pixels lighter than the blend color are replaced, and pixels darker than the blend color do not change. This mode is useful for adding special effects to an image.

**Hard Mix** Reduces colors to white, black, red, green, blue, yellow, cyan, and magenta—depending on the base color and the blend color.

## Adding shapes and text

**Difference** Looks at the color information in each channel and subtracts either the blend color from the base color or the base color from the blend color, depending on which has the greater brightness value. Blending with white inverts the base color values; blending with black produces no change.

**Exclusion** Creates an effect similar to, but lower in contrast, than the Difference mode. Blending with white inverts the base color values. Blending with black produces no change.

**Hue** Creates a result color with the luminance and saturation of the base color and the hue of the blend color.

**Saturation** Creates a result color with the luminance and hue of the base color and the saturation of the blend color. Painting with this mode in an area with zero saturation (a neutral gray area) causes no change.

**Color** Creates a result color with the luminance of the base color and the hue and saturation of the blend color. This preserves the gray levels in the image and is useful for coloring monochrome images and for tinting color images.



*Using the Color blending mode to change the color of a shirt*

**Luminosity** Creates a result color with the hue and saturation of the base color and the luminance of the blend color. This mode creates an inverse effect from that of the Color mode.

## Web-safe colors

Web-safe colors are the 216 colors used by browsers on both the Windows and Mac OS platforms. By working only with these colors, you ensure that colors in art you prepare for the web display accurately in a web browser.

You can identify web-safe colors in the Adobe Color Picker by using either of the following methods:

- Select Only Web Colors in the lower-left corner of the Color Picker, and then choose any color in the Color Picker. When this option is selected, any color you pick is web-safe.
- Choose a color in the Color Picker. If you choose a color that isn't web-safe, an alert cube appears next to the color rectangle in the upper-right area of the Color Picker. Click the alert cube to select the closest web-safe color. (If no alert cube appears, the color you chose is web-safe.)

## Painting tools



## Use the Brush tool

The Brush tool creates soft or hard strokes of color. You can use it to simulate airbrush techniques. (If you don't see it in the toolbox, select either the Impressionist Brush or the Color Replacement tool, and then click the Brush tool icon in the Tool Options bar.)

- 1 Select a color to paint by setting the foreground color.
- 2 From the Draw section in the toolbox, select the Brush tool.
- 3 Specify Brush tool options in the Tool Options bar as desired, and then drag within the image to paint.



*To draw a straight line, click a starting point in the image. Then hold down Shift and click an ending point.*

You can specify any of the following Brush tool options:

**Airbrush Mode** Enables airbrush capabilities. This option applies gradual tones to an image, simulating traditional airbrush techniques.

**Brush** Sets the brush tip. Click the arrow next to the brush sample, choose a brush category from the Brush drop-down, and then select a brush thumbnail.

**Size** Sets the size of the brush in pixels. Drag the Size slider or enter a size in the text box.

**Opacity** Sets the opacity of the paint you apply. A low opacity setting allows pixels under a paint stroke to show through. Drag the slider, or enter an opacity value.

**Mode** Specifies how the paint that you apply blends with the existing pixels in the image.

**Tablet Options** Sets the options to control with your stylus if you are using a pressure sensitive drawing tablet instead of a mouse.

**Brush Settings** Sets additional brush options.

## Use the Pencil tool

The Pencil tool creates hard-edged freehand lines.

- 1 Select a color to paint by setting the foreground color.
- 2 From the Draw section in the toolbox, select the Pencil tool.
- 3 Set Pencil tool options in the Tool Options bar, as desired, and then drag within the image to paint.



*To draw a straight line, click a starting point in the image. Then hold down Shift and click an ending point.*

You can specify any of the following Pencil tool options:

**Brush tip** Sets the tip. Click the arrow next to the brush sample, choose a brush category from the Brush drop-down, and then select a brush thumbnail.

**Size** Sets the size of the brush in pixels. Drag the Size slider or enter a size in the text box.

**Opacity** Sets the opacity of the paint you apply. A low opacity setting allows pixels under a paint stroke to show through. Drag the slider, or enter an opacity value.

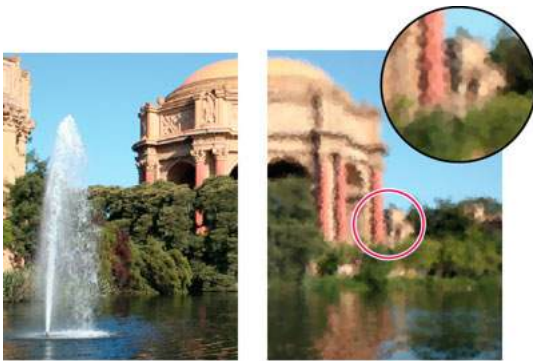
**Mode** Specifies how the paint that you apply blends with the existing pixels in the image.

**Auto Erase** If you begin drawing and drag over an area that doesn't contain the foreground color, the tool paints with the foreground color. That is, if we start with color other than foreground color, it paints the foreground color only. Click and paint on the areas containing the foreground color, pencil paints with the Background color.

## Use the Impressionist Brush tool

The Impressionist Brush tool changes the existing colors and details in your image so your photo looks like it was painted using stylized brush strokes. By experimenting with different style, area size, and tolerance options, you can simulate the textures associated with painting in different artistic styles.

- 1 With the Brush tool selected in the toolbox, select the the Impressionist Brush tool from the Tool Options bar.
- 2 Set options in the Tool Options bar as desired, and then drag within the image to paint.



*Original photo (left), and after using the Impressionist Brush tool (right)*

You can specify any of the following options:

**Brush** Sets the brush tip. Click the arrow next to the brush sample, choose a brush category from the Brush dropdown, and then select a brush thumbnail.

**Size** Sets the size of the brush in pixels. Drag the Size slider or enter a size in the text box.

**Opacity** Sets the opacity of the paint you apply. A low opacity setting allows pixels under a paint stroke to show through. Drag the slider or enter an opacity value.

**Mode** Specifies how the paint that you apply blends with the existing pixels in the image. See [About blending modes](#) for more information.

**Advanced** Style affects the shape of the brush stroke. Area controls the size of the brush stroke. A larger area value also increases the number of strokes. Tolerance controls how similar in color value adjacent pixels must be before they are affected by the brush stroke.

## Use the Smudge tool

The Smudge tool simulates the actions of dragging a finger through wet paint. The tool picks up color where the stroke begins and pushes it in the direction you drag. You can smudge existing colors in your image, or smear foreground color on the image.

## Adding shapes and text



Original image (left), and after smudging parts of the photo (right)

- 1 From the Enhance section in the toolbox, select the Smudge tool (If you don't see it in the toolbox, select either the Blur tool or the Sharpen tool and then click the Smudge tool icon from the Tool Options bar.)
- 2 Set options in the Tool Options bar, and then drag within the image to smudge color.



To temporarily use the Finger Painting option as you drag with the smudge tool, press the Alt key (Option key in Mac OS).

You can specify any of the following Smudge tool options:

**Mode** Specifies how the paint that you apply blends with the existing pixels in the image. See [About blending modes](#) for more information.

**Brush** Sets the brush tip. Click the arrow next to the brush sample, choose a brush category from the Brush drop-down, and then select a brush thumbnail.

**Size** Sets the size of the brush in pixels. Drag the Size slider or enter a size in the text box.

**Strength** Sets the amount of the smudge effect.

**Sample All Layers** Smudges using color from all visible layers. If this option is deselected, the smudge tool uses colors from only the active layer.

**Finger Painting** Smears the foreground color at the beginning of each stroke. If this option is deselected, the smudge tool uses the color under the pointer at the beginning of each stroke.

## Use the Eraser tool

The Eraser tool changes pixels in the image as you drag through them. If you're working in the Background layer or in a layer with locked transparency, erased pixels change to the background color; otherwise, erased pixels become transparent. Transparent pixels are indicated by the transparency grid.

- 1 From the Draw section in the toolbox, select the Eraser tool. (If you don't see it in the toolbox, select either the Background Eraser tool or the Magic Eraser tool, and then click the Eraser tool icon in the Tool Options bar.)
- 2 Set options in the Tool Options bar as desired, and then drag through the area you want to erase.

You can specify any of the following Eraser tool options:

**Brush** Sets the brush tip. Click the arrow next to the brush sample, choose a brush category from the Brush drop-down, and then select a brush thumbnail.

## Adding shapes and text

**Size** Sets the size of the brush in pixels. Drag the Size slider or enter a size in the text box.

**Opacity** Defines the strength of the erasure. An opacity of 100% erases pixels to complete transparency on a layer and to the background color on the Background layer. A lower opacity erases pixels to partial transparency on a layer and paints partially with the background color on the Background layer. (If Block mode is selected in the Tool Options bar, the Opacity option isn't available.)

**Type** Brush mode erases by using characteristics of the brush tool, so you can make soft-edged erasures. Pencil mode makes hard-edge erasures like a pencil. Block mode uses a hard-edged 16-pixel square as an eraser.

## Use the Magic Eraser tool

The Magic Eraser tool changes all similar pixels when you drag within a photo. If you're working in a layer with locked transparency, the pixels change to the background color; otherwise, the pixels are erased to transparency. You can choose to erase contiguous pixels only, or all similar pixels on the current layer.



Original image (left), and after erasing the clouds (right)

- 1 In the Layers panel, select the layer containing the areas you want to erase.

**Note:**

*If you select the Background, it automatically becomes a layer when you use the Magic Eraser.*

- 2 From the Draw section in the toolbox, select the Magic Eraser tool in the toolbox. (If you don't see it in the toolbox, select either the Eraser tool or the Background Eraser tool, and then click the Magic Eraser tool icon in the Tool Options bar.)
- 3 Set options in the Tool Options bar, as desired, and then click the area of the layer you want to erase.

You can set any of the following Magic Eraser tool options:

**Tolerance** Defines the range of colors that will be erased. A low tolerance erases pixels within a range of color values very similar to the pixel you click. A high tolerance erases pixels within a broader range.

## Adding shapes and text

**Opacity** Defines the strength of the erasure. An opacity of 100% erases pixels to complete transparency on a layer and to the background color on a locked layer. A lower opacity erases pixels to partial transparency on a layer and paints partially with the background color on a locked layer.

**Sample All Layers** Samples the erased color using combined data from all visible layers. Deselect the option if you want to erase only the pixels on the active layer.

**Contiguous** Erases only pixels that are adjacent to the one you click. Deselect this option to erase all similar pixels in the image.

**Anti-aliasing** Smooths the edges of the area you erase, making the edge look more natural.

## Use the Background Eraser tool

The Background Eraser tool turns color pixels to transparent pixels so that you can easily remove an object from its background. With careful use, you can maintain the edges of the foreground object while eliminating background fringe pixels.

The tool pointer is a circle with a cross hair indicating the tool's hotspot. As you drag the pointer, pixels within the circle and of a similar color value as the pixel under the hotspot are erased. If the circle overlaps your foreground object, and it doesn't contain pixels similar to the hotspot pixel, the foreground object won't be erased.



*Erasing the distracting background. You can replace the background with another background by using the Clone Stamp tool or by adding another layer.*

- 1 In the Layers panel, select the layer containing the areas you want to erase.

**Note:**

*If you select Background, it automatically becomes a layer when you use the Background Eraser.*

- 2 From the Draw section in the toolbox, select the Background Eraser tool . (If you don't see it in the toolbox, select either the Eraser tool or the Magic Eraser tool , and then click the Background Eraser tool icon in the Tool Options bar.)
- 3 Set options in the Tool Options bar as desired, and then drag through the area you want to erase. Keep the tool's hotspot off of areas that you don't want to erase.

You can specify any of the following Background Eraser tool options:

**Size** Pixel width of the brush

**Tolerance** Defines how similar in color to the hotspot a pixel must be to be affected by the tool. A low tolerance limits erasure to areas that are very similar to the hotspot color. A high tolerance erases a broader range of colors.

## Adding shapes and text

**Brush Settings** Sets the presets of the brush, such as size, diameter, hardness, and spacing. Drag the Size sliders or enter numbers in text boxes.

**Limits** Choose Contiguous to erase areas that contain the hotspot color and are connected to one another. Discontiguous erases any pixels within the circle that are similar to the hotspot color.

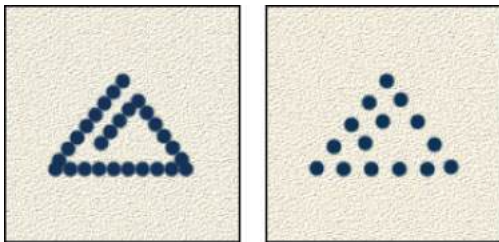
# Set up brushes

## About brush options

You can simulate actual brush strokes by setting the rates at which the brush tool strokes fade out. You can specify which options dynamically change over the course of a brush stroke, including scattering, size, and color. The brush thumbnail in the Tool Options bar reflects the brush changes as you adjust the brush dynamics options.

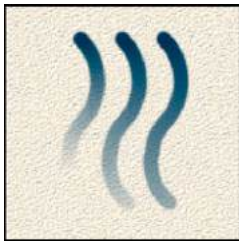
You set brush dynamics options by selecting a brush tool and then clicking Brush Settings (or Advanced, for some tools) from the Tool Options bar.

**Spacing** Controls the distance between the brush marks in a stroke. To change the spacing, type a number, or use the slider to enter a value that is a percentage of the brush diameter. (The brush thumbnail in the Tool Options bar dynamically changes to reflect your spacing adjustments.)



*Increasing the spacing makes the brush skip.*

**Fade** Sets the number of steps until the paint flow fades to nothing. A low value makes the paint stroke fade away very quickly, while a value of zero has no fading effect. Each step is equal to one mark of the brush tip. Possible values range from 0 to 9999. For example, entering 10 for Fade produces a fade in 10 increments. For smaller brushes, you may want to set a value of 25 or larger. If strokes fade too quickly, increase the values.

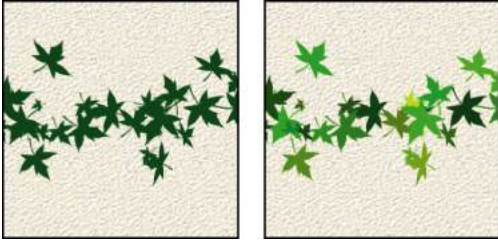


*Fade showing setting of 40, 60, and 80 steps*

**Hue Jitter** Sets the rate at which the stroke color switches between the foreground and background colors. Higher values cause more frequent switches between the two colors than lower values. (To set the colors used by the color jitter

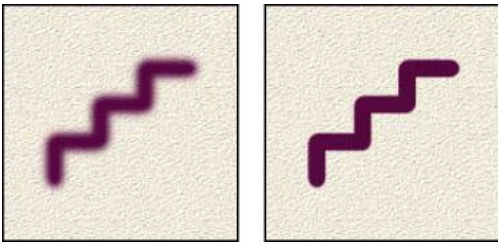
## Adding shapes and text

option, see [About foreground and background colors.](#))



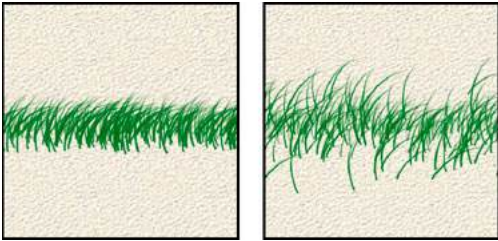
*Paint stroke without and with color jitter*

**Hardness** Controls the size of the brush's hard center. Type a number, or use the slider to enter a value that's a percentage of the brush diameter.



*Brush strokes with different hardness values*

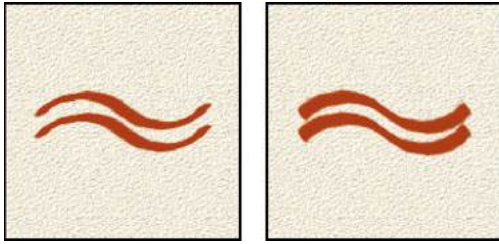
**Scatter** Brush scattering determines how brush marks are distributed in a stroke. A low value produces a denser stroke with less paint scattering, and higher values increase the scattering area.



*Brush stroke with low and high scatter values*

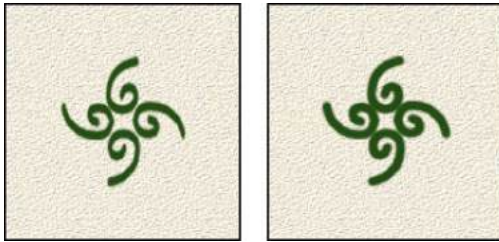
**Angle** Specifies the angle by which an elliptical brush's long axis is offset from horizontal. Type a value in degrees, or drag the arrowhead of the angle icon to mark the desired angle.

## Adding shapes and text



*Angled brushes create a chiseled stroke*

**Roundness** Specifies the ratio between the brush's short and long axes. Enter a percentage value, or drag a dot in the angle icon away from or toward the arrow. A value of 100% indicates a circular brush, a value of 0% indicates a linear brush, and intermediate values indicate elliptical brushes.



*Adjusting roundness affects the shape of a brush tip.*

**Set this as a default** This option, available for certain tools that can have brush attributes, enable you to set the currently selected settings as your default settings.

## Add a new brush to the brush library

- 1 From the Draw section in the toolbox, select the Brush tool .
- 2 In the Tools Options bar, click the arrow next to the Brush pop-up to display the pop-up panel; choose a category from the Brush drop-down, and then select a brush to modify.
- 3 Click Brush Settings, and use the sliders to modify the original brush.
- 4 In the Brush pop-up, click the pop-up menu, and then choose Save Brush.
- 5 Enter a name in the Brush Name dialog box and click OK.

The new brush is selected in the Tool Options bar, and is added to the bottom of the brushes pop-up panel.

## Delete a brush

- 1 From the Draw section in the toolbox, select the Brush tool .
- 2 Click the arrow next to the brush sample to display the brushes pop-up panel in the Tool Options bar.
- 3 Do one of the following:
  - Press the Alt key (Option key in Mac OS) to change the pointer to scissors, and then click the brush you want to delete.
  - Select the brush in the pop-up panel, and choose Delete Brush from the panel menu.

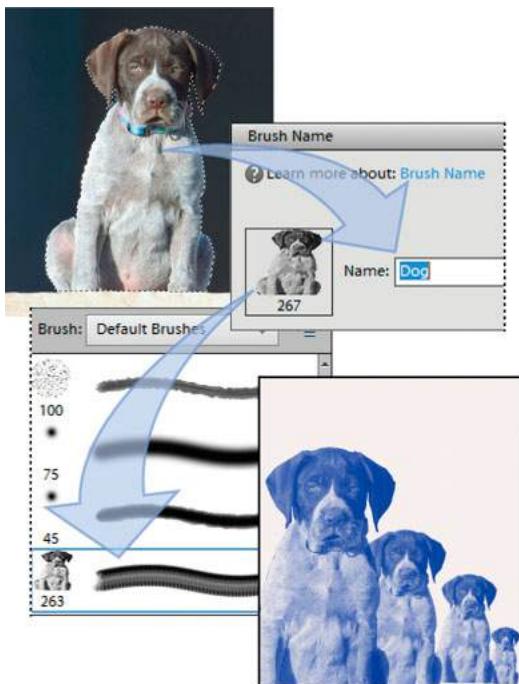


## Adding shapes and text

- Choose Preset Manager from the panel menu, select Brushes from the Preset Type list, select the brush from the list in the dialog box, and click Delete.

## Create a custom brush shape from an image

You can create a custom brush by selecting an area in a photo. The brush uses a grayscale version of that selection to apply the foreground color to your image. For example, you could select a leaf and then paint using a fall color. You can also draw a new brush shape using the Brush tool. You can create a custom brush shape either from an entire layer or from a selection. A custom brush shape can be up to 2500 pixels by 2500 pixels in size.



*Creating a custom brush of a dog. When you paint with this brush, you paint on dogs.*

### 1 Do one of the following:

- To use part of the image as a custom brush, select part of an image.
- To use the entire layer as a custom brush, deselect everything.

Use the painting tools to draw the brush shape and select it. You can use hard-edged or soft-edged strokes, or vary the opacity of strokes to achieve soft-edge effects.

### 2 Choose Edit > Brush From Selection.

### 3 Name the brush and click OK.

## Set up pressure-sensitive tablet support

Photoshop Elements is compatible with most pressure-sensitive digitizing tablets, such as *Wacom*® tablets. With the software control panel for your tablet installed, you can vary brush tool properties based on the chosen tablet options and the amount of pressure you apply with your stylus.

- ? Select the Brush tool in the toolbox and then set the tablet options in the Tool Options bar that you want to control with pen pressure.

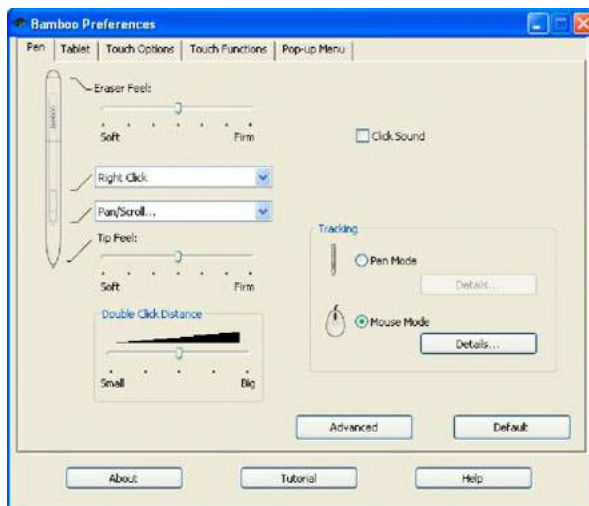
## Using Elements Organizer on Wacom tablets

You can now work with Elements Organizer on Wacom tablets.

The mouse mode in Wacom Tablets works seamlessly in the following Wacom tablets: Wacom Intuos3, Intuos 4, Bamboo Fun, and Bamboo Touch.

## Switch between mouse and pen mode

- 1 Select Start > Wacom Tablet Properties.
- 2 Select the mode you want to switch to.



*Wacom tablet preference settings*

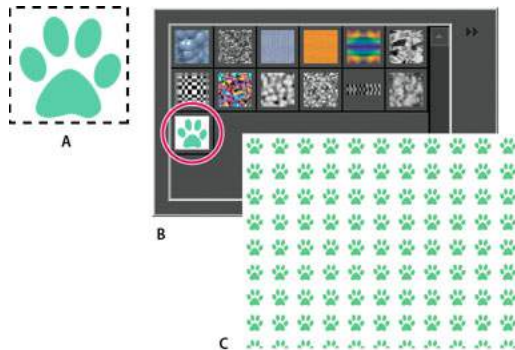
# Patterns

## About patterns

You can paint a pattern with the Pattern stamp tool or fill a selection or layer with a pattern that you choose from the pattern libraries. Photoshop Elements has several patterns you can choose from.

## Adding shapes and text

To customize your images, or to make one-of-a-kind scrapbook pages, you can create your own patterns. You can save patterns that you create in a library, and then load libraries of patterns using the Preset Manager or the Pattern pop-up panel, which appears in the Tool Options bar of the Pattern Stamp tool and the Paint Bucket tool. Saving patterns allows you to easily use a pattern in multiple images.



*Creating a custom pattern*

*A Rectangular selection used to define a pattern B Custom pattern in pattern picker C New image filled with custom pattern*

## Use the Pattern Stamp tool

The Pattern Stamp tool paints with a pattern defined from your image, another image, or a preset pattern.

- 1 From the Enhance section in the toolbox, select the the Pattern Stamp tool. (If you don't see it in the toolbox, select the Clone Stamp tool , and then click the Pattern Stamp tool icon in the Tool Options bar.)
- 2 Choose a pattern from the Pattern pop-up panel in the Tool Options bar. To load additional pattern libraries, select a library name from the panel menu, or choose Load Patterns and navigate to the folder where the library is stored. You can also define your own pattern.
- 3 Set Pattern Stamp tool options in the Tool Options bar, as desired, and then drag within the image to paint.

You can specify any of the following Pattern Stamp tool options:

**Brush** Sets the brush tip. Click the arrow next to the brush sample, choose a brush category from the Brush drop-down, and then select a brush thumbnail.

**Impressionist** Paints the pattern using paint daubs to create an impressionist effect.

**Size** Sets the size of the brush in pixels. Drag the Size slider or enter a size in the text box.

**Opacity** Sets the opacity of the pattern you apply. A low opacity setting allows pixels under a pattern stroke to show through. Drag the slider or enter an opacity value.

**Mode** Specifies how the paint that you apply blends with the existing pixels in the image. (See [About blending modes.](#))

**Aligned** Repeats the pattern as a contiguous, uniform design. The pattern is aligned from one paint stroke to the next. If Aligned is deselected, the pattern is centered on the pointer each time you stop and resume painting.

## Add a custom pattern to the pattern picker

- 1 Do one of the following:
  - To create a pattern from part of the image, make a rectangular selection with Feather set to 0 pixels.
  - To create a pattern from the entire image, deselect everything.
- 2 Choose Edit > Define Pattern From Selection.

## Adding shapes and text

- 3 Enter a name for the pattern in the Pattern Name dialog box.
- 4 To deselect the original selection, choose Select > Deselect.

# Fills and strokes

## Use the Paint Bucket tool

The Paint Bucket tool fills an area, that is similar in color value to the pixels you click. You can fill an area with the foreground color or a pattern.

- 1 Choose a foreground color.
- 2 Select the Paint Bucket tool in the toolbox.
- 3 Set options in the Tool Options bar, as desired, and then click the part of the image you want to fill.



*If you don't want to fill transparent areas in a layer, you can lock the layer's transparency in the Layers panel.*

You can specify any of the following Paint Bucket tool options:

**Paint / Pattern** Sets a foreground color (Paint) or a pattern design (Pattern) to use as the fill.

**Opacity** Sets the opacity of the paint you apply. A low opacity setting allows pixels under a paint stroke to show through. Drag the slider or enter an opacity value.

**Tolerance** Defines how similar in color filled pixels must be. A low tolerance fills pixels with color values very similar to the pixel you click. A high tolerance fills pixels that have a broader range of colors.

**Mode** Specifies how the paint that you apply blends with the existing pixels in the image.

**All Layers** Fills similar pixels on any visible layer that are within the levels set by the Tolerance and Contiguous options.

**Contiguous** Fills similarly colored pixels that are next to each other. Deselect this option to fill all similar pixels in the image, including those that aren't touching. The Tolerance option defines how similar the colors must be.

**Anti-aliasing** Smooths the edges of the filled selection.

## Fill a layer with a color or pattern

You can use a fill layer to apply a fill or a pattern to your image, instead of using one of the brush tools. The fill layer gives you the added flexibility of changing the fill and pattern properties and editing the fill layer's mask to limit the gradient to a portion of your image.

- 1 Specify a foreground or background color.
- 2 Select the area you want to fill. To fill an entire layer, select the layer in the Layers panel.
- 3 Choose Edit > Fill Layer, or Edit > Fill Selection .
- 4 Set options in the Fill dialog box, and then click OK.

**Contents** Choose a color from the Use menu. To select a different color, choose Color, and then select a color from the Color Picker. Choose Pattern to fill with a pattern.

## Adding shapes and text

**Custom Pattern** Specifies the pattern to use if you choose Pattern from the Use menu. You can use patterns from the pattern libraries or create your own patterns.

**Mode** Specifies how the color pattern that you apply blends with the existing pixels in the image.

**Opacity** Sets the opacity of the color pattern to apply.

**Preserve Transparency** Fills only opaque pixels.

## Stroke (outline) objects on a layer

You can use the Stroke command to automatically trace a colored outline around a selection or the content of a layer.

### *Note:*

*To add an outline to the background, you must first convert it to a regular layer. The background contains no transparent pixels, so the entire layer is outlined.*

- 1 Select the area in the image or a layer in the Layers panel.
- 2 Choose Edit > Stroke (Outline) Selection.
- 3 In the Stroke dialog box, set any of the following options, and then click OK to add the outline:

**Width** Specifies the width of the hard-edged outline. Values can range from 1 to 250 pixels.

**Color** Sets the color of the outline. Click the color swatch to select a color in the Color Picker.

**Location** Specifies whether to place the outline inside, outside, or centered over the selection or layer boundaries.

**Mode** Specifies how the paint that you apply blends with the existing pixels in the image.

**Opacity** Sets the opacity of the paint you apply. Enter an opacity value or click on the arrow and drag the slider.

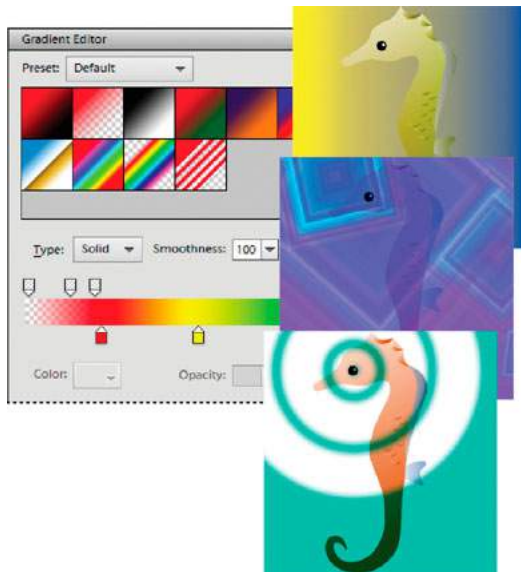
**Preserve Transparency** Strokes only areas containing opaque pixels on a layer. If your image has no transparency, this option isn't available.

# Gradients

## About gradients

You fill an area with a gradient by dragging within the image or by selecting with the Gradient tool. The distance between the starting point (where you first press the mouse button) and ending point (where you release the mouse button) affects the gradient appearance, as does the gradient type.

## Adding shapes and text



Using the Gradient tool and Gradient Editor, you can create a custom mix of colors in your photos.

You can choose any of the following gradient types in the Tool Options bar.

**Linear gradient** Shades from the starting point to the ending point in a straight line.

**Radial gradient** Shades from the starting point to the ending point in a circular pattern.

**Angle gradient** Shades in a counterclockwise sweep around the starting point.

**Reflected gradient** Shades using symmetric linear gradients on either side of the starting point.

**Diamond gradient** Shades from the starting point outward in a diamond pattern. The ending point defines one corner of the diamond.



*You can also use a Fill Layer to apply a gradient to your image. The fill layer gives you the added flexibility of changing the gradient properties and editing the fill layer's mask to limit the gradient to a portion of your image.*

Gradients are stored in libraries. You can choose a different library of gradients to display in the Gradient Picker menu by clicking the the menu and selecting a library at the bottom of the list. You can also save and load your own libraries of gradients in this menu. You can also manage gradients by using the Preset Manager.

## Apply a gradient

- 1 To fill part of the image, select the area with one of the selection tools. Otherwise, the gradient fill is applied to the entire active layer.
- 2 Select the Gradient tool .
- 3 In the Tool Options bar, click the desired gradient type.
- 4 Choose a gradient fill from the Gradient Picker panel in the Tool Options bar.
- 5 (Optional) Set gradient options in the Tool Options bar.

**Mode** Specifies how the gradient blends with the existing pixels in the image.

## Adding shapes and text

**Opacity** Sets the opacity of the gradient. A low opacity setting allows pixels under the gradient to show through. Drag the slider or enter an opacity value.

**Reverse** Switches the order of the colors in the gradient fill.

**Transparency** Uses the gradient's transparency (instead of any transparent areas in the image) if the gradient has transparent areas.

**Dither** Creates a smoother blend with less obvious bands of color.

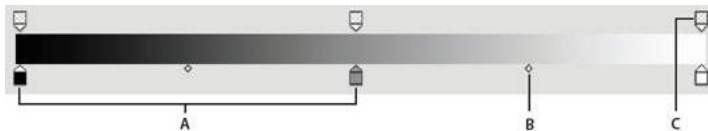
- 6 In the image, position the pointer where you want to set the starting point of the gradient, and drag to define the ending point. To constrain the gradient angle to a multiple of 45°, hold down Shift as you drag.

## Apply gradient fill to text

- 1 Select the text you want to fill.
- 2 Choose Layer > Simplify Layer to convert the vector text to a bitmap image. You won't be able to edit the text after you simplify the layer.
- 3 Control-click (Command-click in Mac OS) the thumbnail for the text layer in the Layers panel to select the text.
- 4 Select the Gradient tool.
- 5 In the Tool Options bar, click the desired gradient type.
- 6 Choose a gradient fill from the Gradient Picker panel.
- 7 Position the pointer on the text where you want to set the starting point of the gradient, and drag to define the ending point.

## Define a gradient

You can define your own gradients in the Gradient Editor dialog box. A gradient can include two or more colors, or one or more colors that fade to transparency.



*Gradient Editor dialog box.*

*A Color Stop B Color Midpoint C Opacity Stop*

To define a gradient, you add a color stop to add a color to the gradient, drag the color stop and the midpoint icon to define the range between two colors, and adjust the Opacity stops to specify the transparency that you want in the gradient.

- 1 From the Draw section in the toolbox, select the Gradient tool.
- 2 To display the Gradient Editor dialog box, click the Edit button below the gradient sample.
- 3 In the Preset section of the Gradient Editor dialog box, select a gradient on which to base your new gradient.
- 4 To choose colors for your gradient, double-click the color stop, or click the Color swatch to display the Color Picker. Choose a color, and click OK.
- 5 To adjust the color stop location of a color, drag the stop left or right.
- 6 To add a color to the gradient, click below the gradient bar to define another color stop.

## Adding shapes and text

- 7 To adjust the location of the transition midpoint between colors, drag the diamond below the gradient bar to the left or right.
- 8 To delete the color stop you are editing, click Delete.
- 9 To set the color transition's smoothness, enter a percentage in the Smoothness text box, or drag the slider.
- 10 If desired, set transparency values for the gradient by dragging the Opacity stops.
- 11 To save the gradient in the gradient presets, enter a name for the new gradient, and then click Add to preset.
- 12 Click OK. The newly created gradient is selected and ready to use.

## Specify gradient transparency

Each gradient fill contains settings (opacity stops) that control the opacity of the fill at different locations in the gradient. The checkerboard pattern indicates the amount of transparency in the gradient preview. Gradients need at least two opacity stops.

- 1 Create a gradient.
- 2 To adjust the starting opacity in the Gradient Editor, click the left opacity stop above the gradient bar. The triangle below the stop turns black, indicating that you're editing the starting transparency.
- 3 Set the Opacity by doing one of the following:
  - Enter a value between 0 (fully transparent) and 100% (fully opaque).
  - Drag the arrow on the Opacity slider.
- 4 To adjust the opacity of the endpoint, click the right transparency stop above the gradient bar. Then set the opacity as described in step 3.
- 5 To adjust the location of the starting or ending opacity, do one of the following:
  - Drag the corresponding opacity stop to the left or right.
  - Select the corresponding opacity stop, and enter a value for Location.
- 6 To adjust the location of the midpoint opacity (the point midway between the starting and ending opacities), do one of the following:
  - Drag the diamond above the gradient bar to the left or right.
  - Select the diamond, and enter a value for Location.
- 7 To delete the opacity stop you are editing, click Delete, or drag the stop away from the gradient bar.
- 8 To add an intermediate opacity, click above the gradient bar to define a new opacity stop. You can then adjust and move this opacity as you would a starting or ending opacity.  
To remove an intermediate opacity, drag its transparency stop up and off the gradient bar, or select the stop and click the Delete button.
- 9 To save the gradient to the gradient presets, enter a new name in the Name text box, and then click New. This creates a new gradient preset with the transparency setting you specified.
- 10 Click OK to exit the dialog box and select the newly created gradient. Make sure that Transparency is selected in the Tool Options bar.

## Create a noise gradient

A noise gradient is a gradient that contains randomly distributed colors within a range of colors that you specify.



## Adding shapes and text



Noise gradients with different noise values.  
A 10% noise B 50% noise C 90% noise

- 1 Select the Gradient tool.
- 2 To display the Gradient Editor dialog box, click the Edit button in the Tool Options bar.
- 3 Choose Noise from the Gradient Type menu.
- 4 Set options for the gradient.

**Roughness** Sets the amount of softness in the transition between colors in the pattern.

**Color Model** Specifies the color model to use to set the color range to include in the gradient. To define the range of colors, drag the sliders for each color component.

**Restrict Colors** Prevents oversaturated colors.


**Add Transparency** Adds transparency to random colors.

- 5 To randomly mix the colors, click the Randomize button until you find a gradient you like.
- 6 Enter a name for the new gradient.
- 7 To add your gradient preset, click New.
- 8 Click OK to exit the dialog box, and then select the newly created gradient.

## Work with Asian type


### Display Asian type options

Photoshop Elements provides several options for working with Asian type. Asian fonts are often referred to as double-byte fonts or CJK fonts, meaning Chinese, Japanese, and Korean fonts.

- 1 In Windows, choose Edit > Preferences > Type. In Mac OS, choose Photoshop Elements > Preferences > Type.
- 2 Set text options:
  - Show Asian Text Options to display Asian type options.
  - Show Font Names in English to display Asian font names in English.
- 3 Click OK. The Asian type options button  is added to the type tool options bar.

## Reduce spacing between Asian characters

Tsume reduces the space around a character (but not the character itself) by a specified percentage value. When tsume is added to a character, spacing around both sides of the character is reduced by an equal percentage.

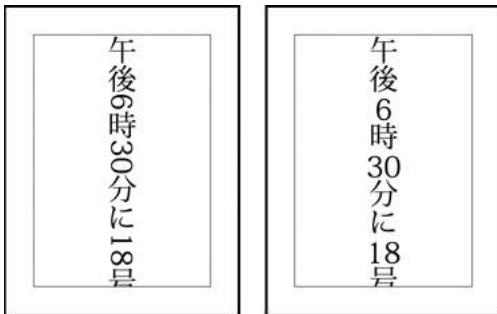
- 1 If you're working with an existing layer, select the text layer in the Layers panel and then select a type tool.
- 2 Select the characters you want to adjust.
- 3 Click the Show Asian Text Options button  in the options bar. If you don't see the button, make sure that preferences are set to show Asian type options.
- 4 Select a percentage for Tsume from the pop-up menu, and press the Enter or Return key. The greater the percentage, the tighter the compression between characters. At 100% (the maximum value), there is no space between the character's bounding box and its em box.

### Note:


*An em box is a space whose height and width roughly correspond to the width of the letter "M" (also called a mutton).*

## Turn on or turn off tate-chuu-yoko

Tate-chuu-yoko (also called kumimoji and renmoji) is a block of horizontal type laid out within a vertical type line.

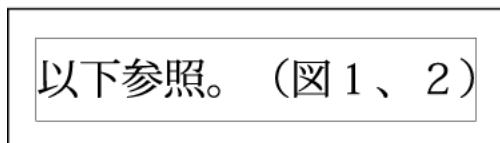
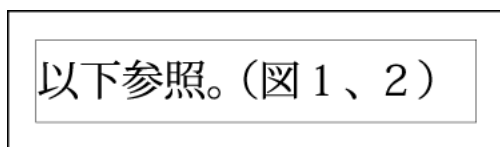


*Before and after tate-chuu-yoko is applied*


- 1 If you're working with an existing layer, select the text layer in the Layers panel and then select a type tool.
- 2 Select the characters that you want to rotate.
- 3 Click the Asian Text Options button  in the options bar.
- 4 Enable Tate-Chuu-Yoko.

## Turn on or turn off mojikumi

Mojikumi determines spacing between punctuation, symbols, numbers, and other character classes in Japanese type. When mojikumi is on, half-width spacing is applied to these characters.

**Adding shapes and text**

*Mojikumi off (top), and mojikumi on (bottom)*

- 1 If you're working with an existing layer, select the text layer in the Layers panel and then select a type tool.
- 2 Click the Asian Text Options button  in the options bar.
- 3 Enable Mojikumi.

# Chapter 5: Guided edits, effects, and filters

## Filters

### About filters

You can use filters to clean up or retouch photos. You can also use filters to apply special art effects or create unique transformations using distortion effects. In addition to the filters provided by Adobe, some filters provided by third-party developers are available as plug-ins. Once installed, these plug-in filters appear at the bottom of the Filter lists.



*Filters can radically change the mood of a photo or image.*

You can apply filters in any of three ways:

**Filter menu** Contains all of the available filters and lets you apply filters individually.

**Filter Gallery** Displays thumbnail examples of what each filter does, like the panel. The Filter Gallery lets you apply filters cumulatively and apply individual filters more than once. You can also rearrange filters and change the settings of each filter you've applied to achieve the effect you want. Because it is so flexible, the Filter Gallery is often the best choice for applying filters. However, not all filters listed in the Filter menu are available in the Filter Gallery.

**Filters panel** Displays thumbnail examples of what each filter listed in the Filter menu does. The Filters panel allows you to apply filters individually to a photo in the Expert view.

### Tips for applying filters

The following information can help you understand the process of applying filters to your images.

- Preview the filter's result. Applying filters to a large image can be time-consuming. It's quicker to preview what the filter does in the Filter Gallery. Most filters also let you preview their result in the Filter Options dialog box and the document window. You can then choose to apply the filter or cancel the operation without losing time.
- Filters apply only to the active part of an image. Filters affect only the active, visible layer or a selected area of the layer.
- Filters don't work on all images. You can't use some filters on images in grayscale mode, or any filters on images in bitmap or indexed-color mode. Many filters don't work on 16-bit images.
- You can reapply the previous filter. The last filter you applied appears at the top of the Filter menu. You can reapply it with the same settings you last used to further enhance the image.

### Tips for creating visual effects with filters

Use the following techniques to achieve special visual results with filters:

- Feature the filter edges. If you're applying a filter to a selected area, you can soften the edges of the filter effect by feathering the selection before you apply the filter.
- Apply filters in succession to build up effects. You can apply filters to individual layers or to several layers in succession to build up an effect. Choosing different blending modes in the Layers panel blends the effect. For a filter to affect a layer, the layer must be visible and must contain pixels.
- Create textures and backgrounds. By applying filters to solid-color or grayscale images, you can generate a variety of backgrounds and textures. You can then blur these textures. Although some filters (for example, the Glass filter) have little or no visible effect when applied to solid colors, others produce interesting effects. For such colors, you can use Add Noise, Chalk & Charcoal, Clouds, Conté Crayon, Difference Clouds, Glass, Graphic Pen, Halftone Pattern, Mezzotint, Note Paper, Pointillize, Reticulation, Rough Pastels, Sponge, or Underpainting. You can also use any of the filters in the Texture submenu.
- Improve image quality and consistency. You can disguise faults, alter or enhance images, or make a series of images look similar by applying the same filter to each.

## Apply a filter

**1** Choose the area you want to apply the filter to:

- To apply a filter to an entire layer, deselect any selected areas, and then select the layer in the Layers panel.
- To apply a filter to a portion of a layer, use any selection tool to select an area.

**2** Choose how to apply the filter:



- To use the Filter gallery, choose Filter > Filter Gallery, select a category, and click the filter you want to apply.
- To use the Filters panel, choose Window > Filters, select a category, and double-click the filter you want to apply.
- To use the Filter menu, choose Filter, then choose a submenu followed by the filter you want to apply. If a filter name is followed by ellipses (...), a Filter Options dialog box appears.

**3** If a dialog box appears, enter values or select options.

**4** If available, select the Preview option to preview the filter in the document window. Depending on the filter and how you are applying it, use one of the following methods to preview the filter:



- Use the + button or - button under the preview window to zoom in or zoom out.
- Click the zoom bar (where the zoom percentage appears) to choose a zoom percentage.
- Click-drag within the preview window to center a specific area of the image in the window.

## Guided edits, effects, and filters

- Click the Show/Hide button  at the top of the dialog box to hide the filter thumbnails. Hiding the thumbnails expands the preview area.
  - Click the eye icon  next to a filter to hide the effect in the preview image.
- 5 If the dialog box contains sliders, hold down Alt (Option in Mac OS) while dragging a slider to see a real-time preview (real-time rendering).
  - 6 Click in the image window to center a specific area of the image in the preview window. (This may not work with all preview windows.)

### Note:

*A blinking line beneath the preview size indicates that the preview is being rendered.*

- 7 If you are using the Filter Gallery, or the filter opens in the Filter Gallery, do any of the following and click OK:
  - Click the New Effect Layer button  at the bottom of the dialog box and choose an additional filter to apply. You can add multiple effect layers to apply multiple filters.
  - Rearrange applied filters by dragging a filter name to another position in the list of applied filters at the bottom of the dialog box. Rearranging the order of filters can dramatically change the way your image looks.
  - Remove applied filters by selecting the filter and clicking the Delete Effect Layer button .
- 8 If you are using the Filters panel, do the following and click OK:
  - Click the filter you want to apply to your photo.
  - If available, you can do one of the following:
    - Adjust the sliders to modify the intensity of the filter applied.
    - Click Apply More button to add more effect, available for few one-click filters (for example, Blur).
    - Some filters enable further adjustments. Click Advance Options button. In the dialog box, adjust the sliders and select options to make modifications in the filter applied to the photo.

## Filter categories

You can apply the following categories of filters:

**Correct Camera Distortion** Fixes common lens flaws such as barrel and pincushion distortion, and vignetting. The filter also rotates an image and fixes image perspective caused by vertical or horizontal camera tilt.

**Adjustment filters** Change the brightness values, color, grayscale range, and tonal levels of pixels in an image. Convert color pixels into black and white.

**Artistic filters** Simulate a painterly appearance on traditional media and create a unique look.

**Blur filters** Soften a selection or an image. Useful for retouching.

**Brush Stroke filters** Give a painterly or fine-arts look using different brush and ink stroke effects.

**Distort filters** Geometrically distort an image, creating three-dimensional and other reshaping effects.

**Noise filters** Blend a selection into the surrounding pixels and remove problem areas, such as dust and scratches.

**Pixelate filters** Sharply define an image or selection by clumping pixels of similar color values.

**Render filters** Create cloud patterns, lens flare, fibers, and lightning effects in an image.

**Sketch filters** Add texture for depth or to give a hand-drawn look.

**Guided edits, effects, and filters**

**Stylize filters** Produce a painted or impressionistic effect by displacing pixels and heightening contrast.

**Texture filters** Give the appearance of depth or substance, or add an organic look.

**Other filters** Let you create your own filter effects, modify masks, offset a selection within an image, and make quick color adjustments.

**Digimarc filter** Lets you read a *Digimarc* watermark.

## Filter Gallery

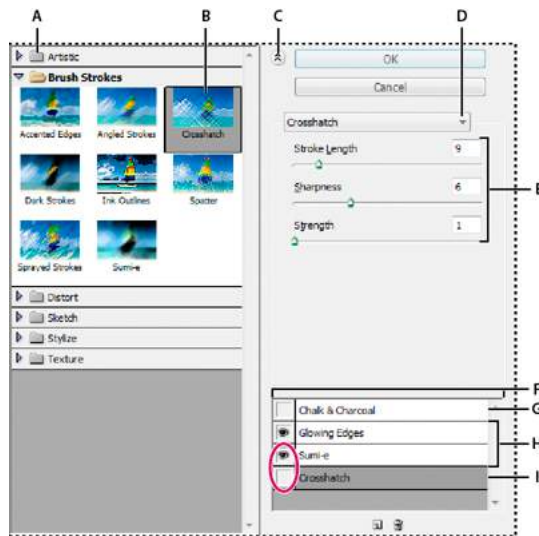
The Filter Gallery (Filter > Filter Gallery) lets you apply filters cumulatively, and apply individual filters more than once. You can also rearrange filters and change the settings of each filter you've applied to achieve the effect you want. Because you can apply more than one filter to an image when you use the Filter Gallery dialog box, you have a lot of control over the way your image is affected by each filter. The Filter Gallery is often the best choice for applying filters because it's flexible and easy to use.



*Applying filters through the Filter Gallery*

*A Original photo B Photos each with a single filter applied C Three filters applied cumulatively*

## Guided edits, effects, and filters




Filter Gallery dialog box

A Filter category B Thumbnail of selected filter C Show/Hide filter thumbnails D Filter menu E Options for selected filter F List of filter effects to apply or arrange G Hidden filter H Filters applied cumulatively but not selected I Filter selected but not applied

However, not all filters are available from the Filter Gallery. Some are available only as individual commands from the Filter menu. Also, you cannot apply effects and Styles from the Filter Gallery, as you can from the Effects panel.

## Texture and glass surface options

The Conté Crayon, Glass, Rough Pastels, Texturizer, and Underpainting filters have texturizing options. These options make images appear as if they were painted onto textures, such as canvas or brick, or viewed through glass blocks.

**Texture** Specifies the type of texture to apply. You can also click Load Texture  to specify a Photoshop file.

**Scaling** Increases or decreases the effect on the image surface.

**Relief (if available)** Adjusts the depth of the texture's surface.

**Light (if available)** Sets the direction of the light source on the image.

**Invert** Reverses the surface's light and dark colors.

## Improve performance with filters and effects

Some filters and effects are memory intensive, especially when applied to high-resolution images. You can use these techniques to improve performance:

- Try filters and settings on a small selected area of the image.
- Try filters and settings on a smaller, resized copy of your image. When you're satisfied with the results, apply the filter with the same settings to your original image.
- Free up memory before running the filter or effect by clearing the clipboard, the undo history, or both. Choose Edit > Clear > [command].
- Exit from other applications to make more memory available.



- Adjust filter settings to make memory-intensive filters less complex. Memory-intensive filters include Cutout, Stained Glass, Chrome, Ripple, Spatter, Sprayed Strokes, and Glass. (For example, to reduce the complexity of the Stained Glass filter, increase cell size. To reduce the complexity of the Cutout filter, increase Edge Simplicity, decrease Edge Fidelity, or both.)

## Guided mode Photomerge edits

The **Guided** mode provides you with guided edits - a wizard-like interface to accomplish certain predefined effects. Each guided edit has an associated image. As you move the mouse horizontally over the image, the portion to the left of the slider displays the image before the effect is applied. The portion to the right of the slider displays the image after the effect is applied.

### Use Photomerge Group Shot

Use **Photomerge Group Shot** to create the perfect group photo from multiple photos.

**Note:**

*For best results, pick multiple images from the same photo session.*

- 1 Do one of the following to select the group photos you want to use as source images for the **Photomerge Group Shot**:
  - In Elements Organizer, select the photos.
  - In Photoshop Elements, open the photos.
- 2 In the Guided room, choose **Photomerge > Photomerge Group Shot**.
- 3 Select the best group photo, and drag it from the **Photo Bin** to the **Final** window.
- 4 Click other photos in the **Photo Bin** (color coded to help you keep track). Use the **Pencil** tool to mark areas that you want to merge into the final photo. To fine tune the final image, use the **Pencil** tool to add additional content, or the **Eraser** tool to remove content.
- 5 Set any of the following:
 

**Show Strokes** Click this option to show the **Pencil** strokes you marked in the source image.

**Show Regions** Click this option to reveal the selected regions in the final image.

**Advanced Options** Expand or collapse this arrow for **Advanced Options**.

**Alignment Tool** To correct the alignment of multiple photos, click the **Alignment Tool**, place three markers in the source image and three markers in the final image, then click **Align Photos**.

**Note:** **Photomerge Group Shot** uses auto alignment. Use the **Alignment Tool** only if the automatic alignment didn't produce the expected result.

**Pixel Blending** Click this option to blend pixels.
- 6 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.

## Guided edits, effects, and filters

- **Share - Flickr / Twitter:** Choose to place your image online through one of the social or sharing services available in Photoshop Elements.



Photomerge Group Shot window

## Use Photomerge Scene Cleaner

Use **Photomerge Scene Cleaner** to create the perfect scenic photo from multiple photos. For example, you can eliminate unwanted elements like tourists that inadvertently wandered into the scenery.

### **Note:**

*For best results, use images from the same scene taken from the same angle.*

- 1 Do one of the following to select 2 - 10 photos you want to use for the Photomerge Scene Cleaner:
  - In the Elements Organizer, select the photos.
  - In Photoshop Elements, open the photos.
- 2 In the Guided room, choose **Photomerge > Photomerge Scene Cleaner**.
- 3 Select the best photo and then drag it from the **Photo Bin** to the **Final** window.

This photo becomes the base image for the final photo.

### Guided edits, effects, and filters

- 4 Click a photo in the **Photo Bin** (color-coded to help you keep track).  
It appears in the Source window.
- 5 Do any of the following to add or remove areas from the **Final** window:
  - To remove an area, use the **Pencil** tool to mark the area in the **Final** window.
  - To add an area to the **Final** window, use the **Pencil** tool to mark the area in the **Source** window.
  - To fine-tune the final image, use the **Pencil** tool to add additional content or the **Eraser** tool to remove content.
- 6 (Optional) Select one of the following:
 

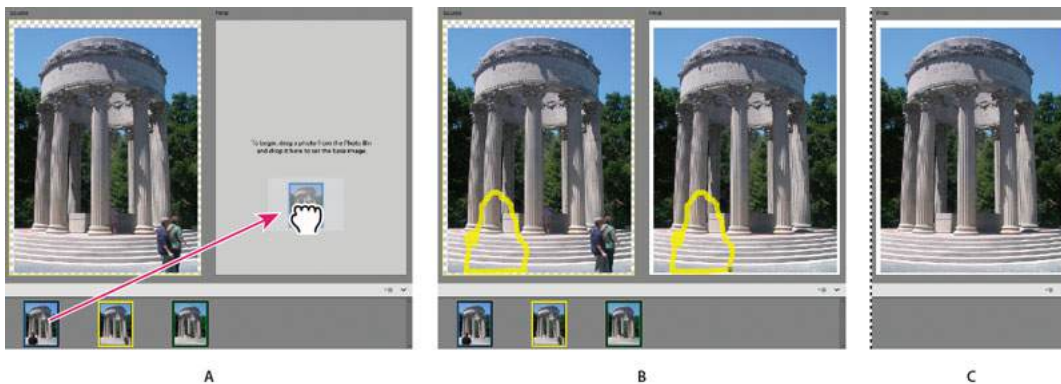
**Show Strokes** Shows your **Pencil** strokes in the source image.

**Show Regions** Reveals the selected regions in the final image.
- 7 (Optional) If there's a problem with the photos aligning properly, click the **Advanced Options** arrow to access the following:
 

**Alignment Tool** Corrects the alignment of the multiple photos. Click the **Alignment Tool** to place three markers in the source image and three markers in the final image. Drag markers to similar areas in each photo and then click Align Photos.

**note: Photomerge Scene Cleaner** uses auto alignment. The **Alignment Tool** should only be used if the automatic alignment didn't produce the result you want.

**Pixel Blending** Blends pixels using different options. Experiment to see whether this option improves the photo or not.
- 8 (Optional) Select other photos in the **Photo Bin** for use in the **Source** window and repeat step 5.
- 9 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.



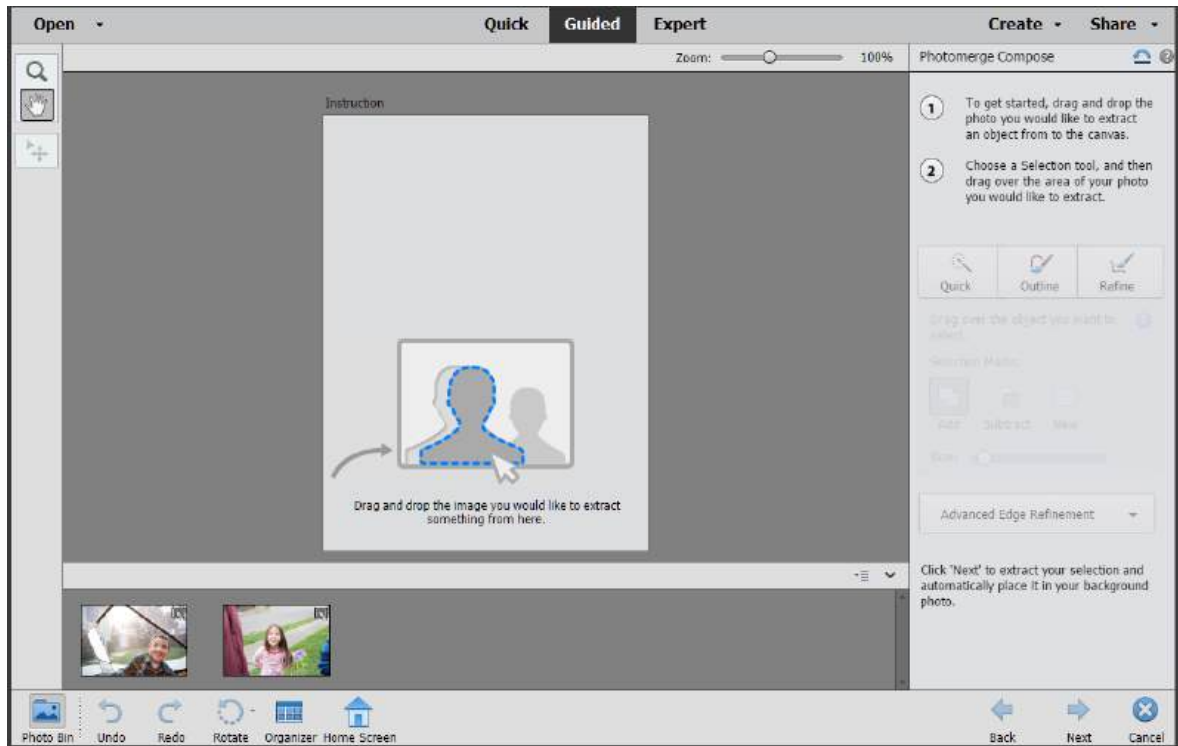
*Photomerge Scene Cleaner*

*A Dragging a photo to the Final window B Using the Pencil tool to mark area to be replaced in the Final window C Result in the Final window*

## Photomerge Compose

The Photomerge Compose feature enables you to replace portions of an image. For example, you can select a person from one photo and add the selection to another photograph. You need two images - a source and a destination. You can select an area, crop it from the source image, and then paste it into the destination image, and then adjust it for proportionality and color for the most natural outcome.

- 1 Select two photos in the Photo Bin, and then click Photomerge > Photomerge compose.

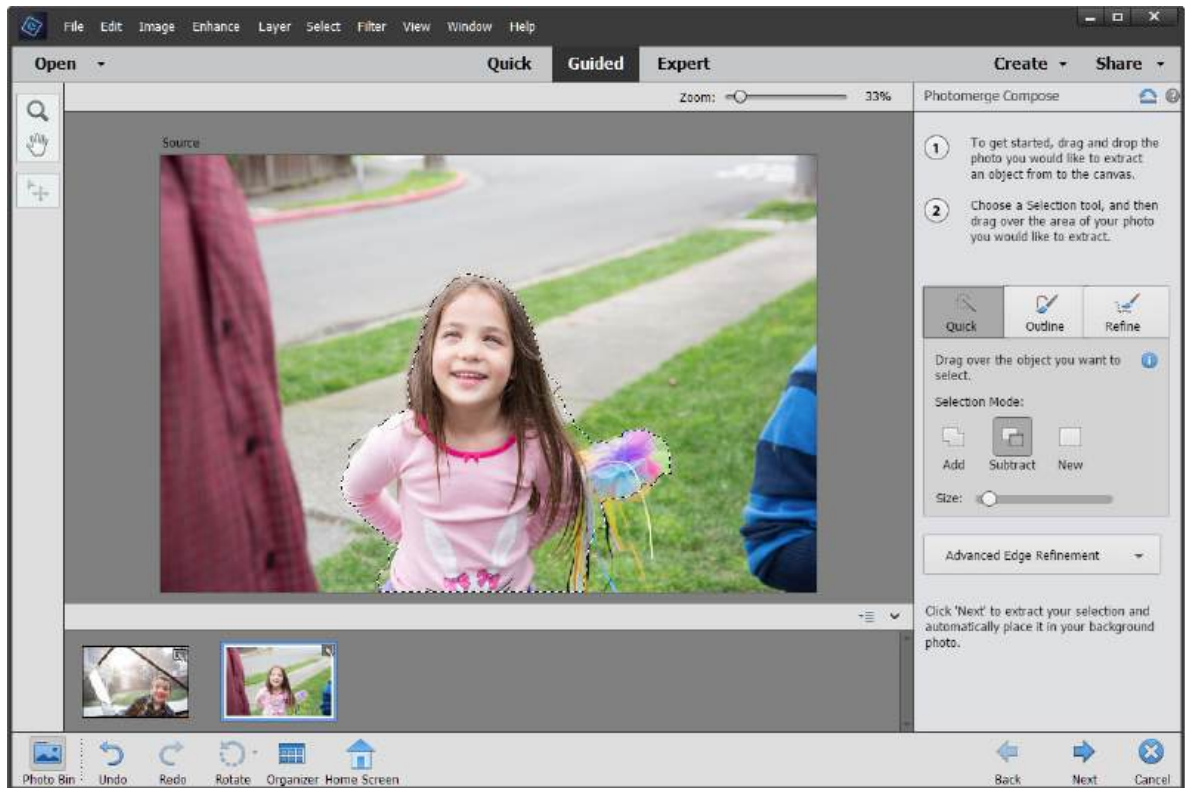


*The Photomerge Compose work area*

- 2 Drag the image from which you want to move an object or person into the photo editing area. Then, click one of the Selection tools, make a selection, and then click Next.

**Note:** Use the Selection Modes to refine selected areas.

## Guided edits, effects, and filters



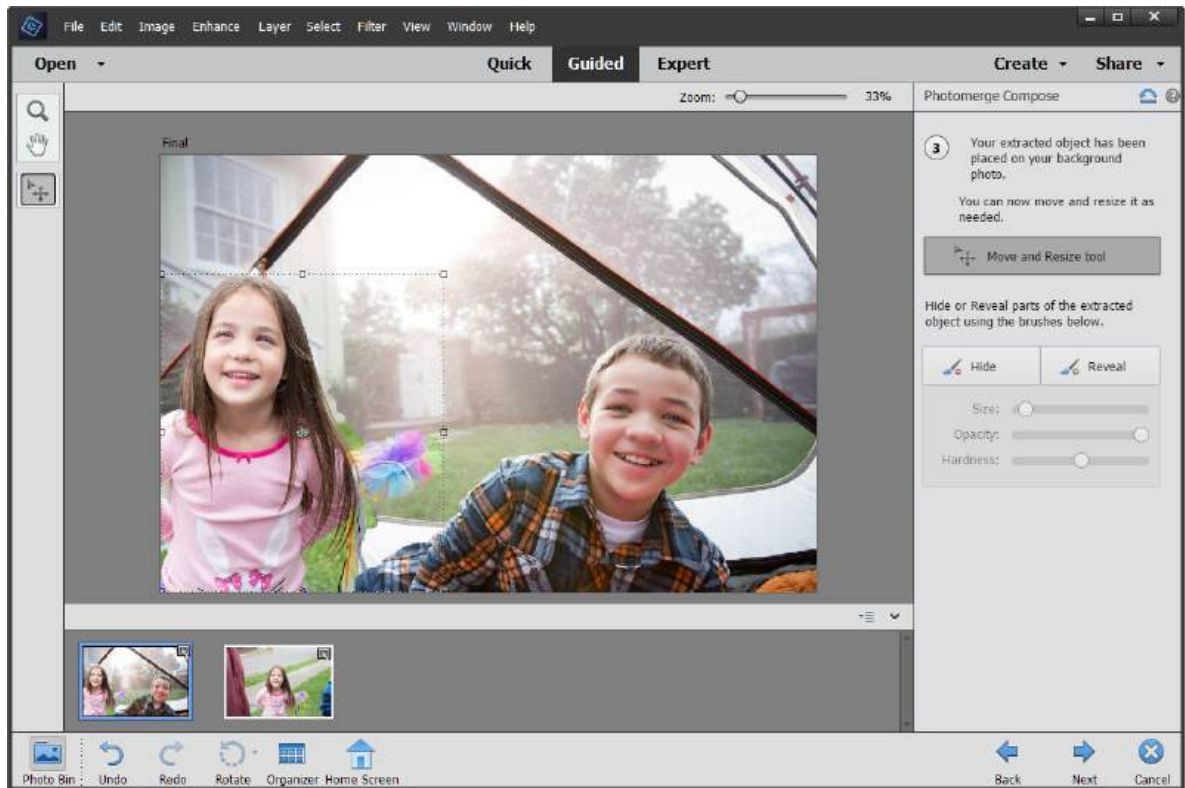
Select the object or person you want to extract from this photo

- 3 The portion selected in the previous step is pasted on the image that you want to move the selection to. Use the mouse to move the selection around, and drag the coach marks to resize it to ensure that the pasted content is in proportion with the rest of the photo.

Click Next.

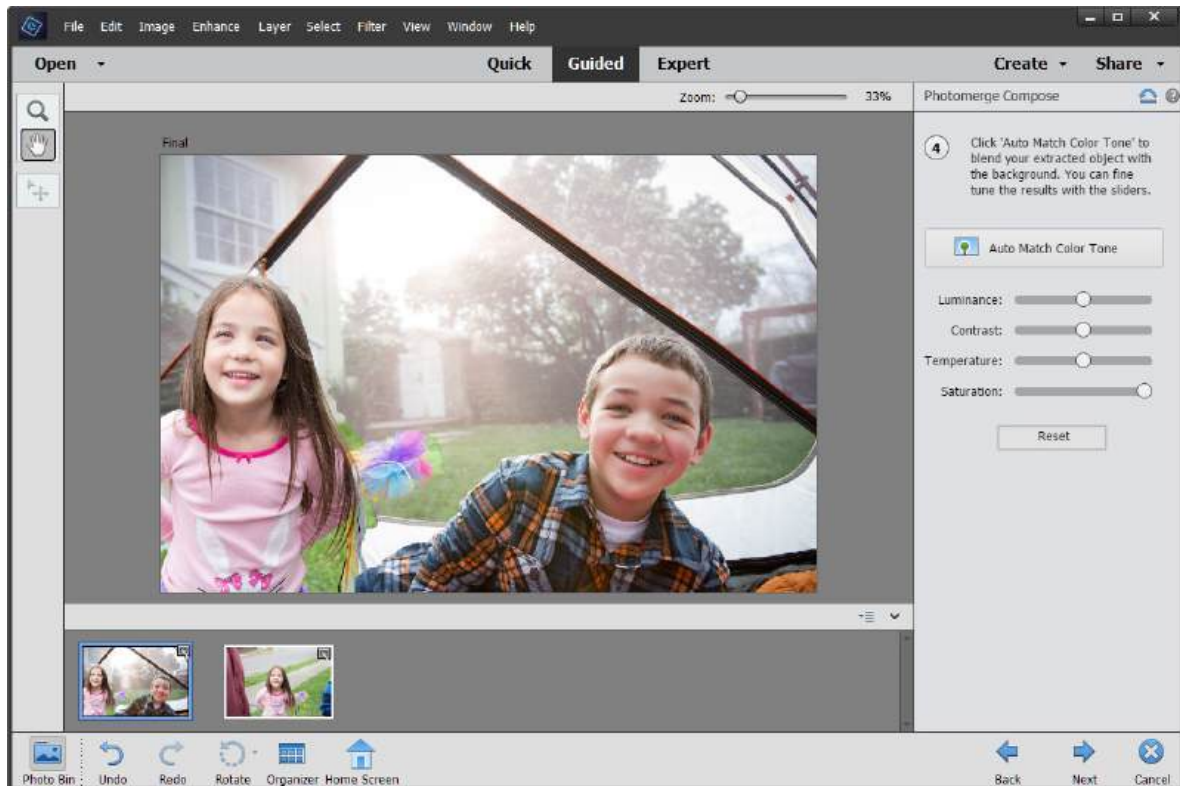
**Note:** You can also hide/reveal portions of the selection using the available brushes.

## Guided edits, effects, and filters



*Resize the pasted content to ensure that it is in proportion with the rest of the image.*

- 4 Now adjust the tonal and color values of the pasted content to ensure that it matches with the rest of the image. Try to get the most natural selection possible. To perform this in one step automatically, click Auto Match Color Tone.



*Apply color correction to match the tonal and color characteristics of both images*

- 5 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Photomerge Faces

Use Photomerge Faces to combine multiple facial features to create one composite face.

- 1 Do one of the following to select the face images you want to use as source images for Photomerge Faces:
  - In Elements Organizer, select the face image photos.
  - Open the face image photos.
- 2 In the Guided room, choose **Photomerge > Photomerge Faces**.
- 3 Pick a face photo as your base image, and drag it from the Photo Bin to the Final window.
- 4 Click another image in the Photo Bin, and click the Alignment tool. Place the three alignment markers on the eyes and mouth on the source image and the final image, and click Align Photos.
- 5 Click other photos in the Photo Bin (color coded to help you keep track). Use the Pencil tool to mark the areas that you would like to merge into the final photo. To fine-tune the final image, use the Pencil tool to add additional content, or the Eraser tool to remove content.

### Guided edits, effects, and filters

6 Set the following:

**Show Strokes** Click this option to show the Pencil strokes you marked in the source image.

**Show Regions** Click this option to reveal the selected regions in the final image.

7 After you get the desired result, click Next to choose how you would like to proceed:

- **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
- **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
- **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.



*Photomerge Faces window*



## Photomerge Exposure

Use Photomerge Exposure to efficiently handle scenes in photos with exposure challenges. You can blend two photos together to get a perfectly exposed photo. For example, if you have a photo with a window in the background and you want a perfect photo with the following properties:

- A good exposure of the scenery outside the window.
- A good exposure of the darker objects inside the room.

In such a scenario, you often end up with either overexposed scenery outside the window or underexposed objects inside the room.

To ensure that you get a perfect photo, do the following:

- Take two or more photos of the same scene with different exposures. For best results, take the photos at different exposure value, with minimum shake. For example:
  - You can take two or more photos with the flash turned on to properly expose the subject (the objects inside the room).
  - You can then take one photo with the flash turned off to properly expose the background (the scenery outside the window).

**Tip:** You can use Exposure Bracketing in your camera to capture the same subject with a number of shots with different exposure settings.

- Blend the photos to create a perfectly exposed photo.

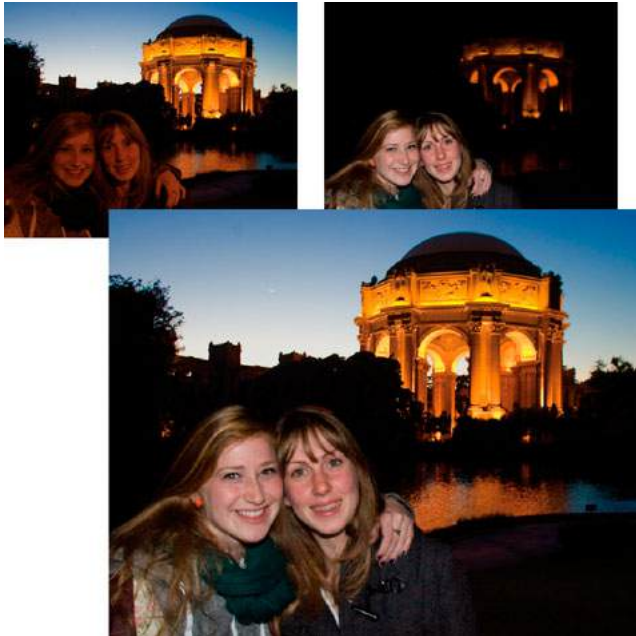
Photomerge Exposure facilitates blending the two photos together to get a perfectly exposed photo.

Photomerge Exposure can be done in the following modes:

- [Automatic Photomerge Exposure](#)
- [Manual Photomerge Exposure](#)



*To obtain best results while using the Automatic mode, use photos that are shot at different exposure values, using Exposure Bracketing. To obtain best results while using the manual mode, use photos shot with flash turned on and flash turned off.*



*Photomerge Exposure*

### Automatic Photomerge Exposure

You can select the required photos from Elements Organizer, and select and deselect the photos through the Photo Bin.

- 1 In the Guided room, click Photomerge > Photomerge Exposure, and then do one of the following:
  - In Elements Organizer, select a minimum of two and a maximum of ten photos, and in the Guided room, choose **Photomerge > Photomerge Exposure**.
  - Open the required files using File > Open.
- 1 Select Show Open Files In The Photo Bin to view all the opened files.
- 2 Select a minimum of two and a maximum of ten photos from the Photo Bin.
- 3 In the Guided room, choose Photomerge > Photomerge Exposure.  
Photoshop Elements displays the selected photos.
- 4 In the Photomerge Exposure, select Automatic.
- 5 Select one of the following options:
  - Simple Blending** This option does not allow you to change the Photomerge Exposure settings. Selecting this option displays the merged photo.
  - Smart Blending** Selecting this option enables you to adjust the settings using the sliders. You can view the final photo based on the settings you provide. You can adjust the following settings:
    - Highlight** Enables you to increase or decrease the details that are in the highlight.
    - Shadows** Enables you to lighten or darken the shadows.
    - Saturation** Enables you to change the intensity of the color.
- 6 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save - Save / Save As:** Preserve the newly-created image in any of the available formats.

- **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
- **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Manual Photomerge Exposure

### Note:

*For Photomerge Exposure, if you are using photos that have been taken with your flash on, then manual Photomerge Exposure is the default mode.*

- 1 In the Guided room, click Photomerge > Photomerge Exposure, and then do one of the following:
  - In Elements Organizer, select a minimum of two and a maximum of ten photos and select Photomerge > Photomerge Exposure.
  - Open the required files using File > Open.
- 1 Select Show Open Files In The Photo Bin to view all the opened files.
- 2 Select a minimum of two and a maximum of ten photos from the Photo Bin.
- 3 In the Guided room, choose **Photomerge > Photomerge Exposure**.  
Photoshop Elements displays the selected photos.
- 4 In the Photomerge panel, select Manual.  
The first image in the Photo Bin is displayed as the source photo. You can select an image from the Photo Bin as the final photo.
- 5 Select exposed regions from the source image:
  - Click Pencil Tool and use the mouse to paint exposed regions of the source image. Change the source photo, and select regions from this photo if necessary.
  - Click Eraser Tool and use the mouse to paint over any regions you have chosen to expose - this action will deselect regions selected by the Pencil Tool.

You can now view a final image with different regions copied from different source photos above the initially selected final photo.
- 6 Set the following:
  - Show Strokes** Click to show your Pencil strokes in the source image.
  - Show Regions** Click to reveal the selected regions in the final image.
- 7 Additionally:
  - Change the transparency of these selected regions to blend them properly with the background by using the Opacity Slider.
  - Select Edge Blending to smoothen the blended edges.

### Note:

*Opacity Slider affects only those regions that are selected from the currently displayed source image. Change to a different source image if you want to change the transparency of the regions selected from the other images. It remembers the value used for a particular image.*

- 8 To correct the alignment of multiple photos, select Advanced Option, and click Alignment Tool. Place three markers in the source image and three markers in the final image, then click Align Photos. Click Done.

## Guided edits, effects, and filters

- 9 After you get the desired result, click Next to choose how you would like to proceed:
- **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Photomerge Panorama

Use the Photomerge Panorama Guided Effect to stitch multiple pictures together. The pictures must have common, overlapping regions from the scene photographed for the stitching process to work best.



*Photomerge Panorama*



For more tips on creating awesome panoramas, see [Creating Photomerge Panoramas](#).

- 1 Select multiple images with overlapping content from the Photo Bin, and then choose Guided room > Photomerge > Photomerge Panorama.
- 2 In the Photomerge Panorama panel, from the Panorama Settings area, choose the pan motion / layout settings for your images. Click the triangle to see the options available.

**Auto Panorama** Analyzes the source images and applies either a Perspective or Cylindrical layout, depending on which produces a better photomerge.

**Perspective** Creates a consistent composition by designating one of the source images (by default, the middle image) as the reference image. The other images are then transformed (repositioned, stretched, or skewed as necessary) so that overlapping content layer is matched.

**Cylindrical** Reduces the “bow-tie” distortion that can occur with the Perspective layout by displaying individual images as on an unfolded cylinder. Overlapping content is still matched. The reference image is placed at the center. This is best suited for creating wide panoramas.

**Spherical** Aligns and transforms the images as if they were for mapping the inside a sphere. If you have taken a set of images that cover 360 degrees, use this for 360 degree panoramas. You might also use Spherical to produce nice panoramic results with other file sets.

**Collage** Aligns the layers and matches overlapping content and transforms (rotate or scale) any of the source layers.

**Reposition** Aligns the layers and matches overlapping content, but does not transform (stretch or skew) any of the source images.

### Guided edits, effects, and filters

**3** Choose the Settings checkboxes to fine tune the appearance of the panorama that will be created.

**Blend Images Together** Finds the optimal borders between the images and creates seams based on those borders, and to color match the images. With Blend Images Together turned off, a simple rectangular blend is performed. This may be preferable if you intend to retouch the blending masks by hand.

**Vignette Removal** Removes and performs exposure compensation in images that have darkened edges caused by lens flaws or improper lens shading.

**Geometric Distortion Correction** Compensates for barrel, pincushion, or fisheye distortion.

**Content Aware Fill Transparent Areas** Seamlessly fill the transparent areas with similar image content nearby.

**4** Click Create Panorama. Photoshop Elements analyzes the images selected and starts the process of creating a panorama.

**5** When Photoshop Elements creates a panorama, the new image is displayed in the Expert view.



*A message asks whether you want to fill the panorama edges that are left transparent. If you click Yes, Photoshop Elements fills the edges with content-aware fill swatches.*

**6** After you get the desired result, click Next to choose how you would like to proceed:

- **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
- **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
- **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Guided mode Basic edits

The **Guided** mode provides you with guided edits - a wizard-like interface to accomplish certain predefined effects. Each guided edit has an associated image. As you move the mouse horizontally over the image, the portion to the left of the slider displays the image before the effect is applied. The portion to the right of the slider displays the image after the effect is applied.

### Object Removal guided edit

The Object Removal Guided Edit enables you to remove unwanted content from your photos.

Here's how:

- 1** Do one of the following:
  - Open a photo in Photoshop Elements.
  - Select a photo from the Photo Bin.
- 2** Select **Guided > Basics > Object Removal**.

## Guided edits, effects, and filters

3 From the right panel, choose one of the following Selection tools:

**Brush** - Use the Selection Brush tool to paint over the object you want to remove. You can adjust the size of the brush using the **Brush Size** slider.

**Lasso** - Use the Lasso tool to draw a free-form selection around the object that you want to remove.

**Auto** - Use the Auto Selection tool to automatically create a selection when you draw a shape around the object you want to remove.

**Quick** - Use the Quick Selection tool to make a selection based on edges when you click or click-drag the object you want to remove. You can adjust the size of the Quick Selection tool using the **Brush Size** slider.

4 Click the following buttons to edit your selection:

- **Add** helps you to add more of the photo to your selection.
- **Subtract** helps you to erase or remove a part of the selection.

5 Click **Remove Object** to remove the selected object in your photo.

6 (Optional) To fine-tune your result, choose one of the following options:

- **Spot Healing Brush** - Use this option to edit a small area. Just click or drag this tool over the areas you want to remove. You can change the size of the brush with the **Brush Size** slider. For best results, use a small brush size.
- **Clone Stamp Tool** - Use this option to edit a large area. Once you choose this tool, hover over the part of the photo you want to cover the object with and press Alt+click (Windows)/Option+click (macOS). Click and drag the tool over the object. You can adjust the size of the brush with the **Brush Size** slider.

7 After you get the desired result, click Next and choose how you'd like to proceed:

- Save or Save As to preserve the newly created photo in any of the available formats.
- Continue editing in Quick or Expert mode.
- Share to Flickr or Twitter.

## Brightness And Contrast Guided Edit

Use the **Brightness And Contrast Guided Edit** to adjust brightness or contrast in an image.

You can view the after image only, or view both the before and after images either vertically or horizontally.

For more on adjusting brightness and contrast, see [Adjust shadows and light](#).

## Correct Skin Tone Guided Edit

Use the **Correct Skin Tone Guided Edit** to correct skin tones (tan, blush, and light) in an image.

You can view the after image only, or view both the before and after images either vertically or horizontally.

For more on correcting color casts, see [Adjust the color of skin tone](#).

## Crop Photo Guided Edit

Use the **Crop Photo Guided Edit** to crop an image.

You can view the after image only, or view both the before and after images either vertically or horizontally.

For more information on cropping, see [Cropping](#).

## Levels Guided Edit

For more information on using Levels, see [About Levels adjustments](#).

## Lighten and Darken Guided Edit

Use the **Lighten or Darken Guided Edit** to lighten or darken an image.

You can view the after image only, or view both the before and after images either vertically or horizontally.

For more on lightening or darkening an image, see [Adjust shadows and light](#).

## Resize Guided Edit

Use the Resize Your Photo Guided Edit to quickly create a version of your photograph to meet specific size requirements - pixels, inches, or bytes.

- 1 Select a photo from the Photo Bin, and choose Guided room > Basics > Resize Your Photo.
- 2 Select what is the purpose of the resized photo. Choose whether you want to use it online or create a printed copy.

**Web output:** Choose a size option from the drop-down.

- **Long Edge:** Specify a width for the image. The height is automatically adjusted to maintain aspect ratio.
- **Short Edge:** Specify a height for the image. The width is automatically adjusted to maintain aspect ratio.
- **Width and Height:** Specify a custom width and height. A portion of the image is highlighted with a crop window. Use the mouse to drag the crop window across the photo to select what portion will be saved.
- **File Size:** Specify the maximum size in kilobytes. The output created is of a file size smaller than the number you specified.

**Print output:** Choose a dimension option from the drop-down.

- **Long Edge:** Specify a width for the image. The height is automatically adjusted to maintain aspect ratio.
- **Short Edge:** Specify a height for the image. The width is automatically adjusted to maintain aspect ratio.
- **Width and Height:** Specify a custom width and height and click Preview/Apply. A portion of the image is highlighted with a crop window. Use the mouse to drag the crop window across the photo to select what portion will be saved. If you select the Shrink to Fit checkbox, the entire image is shrunk to fit one of the two dimensions (this may result in white edges at the top/bottom or left/right edges of the photo).
- **Predefined sizes** (for example, 4 x 6): Choose from the available sizes and click Preview/Apply. A portion of the image is highlighted with a crop window. Use the mouse to drag the crop window across the photo to select what portion will be saved. If you select the Shrink to Fit checkbox, the entire image is shrunk to fit one of the two dimensions (this may result in white edges at the top/bottom or left/right edges of the photo).

- 3 Click Next and then choose what to do with the output.

In the previous step, if you chose **Web output**, you are presented with the following options:

- **Save / Save As:** Preserve the newly-resized image in any of the available formats.
- **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the resized image- in Quick mode or Expert mode.
- **LinkShare** - Flickr / Twitter: Choose to place your resized image online through one of the social or sharing services available in Photoshop Elements.

In the previous step, if you chose [LinkPrint output](#), you are presented with the following options:

- **Save / Save As:** Preserve the newly-resized photo in any of the available formats.
- **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the photo - in Quick mode or Expert mode.
- **Print - Local Printer / Order Prints:** Choose to print the photo outline to a printer that you have installed locally (on this computer). Or order prints from using Adobe Photoshop Services. For details on using PhotoShop Elements to order prints, see [Printing photos](#).

4 Click Done.

## Rotate and Straighten Guided Edit

Use the **Rotate and/or Straighten Photo Guided Edit** to rotate a picture in 90-degree increments or draw a line through an image to realign it.

You can view the after image only, or view both the before and after images either vertically or horizontally.

For more on rotating an image, see [Rotate or flip an item](#).

For more on straightening an image, see [Straighten an image](#).

## Sharpen Guided Edit

Use the **Sharpen Guided Edit** to improve the clarity of an image.

You can view the after image only, or view both the before and after images either vertically or horizontally.

For more on sharpening images, see [Sharpening overview](#) or [Sharpen an image](#).

## Vignette Effect Guided Edit

Treat your photo with the vignette effect to emphasize the importance of a person, group, or object, at the center of the photograph.





Picture before applying the vignette effect (left), and after

- 1 Open a photo, and in the **Guided Edits** panel click **Photo Effects > Vignette Effect**.
- 2 Select **Black** or **White**, to specify the color of the vignette you want to apply.
- 3 Use the Intensity slider to specify how intense (dark or light) you want the vignette to be.
- 4 Click **Refine Shape** to fine-tune the edge (**Feather** slider) and size (**Roundness**) of the vignette. For the **Feather** slider, a smaller pixel value indicates a harder, sharper edge, whereas, a larger value indicates a softer, thicker edge. For the **Roundness** slider, negative values cause an exaggerated vignette effect, and positive values cause a less visible vignette.
- 5 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Adjustment filters

## Apply the Equalize filter

The Equalize filter redistributes the brightness values of the pixels in an image so that they more evenly represent the entire range of brightness levels. When you apply this command, Photoshop Elements finds the brightest and darkest values in the composite image. It then remaps them so that the brightest value represents white and the darkest value represents black. Photoshop Elements then equalizes the brightness—that is, distributes the intermediate pixel values— evenly throughout the grayscale.

- 1 Select an image, layer, or area.
- 2 Choose Filter > Adjustments > Equalize.
- 3 If you selected an area of the image, select what to equalize in the dialog box, and click OK:
  - Equalize Selected Area Only to evenly distribute only the selection's pixels.
  - Equalize Entire Image Based On Selected Area to evenly distribute all image pixels based on those in the selection.

## Apply the Gradient Map filter

The Gradient Map filter maps the grayscale range of an image to the colors of a specified gradient fill.



*Using the Gradient Map filter to simulate a sepia tone*

- 1 Select an image, layer, or area.
- 2 Do one of the following:
  - Choose Filter > Adjustments > Gradient Map.
  - Using the Layers panel or Layer menu, create a new Gradient Map adjustment layer, or open an existing Gradient Map adjustment layer.
- 3 Specify the gradient fill you want to use:
  - To choose from a list of gradient fills, click the triangle to the right of the gradient fill displayed in the Gradient Map dialog box. Click to select the desired gradient fill, and then click in a blank area of the dialog box to dismiss the list.
  - To edit the gradient fill currently displayed in the Gradient Map dialog box, click the gradient fill. Then modify the existing gradient fill or create a new gradient fill.

By default, the shadows, midtones, and highlights of the image are mapped respectively to the starting (left) color, midpoint, and ending (right) color of the gradient fill.

- 4 Select neither, one, or both of the Gradient Options:
  - Dither adds random noise to smooth the appearance of the gradient fill and reduce banding effects.
  - Reverse switches the direction of the gradient fill, reversing the gradient map.
- 5 Click OK.

## Apply the Invert filter

The Invert filter inverts the colors in an image. Use this command, for example, to make a positive black-and-white image negative or to make a positive from a scanned black-and-white negative.

**Note:** Because color print film contains an orange mask in its base, the Invert command cannot make accurate positive images from scanned color negatives. Be sure to use the proper settings for color negatives when scanning film on slide scanners.

When you invert an image, the brightness value of each pixel is converted into the inverse value on the 256-step color-values scale. For example, a pixel in a positive image with a value of 255 is changed to 0.

- 1 Select an image, layer, or area.
- 2 Choose Filter > Adjustments > Invert.

## Apply the Posterize filter

The Posterize filter lets you specify the number of tonal levels (or brightness values) for each channel in an image. It then maps pixels to the closest matching level. For example, choosing two tonal levels in an RGB image gives six colors, two for red, two for green, and two for blue.

This command is useful for creating special effects, such as large, flat areas in a photograph. Its effects are most evident when you reduce the number of gray levels in a grayscale image. But it also produces interesting effects in color images.



*If you want a specific number of colors in your image, convert the image to grayscale and specify the number of levels you want. Then convert the image back to the previous color mode, and replace the various gray tones with the colors you want.*

- 1 Select an image, layer, or area.
- 2 Do one of the following:
  - Choose Filter > Adjustments > Posterize.
  - From the Layers panel or Layer menu, create a new Posterize adjustment layer, or open an existing Posterize adjustment layer.
- 3 Use the slider to get the right effect, or enter the number of tonal levels you want, and click OK.

## Apply the Threshold filter

The Threshold filter converts grayscale or color images into high-contrast, black-and-white images. You can specify a certain level as a threshold. All pixels lighter than the threshold are converted to white; and all pixels darker are converted to black. The Threshold command is useful for determining the lightest and darkest areas of an image.

- 1 Select an image, layer, or area.

### Guided edits, effects, and filters

- 2 Do one of the following:
  - Choose Filter > Adjustments > Threshold.
  - From the Layers panel or Layer menu, create a new Threshold adjustment layer, or open an existing Threshold adjustment layer.
  - The Threshold dialog box displays a histogram of the luminance levels of the pixels in the current selection.
- 3 Select Preview and do any of the following:
  - To change the image to black and white, drag the slider below the histogram until the threshold level you want appears at the top of the dialog box, and click OK. As you drag, the image changes to reflect the new threshold setting.
  - To identify a representative highlight, drag the slider to the right until the image is pure black. Then drag the slider back until some solid white areas appear in the image.
  - To identify a representative shadow, drag the slider to the left until the image is pure white. Then drag the slider back until some solid black areas appear in the image.
- 4 (Optional) To return to default settings, hold down Alt (Option in Mac OS) and click Reset.
- 5 (Optional) Click Cancel to close the Threshold dialog box without applying changes to the image.

## Apply the Photo filter

The Photo Filter command mimics the technique of putting a colored filter in front of the camera lens. A colored filter adjusts the color balance and color temperature of the light transmitted through the lens and exposing the film. The Photo Filter command also lets you choose a color preset to apply a hue adjustment to an image. If you want to apply a custom color adjustment, the Photo Filter command lets you specify a color using the Adobe Color Picker.



*Original image (left), and Warming Filter (81) with 60% Density applied (right)*

- 1 Do one of the following:
  - Choose Filter > Adjustments > Photo Filter.
  - Choose Layer > New Adjustment Layer > Photo Filter. Click OK in the New Layer dialog box.
- 2 To choose the filter color, do one of the following in the Photo Filter dialog box:
 

**Warming Filter (85) and Cooling Filter (80)** Color conversion filters that tune the white balance in an image. If an image was photographed at a lower color temperature of light (yellowish), the Cooling Filter (80) makes the image

colors bluer to compensate for the lower color temperature of the ambient light. Conversely, if the photo was taken at a higher color temperature of light (bluish), the Warming Filter (85) makes the image colors warmer to compensate for the higher color temperature of the ambient light.

**Warming Filter (81) and Cooling Filter (82)** Light balancing filters for minor adjustments in the color quality of an image. The Warming Filter (81) makes the image warmer (yellowier) and the Cooling Filter (82) makes the image cooler (bluer).

**Individual Colors** Apply a hue adjustment to the image depending on the color preset you choose. Your choice of color depends on how you're using the Photo Filter command. If your photo has a color cast, you can choose a complement color to neutralize the color cast. You can also apply colors for special color effects or enhancements. For example, the Underwater color simulates the greenish-blue color cast caused when photographing underwater.

- Select the Filter option, and choose a preset from the Filter menu.
  - Select the Color option, click the color square, and use the Adobe Color Picker to specify the color of a custom color filter.
  - Make sure Preview is selected to view the results of using a color filter.
  - If you don't want the image darkened by adding the color filter, be sure that the Preserve Luminosity option is selected.
- 3 To adjust the amount of color applied to the image, use the Density slider or enter a percentage in the Density text box. A higher Density applies a stronger color adjustment.
  - 4 Click OK.

## Effects

### Using the Effects panel

The Effects panel provides a single location from which you can apply photo effects. By default, the Effects panel is located on the taskbar in Quick and Expert mode. It displays thumbnail examples of the artwork or effects that you can add or apply to an image. Most sections offer a menu of category options and corresponding subcategories.

### Using the Graphics panel


The Graphics panel provides a single location from which you can apply artwork, theme decorations, and text styles to your images. To show the Graphics panel, choose Window > Graphics.

In the Graphics panel, the following sections provide various items that can enhance your images. For example, you can select from varieties of frames, backgrounds, graphics, shapes, and text. Under each tab, a drop-down helps in choosing the right frames, backgrounds, graphics, shapes, or text to reproduce.

Each section displays thumbnail examples of the artwork or effects that you can add or apply to an image. Most sections offer a menu of category options and corresponding subcategories.

## Add stylized shapes or graphics to an image

When you add a shape or graphic to an image, the shape or graphic is a new layer and does not affect the original image.

- 1 In the Graphics panel, choose from the category menu (for example, By Event or By Activity), and choose a subcategory (for example, Baby or Cooking).
- 2 In the toolbox, choose a color for the shape.
- 3 Do one of the following:
  - Double-click a thumbnail.
  - Drag the thumbnail to the image.
- 4 Use the Move tool  to relocate or resize the shape or graphic.





## Add an artistic background to an image

When you add an artistic background to an image, you replace the existing background layer. For example, you could use the selection tools to create a layer separating your family members from a kitchen background, and then replace the kitchen with a nature background.

- 1 If your image has only a background layer, select it, and choose Layer > Duplicate Layer. Name the layer and click OK.
- 2 Select the Background layer in the Layers panel.
- 3 In the Graphics panel, select Backgrounds from the drop-down.
- 4 Do one of the following:
  - Double-click a thumbnail.
  - Drag the thumbnail to the image.

## Add a frame or theme to an image

When you add a frame or theme to a photo project, frames appear with a blank (gray) area for the image. Click and drag an image from the Photo Bin to the blank area.

- 1 In the Graphics panel, choose Frames from the drop-down menu.
- 2 Do one of the following:
  - Select a thumbnail and click Apply.
  - Double-click a thumbnail.
  - Drag the thumbnail to the blank background.
- 3 Drag the desired image from the Photo Bin to the frame.
- 4 Use the slider to resize the image in the frame or theme border, then click the Commit icon  to apply the change, or click the Cancel icon .
- 5 Use the Move tool to center the image, then click the Commit icon  to apply the change, or click the Cancel icon .

## About photo effects

Photo effects let you quickly create different looks for your images. In the Effects panel, choose one of the subcategories, such as Faded Photo, Panels, Monotone Color, Textures, or Vintage Photo.

**Frame** Apply a variety of effects to the edges of a selected layer, or to a portion of a layer. A frame also creates a drop zone where you can add or change the contents easily.

**Image Effects** Apply effects to a copy of a selected layer. Adding the Blizzard effect to an image makes it look like snow is falling. The Neon Glow effect turns the image into a dramatic neon picture. You can use Image effects, such as Oil Pastel or Soft Focus, to soften colors or blur an image. You can also combine Image effects, but you may be prompted to flatten layers first.

**Textures** Apply texture layers to an image. You can add texture to a new, blank image as a background, or add a texture to an existing image. By arranging layers, and working with opacity and other layer tools, you can create interesting and attractive images.



*Many photo effects apply filters with modified values.*

## Apply an effect



*If you want to experiment with an effect, modify a duplicate layer and preserve the original image.*

**1** Do one of the following:

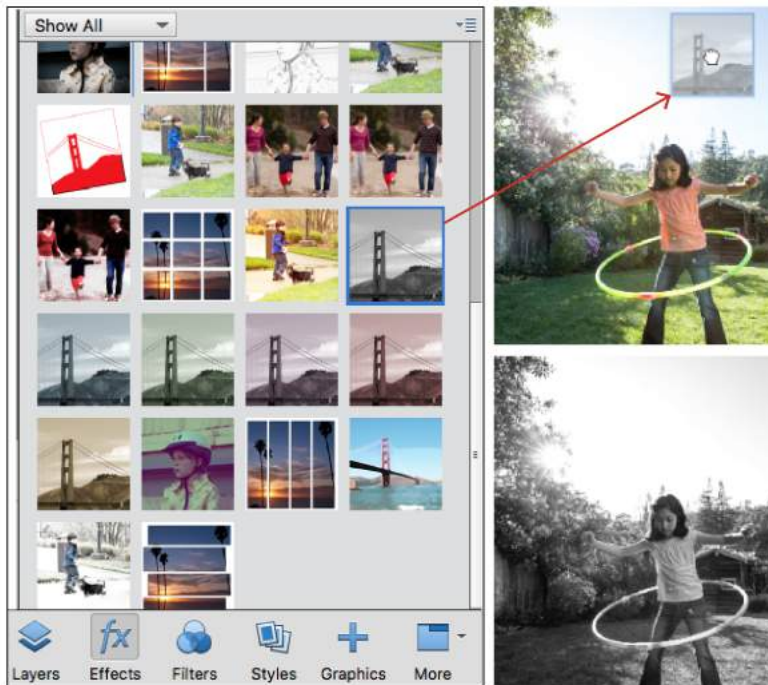
- To apply an effect to an entire layer, deselect any selected areas in the image, and then select the layer in the Layers panel.
- To apply an effect to a portion of a layer, use any selection tool to select the area.
- To apply an effect to text, select or create text, and use any text effect from the Graphics panel.

**2** In the Effects panel, choose a category of photo effects, and do one of the following:

- Double-click an effect.
- Drag an effect to the image.
- Select an effect, and click Apply.

**Note:**





*In some cases, when applying an effect to an image with multiple layers, you are prompted to flatten the image first.*



*Dragging an image effect to a photo*

## Add stylized text to an image

When you add text to an image, a text layer is added, so you can modify the text without affecting the original image.

- 1 In the Graphics panel, select Text from the drop-down, and then do one of the following:
  - Select a thumbnail, and click Apply.
  - Double-click a thumbnail.
  - Drag a thumbnail to the image.
- 2 A text frame appears over the image and the Text tool becomes active. Type in the new text.
- 3 When you have finished changing the text, either click the Commit icon  to apply the change, or click the Cancel icon .
- 4 Use the Move tool to relocate or resize the text frame.
- 5 (Optional) Add color to the text using the pop-up Color panel in the options bar.
- 6 When you finish adjusting the text, either click the Commit icon  to apply the change, or click the Cancel icon .
- 7 (Optional) To experiment with different text effects, drag a different thumbnail over the text frame.

## Add graphics or effects to Favorites

When you see a graphic or effect that you would like to quickly access in the future, add it to the Favorites section of the Effects panel.

- ? In the Effects or Graphics panel, right-click the thumbnail and choose Add To Favorites.



## Guided mode Fun edits

The **Guided** mode provides you with guided edits - a wizard-like interface to accomplish certain predefined effects. Each guided edit has an associated image. As you move the mouse horizontally over the image, the portion to the left of the slider displays the image before the effect is applied. The portion to the right of the slider displays the image after the effect is applied.

### Pattern Brush guided edit

The Pattern Brush Guided Edit lets you jazz up any photo with fun patterns like hearts or stars. The main subject of your photo is masked so you can avoid applying your pattern to it.

- 1 Do one of the following:
  - Open a photo in Photoshop Elements.
  - Select a photo from the Photo Bin.
- 2 Select **Guided > Fun Edits > Pattern Brush**
- 3 In the right panel, select a **Patterns** thumbnail.
- 4 Choose one of the following:
  - **Paint** - Choose this option to manually apply the pattern to your photo. You can control the size, scatter (distance between each shape in the pattern), and opacity of the pattern by using the respective slider.
  - **Fill** - Choose this option to let Photoshop Elements automatically fill the entire photo with the pattern. You can control the opacity of the pattern using the Opacity slider.

**Note:**

By default, **Protect Subject** is selected to mask the subject(s). Unselect this option to unmask the subject(s) in your photo.

- 5 (Optional) To remove the applied pattern from any desired areas of the photo, simply use the **Pattern Eraser Tool**.
- 6 (Optional) Use the **Blur** slider to apply a blur effect in the background.
- 7 (Optional) Click **Refine blur** to fine-tune the amount of blur applied. Then use the **Add** or **Subtract** options to adjust.

Use the **Size** slider to specify the size of the tool.
- 8 After you get the desired result, click **Next** and choose how you'd like to proceed:
  - Save or Save As to preserve the newly created photo in any of the available formats.
  - Continue editing in Quick or Expert mode.
  - Share to Flickr or Twitter.

## Double Exposure guided edit

The Double Exposure guided edit lets you create a surreal double exposure effect by merging two images. You can import a photo from your computer or select from one of the included sample photos.

- 1 Do one of the following:
  - Open a photo in Photoshop Elements.
  - Select a photo from the Photo Bin.
- 2 Click **Guided > Fun Edits > Double Exposure**.
- 3 (Optional) Crop the photo using the crop tool to keep your subject in the center of the frame.
- 4 Select the main subject of your photo using the Auto or Quick selection tool.  
For more information about Auto selection tool, see [Use the Auto Selection tool](#).  
For more information about Quick selection tool, see [Use the Quick Selection tool](#).
- 5 Do one of the following:
  - Click **Import a photo** to import a background image from your computer.
  - Select one of the included sample photos.You can adjust the intensity of the background using the **Intensity** slider.
- 6 (Optional) Click the **Move Tool** to move the subject or the background image.
- 7 (Optional) Apply an effect from the available options. You can adjust the intensity of the effect using the **Intensity** slider.
- 8 After you get the desired result, click **Next** to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: You can upload your photo online through one of the social or sharing services available in Photoshop Elements.

## Effects Collage guided edit

The Effects Collage Guided Edit helps you apply effects to different sections of your photograph. Take a regular image and apply multiple effects to it to make an eye-popping piece of contemporary art.

- 1 Do one of the following:
  - Open a photo in Photoshop Elements.
  - Select a photo from the Photo Bin.
- 2 Click **Guided > Fun Edits > Effects Collage**.
- 3 Select how many sections you want on your photo. Options are 2, 3, and 4.
- 4 Select from the available options for a layout.



*Photo with a layout applied.*

- 5 Choose a collage style. Scroll through the thumbnails to pick and apply the right combination of effects.
- 6 (Optional) Use the Opacity slider to vary the intensity of the effects applied to the photo.



*Photo with a layout, layout style, and effects collage applied.*

- 7 After you get the desired result, click Next to choose how you would like to proceed:
- **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Meme Maker guided edit

Convert any photo into an entertaining meme right out-of-the-box from Photoshop Elements. The Meme Maker guided edit helps you to create a meme with a combination of photo and text.





- 1 Open a photograph in Photoshop Elements.
- 2 Click **Guided > Fun Edits > Meme Maker**.
- 3 Click **Create Meme Template** to apply the default meme template.  
The photo is aligned in the center with sample text at the top and bottom of the meme template.
- 4 Click **Type Tool** or double-click on the sample text to select the text for editing.
- 5 Enter the desired text for your meme. You can change the font, size, color, and style of the text from the Tool Options bar in the Guided workspace. When you are done typing, click the green check mark (✓) to commit your changes.

**Note:**

## Guided edits, effects, and filters

If you are editing the text at the top, clicking the green check mark auto-selects the bottom text for editing.



**6** (Optional) Do one of the following to resize your photo:

- Drag the **Zoom** slide  zoom out  to right to zoom in.
- Click the horizontal  or vertical  flip button to flip your photo.
- Select **Fit Photo to Canvas** option to expand the photo to cover up the entire canvas. Selecting this option disables the Zoom and border customization features.
- Double-click on the photo to display the heads-up-display (HUD). Use the HUD to rotate your photo left or right, zoom in or out, or you can also change the main photo. Once you have made the desired changes, click the green check mark to commit your changes.

**Note:**


You can also resize your photo frame by dragging the bounding box around the photo frame. To scale the photo proportionally, drag a corner handle

**7** (Optional) Do one of the following to change the border:

- Click the border preset  button to open the Border Presets dialog. You can choose from 12 out-of-the-box borders.
- Click the color picker  to choose a solid color.

The selected border or color is applied on the meme template.

**8** (Optional) Click the Effects button to display five preconfigured effects that you can apply on your photo. Click on an effect to apply it on your photo.

You can revert to your original photo by clicking the **Reset**  button.

**9** After you get the desired result, click **Next** to choose how you would like to proceed:

- **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
- **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
- **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Multi-Photo Text guided edit

The Multi-Photo Text guided edit allows you to create visual text with a different photo inside each letter. Use the Multi-Photo Text guided edit to use any photo as a background, add a text, and add a photo inside each letter to create a visually-rich photo.

**1** Do one of the following:

- Open a photo in Photoshop Elements.
- Select a photo from the Photo Bin.

**Note:**

The photo that you start with is used as the background photo. As you cannot change the background image later, ensure that you have selected the desired photo.

**2** Select **Guided > Fun Edits > Multi-Photo Text**.

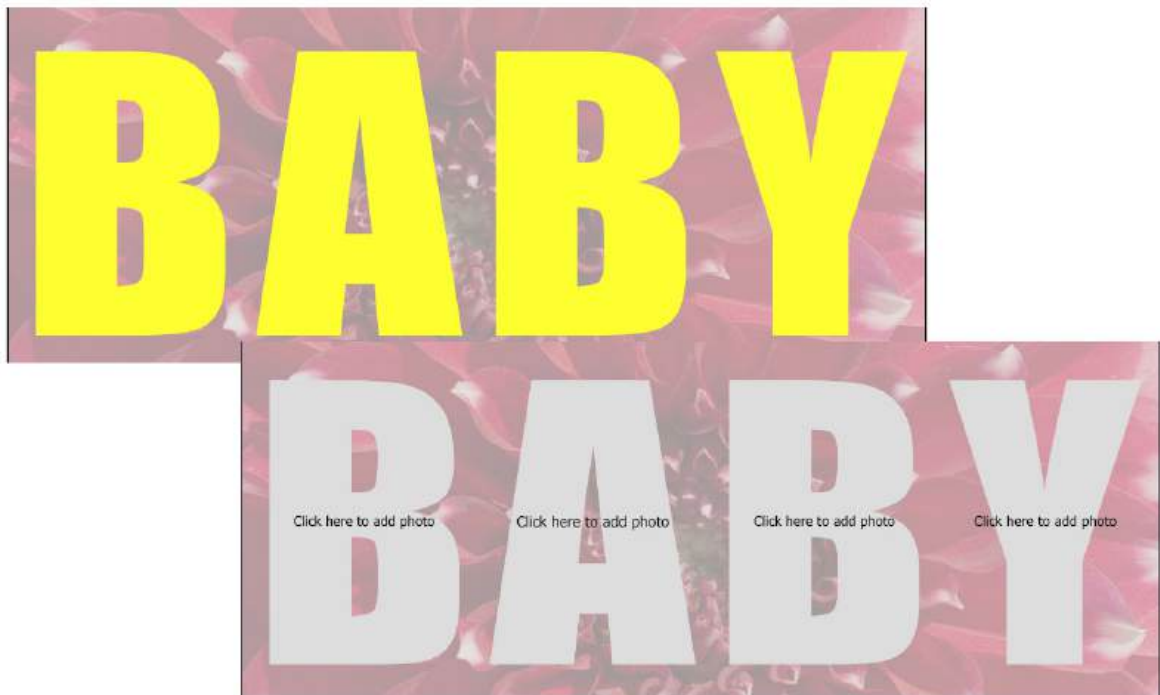
### Guided edits, effects, and filters

- 3 Click **Type Tool**, click anywhere on the photo, and then type your text. You can change the font, size, and style of the text from the **Tool Options** bar in the Guided workspace. When you are done typing, click the green check mark (✓) to commit your changes.
- 4 Choose if you want to resize the text on your photo using the Fit or Fill options.
  - **Fit**: Expands the text to fit across the width of the photo. The aspect ratio of the font is maintained.
  - **Fill**: Expands the text to cover the height and width of the photo.

**Note:**

*You can also drag the textbox to change its position.*

- 5 Click **Create Frames** to convert each character in the text into a photo frame.



*Text resized using the Fit option and each character converted into a frame.*

- 6 Do one of the following to add photo to text:
  - Click on the instructional text within a character frame to browse and select a photo. This option gives you more control on choosing the desired photo to apply on a character.
  - Click **Computer** and choose one or multiple photos from a single folder.
  - Click **Photo Bin** to use photos available in the photo bin. The drop-down list in the **Photo Bin** allows you to choose photos selected in Elements Organizer or an album.

**Note:**

*If you select more photos from **Computer** or the **Photo Bin** contains more photos than the number of character frames, then photos are filled within each frame in an orderly manner. All extra photos are discarded. However, if you choose lesser number of photos, then you will have some blank character frames.*

- 7 (Optional) Change the color of the background by making it transparent, white, black, or choosing the desired color from the Color Picker.

- 8 (Optional) Apply effects to your text using one of the three presets. Choose from **Small**, **Medium**, or **Large**. The buttons vary the Bevel, Drop Shadow, and Strokes of your text.



*A Multi-Photo Text with high intensity of bevel, shadow, and stroke effects.*

- 9 (Optional) Do one of the following to change a photo or swap photos in text frames:
- Double-click on a character frame to display the heads-up-display (HUD). Use the HUD to rotate your photo left or right, zoom in or out, and you can also change the photo. Once you have made the desired changes, click the green check mark to commit your changes.
  - Double-click on a character frame and drag the photo onto the photo frame with which you want to swap the photo. When you see a double-arrow cursor, drop the image. The images between the source and target frames are swapped.
- 10 After you get the desired result, click **Next** to choose how you would like to proceed:
- **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

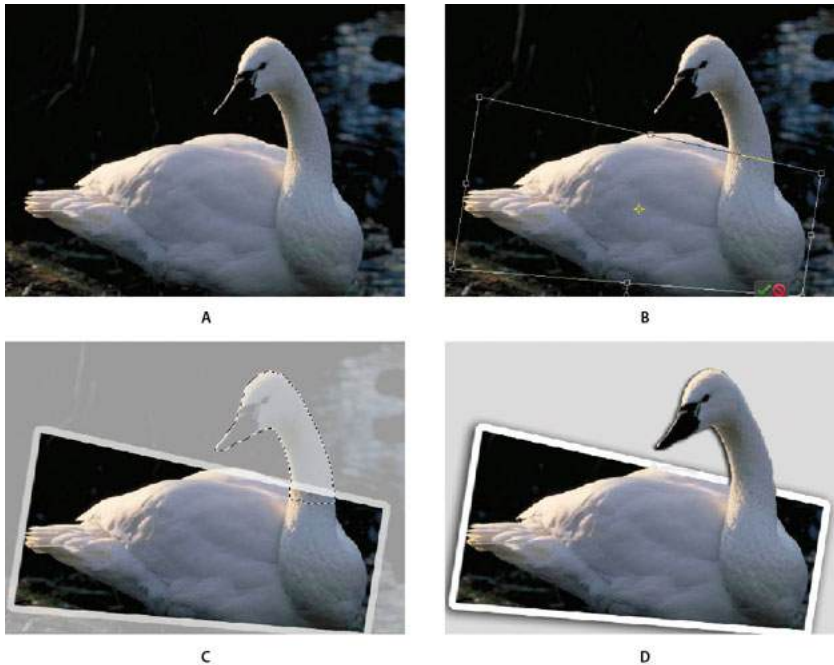
## Old Fashioned Photo guided edit

For more information on the features used in this **Guided Edit**, see [Using the Effects panel](#), [Specify the opacity of a layer](#), and [About Levels adjustments](#).

## Out of Bounds guided edit

The **Out Of Bounds** option in **Guided Edit** helps you add a frame to an image and display a selected part of the image outside the frame.

## Guided edits, effects, and filters

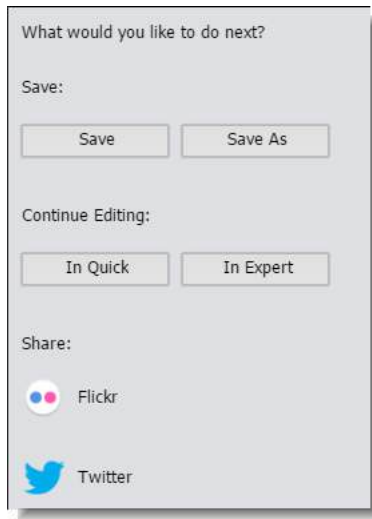


*A Original image B After adding a frame C After selecting the part to extend D Final image*

- 1 In the **Guided Edits** panel, select **Out Of Bounds**.
- 2 Click **Add Frame** to add a frame to the image.
- 3 Drag the corners of the frame to leave a part of the main subject outside the frame.
- 4 Add a perspective by pressing Control + Alt + Shift (Command + Option + Shift in Mac OS) and dragging the handles of the frame. Click **Commit**.
- 5 Adjust the width of the frame border by dragging the boundaries. Click **Commit**.
- 6 Using the **Quick Selection** tool, select the part of the image that should extend outside the frame.
- 7 Click **Out of Bounds Effect**.
- 8 (Optional) Add a shadow.
- 9 (Optional) Click **Add A Background Gradient**.
- 10 Click **Next** to move to the Share panel or **Cancel** to close **Out of Bounds Guided Edit**.

The Share panel is displayed to the right of your picture. In this panel, you can save the picture at the same location or save it as another picture. You can take the picture to the Quick Edit or Expert Edit rooms. You can also share the picture on Flickr, or Twitter.





**Save: Save / Save As** Save your edited picture to a folder on your computer. If you have not saved the edits before, you are asked to pick a folder on your computer where you want to save your picture.

Use the Save As option to save the edited picture to another folder or by another name.

The JPEG Options dialog allows you to select some advanced image formatting options. If you don't want to make any special changes, click OK to accept the settings that are applied by Photoshop Elements.

**Continue Editing: In Quick / In Expert** Take your picture to the Quick Edit or Expert Edit rooms. This means that you have made edits in the Guided Edit and now making more adjustments in the Quick or Expert modes.

**Share: Flickr / Twitter** Share your freshly edited picture with your family and friends on Twitter. Or upload you pictures to Flickr where you can create photo albums that you can share.

**Note:**

*For Flickr and Twitter, Photoshop Elements will ask you to allow it to post your pictures to their websites. However, this is a one-time activity for each of them.*

11 Click Done.

## Painterly guided edit

Painterly is a way to create artistic output by painting your photo with a brush on different textured canvasses and applying different painting effects. Find this Guided Edit in Guided > Fun Edits > Painterly.

- 1 Open a photograph in Photoshop Elements.
- 2 Click Guided > Fun Edits > Painterly.
- 3 Click Paint Brush. You are about to select the area of the photo that you will work on for the rest of this task.
  - **Show / Hide.** Use Show to paint over areas you want to reveal. Use Hide to paint over areas you want to hide.
  - **Presets.** Choose the kind of brush you want to use to create the right effect for your painting.
  - **Size.** Use the Size slider to determine the size of brush strokes on your photo.
  - **Opacity.** Use the opacity slider to determine the intensity of the original revealed upon painting with the brush.
  - **Brush Angle.** Use the Brush Angle control to rotate the brush.



*Paint over the areas that you want to reveal in your painting.*

- 4 Select a canvas color for the rest of the photo. You can choose from the available colors - Black or White. However, you can also click Select Custom Color and click anywhere on the revealed part of the photo to pick a different color.



*A custom canvas color has been applied.*

- 5 (Optional) Select a texture for the canvas (the background).

- 6 To accentuate the texture, click Effect and apply an effect.



*Your painting with a texture and effect applied.*

- 7 After you get the desired result, click Next to choose how you would like to proceed:
- **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Partial Sketch guided edit

Use the Partial Sketch guided edit to convert your favorite photo into an artistic sketch. Choose from the predefined effects, soften sharp edges, or flip the effect to get a great looking sketch.

- 1 Do one of the following:
  - Open a photo in Photoshop Elements.
  - Select a photo from the Photo Bin.
- 2 Select **Guided > Fun Edits > Partial Sketch**.
- 3 Click on an effect's thumbnail to select it. There are four effects that you can choose from: **Pencil Sketch**, **Colored Pencil Sketch**, **Old Photo**, and **Old Paper**.
- 4 Drag the cursor across the area of your photo where you want to apply the effect.
- 5 Drag the **Brush Size** slider to increase or decrease the brush size. Use the following options to adjust the settings of the brush:
  - **Add**: Use this option to apply the effect on the desired area in the photo.

### Guided edits, effects, and filters

- **Subtract:** Use this option to remove the effect from the desired area in the photo.
- **Size:** Increases or decreases the brush size.
- **Opacity:** Increases or decreases the opacity of the brush stroke.

**Note:**

*Once you have made the selection, you can change the effect by clicking on the desired effect's thumbnail.*

- 6 (Optional) Click **Detail Brush** to precisely apply the selected effect on your photo. You can adjust the brush size and the opacity.
- 7 (Optional) Drag the **Soft Edge** slider to soften the selection edges.
- 8 Select **Flip Effect** to reverse the application of the effect on your photo.



*Photo showing the application of an effect before and after selecting the Flip Effect option*

- 9 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

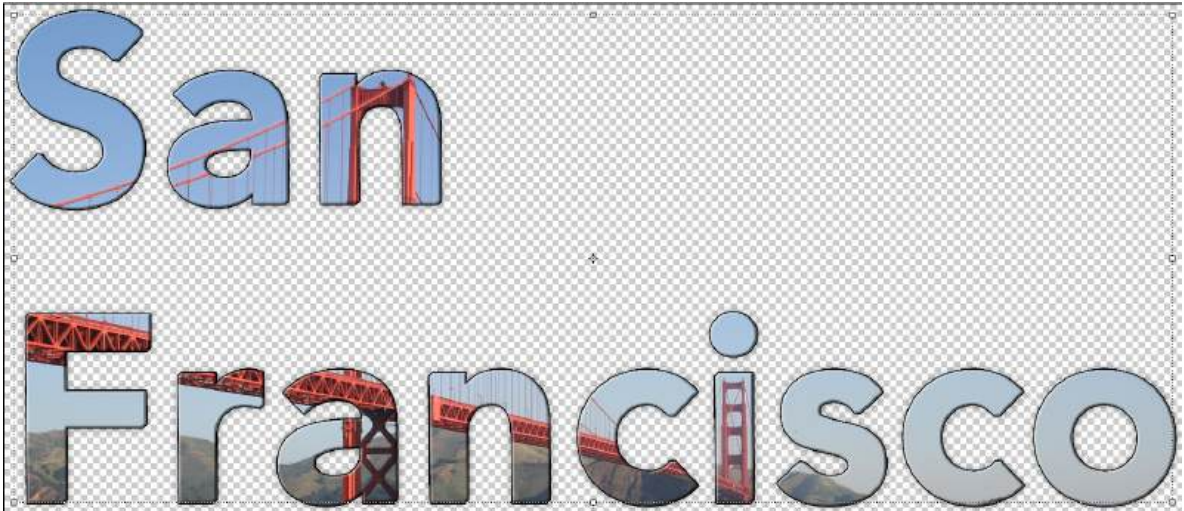
## Photo Text guided edit

The Photo Text Guided Edit allows you to use one of your photos to create cool visual text. Use any photo as a background, and when you use the Photo Text Guided Edit, you can get fun text that is stenciled on to your photo.

- 1 Open a photograph in Photoshop Elements.
- 2 Click Guided > Fun Edits > Photo Text.
- 3 Click Type Tool, click anywhere on the photo, and then type your text. You can change the font, size, and style of the text from the Tool Options bar in the Guided workspace. When you are done typing, click the green check mark to commit your changes.

**Guided edits, effects, and filters**

- 4 Choose if you want to resize the text on your photo using the Fit or Fill options.
  - **Fit:** Expands the text to fit across the width of the photo. The aspect ratio of the font is maintained.
  - **Fill:** Expands the text to cover the height and width of the photo.
- 5 Select a background style for the photo text. Choose from Black, White, or Clear.



*Photo Text, with a clear background.*

- 6 Click Crop Image to remove any extra space around the text.



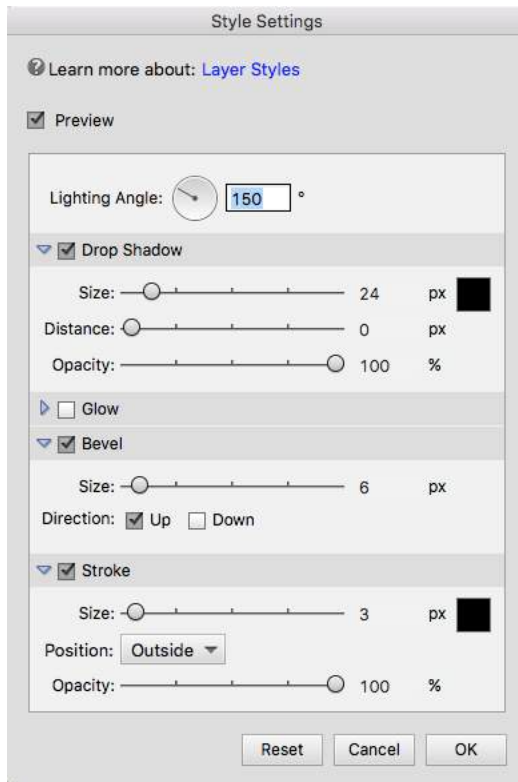
*Move your text to the position of your choice on the image, before clicking Crop Image.*

- 7 Apply effects to your text using one of the three presets. Choose from Small, Medium, or Large. The buttons vary the Bevel, Drop Shadow, and Strokes of your text.



*To modify the Bevel, Drop Shadow, and Stroke to suit your requirements, click Advanced and continue modifying the applied effects.*

## Guided edits, effects, and filters



- 8 After you get the desired result, click Next to choose how you would like to proceed:
- **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Picture Stack guided edit

The Picture Stack Guided Edit helps you add frames to your photo, giving it an outlook of a creative collage.

- 1 Open a photograph in Photoshop Elements.
- 2 Click Guided > Fun Edits > Picture Stack.
- 3 Select the number of pictures you want in your photo collage from the available options.
- 4 Add a border to your pictures using one of the three presets. Choose from Small, Medium, or Large.
- 5 Click one of the following buttons to change the background:
  - **Gradient**
  - **Solid Color**

In the dialog box, specify the color, blending mode, and opacity. Click OK.

## Guided edits, effects, and filters

- 6 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Pop Art guided edit

In **Guided Edit**, transform an image into pop art in three simple steps. What's more, you have a choice of two styles.

- 1 In Guided mode, select Pop Art.
- 2 Choose a style and follow the onscreen instructions:
  - Style A** Convert the image mode, add color, and duplicate the image with different pop colors.
  - Style B** Posterize the image, add a neon glow, and duplicate the image with different pop colors.

## Puzzle Effect guided edit

The **Puzzle Effect Guided Edit** creates the visual effect of a photograph being created by putting together pieces of a puzzle. With the **Guided Edit**, you can extract a few pieces of the puzzle from their slots, and move them around to simulate the feel of an unfinished puzzle.



*The Puzzle Effect Guided Edit enables you to leave a few tiles out of place, to render a realistic view of a puzzle.*

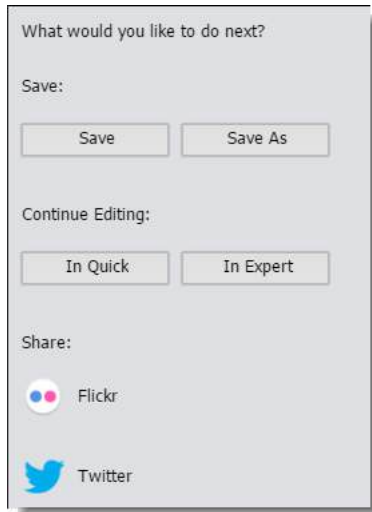
- 1 Click **Small**, **Medium**, or **Large**, to select the size of the tiles that your photo will be sliced into.
- 2 To make the puzzle look real, you can select a few tiles to be out of their intended place. Click **Select Puzzle Piece Button**, and then click a tile in the puzzle. The tile is selected.
- 3 Click **Extract Piece** to displace the selected tile. The Move Tool is automatically selected.
- 4 Drag the selected tile around to any location on the canvas, or use the handles to rotate or scale it.



*Repeat steps 2, 3, and 4, to extract and move around multiple tiles.*

- 5 (Optional) Click **Eraser Tool** to remove any unnecessary artifacts that may have been introduced as a result of applying this **Guided Edit**.
- 6 Click **Next** to move to the Share panel or **Cancel** to close **Pop Art Guided Edit**.

The Share panel is displayed to the right of your picture. In this panel, you can save the picture at the same location or save it as another picture. You can take the picture to the Quick Edit or Expert Edit rooms. You can also share the picture on Flickr or Twitter.



**Save: Save / Save As** Save your edited picture to a folder on your computer. If you have not saved the edits before, you will be asked to pick a folder on your computer where you want to save your picture.

Use the Save As option to save the edited picture to another folder or by another name.

The JPEG Options dialog allows you to select some advanced image formatting options. If you don't want to make any special changes, click OK to accept the settings that are applied by Photoshop Elements.

**Continue Editing: In Quick / In Expert** Take your picture to the Quick Edit or Expert Edit rooms. This means that you have made edits in the Guided Edit room and then make some more adjustments in the Quick and Expert rooms.

**Share: Flickr / Twitter** Share your freshly edited picture with your family and friends on Twitter. Or upload your pictures to Flickr where you can create photo albums that you can share.

**Note:**

For **Flickr** and **Twitter**, Photoshop Elements will ask you to allow it to post your pictures to their websites. However, this is a one-time activity for each of them.

- 7 Click Done.

## Reflection guided edit

In this **Guided Edit**, choose a predefined reflection effect and apply it to an image in a few steps.



*For best results, avoid skipping a step or performing the steps in a random order.*

- 1 In Guided mode, select Reflection.



### Guided edits, effects, and filters

- 2 Click **Add Reflection** to create an inverted duplicate layer.
- 3 Click **Eyedropper** tool, to choose the background color for reflection.
- 4 Choose a color from the image and click **Fill Background**.
- 5 Click one of the following buttons to apply a reflection type:
  - **Floor Reflection**
  - **Glass Reflection**
  - **Water Reflection**
- 6 (Optional) Adjust the intensity of reflection.
- 7 (Optional) Click **Add Distortion** to distort the reflection in a realistic way.
- 8 (Optional) Click **Crop Tool** to remove unnecessary areas.
- 9 (Optional) Click **Gradient Tool** and drag a gradient line from the bottom of the reflection to the bottom of the image.
- 10 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Speed Effect guided edit

Infuse an object with the illusion of motion and speed using the Speed Effect Guided Edit.

- 1 Select an image in the Photo Bin, and then choose Guided room > Fun Edits > Speed Effect.
- 2 Use the Quick Selection Tool to select the portion of the image or an object in your picture that you want to provide a sense of motion to. Use the Add or Subtract buttons to add to or refine your selection.



*Use the Brush Size slider to select large objects quickly or select smaller objects more carefully.*

- 3 Click Add Speed Effect to introduce the illusion of a moving object. If the object is not exactly horizontal or vertical, use the Angle control to provide a direction to the speed effect.
- 4 Click Add Focus Area to remove portions of the effect applied. For example, if the effect is applied to the image in the projection path of a selected object, paint that path. The effect should noticeably reduce in that area of the image. Repeat until the speed effect is only in the regions you would like it to appear.
- 5 Click Refine Effect, and then add or remove the motion blur effect to the selected objects.
  - The Size slider controls the thickness of swaths drawn.
  - The Opacity slider controls the density of swaths drawn. Choose to make the motion starkly apparent or subtle.
- 6 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.

- **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Shape Overlay Effect guided edit

The Shape Overlay Effect guided edit lets you add different shapes to your photo and create amazing effects. You can add inside and outside effects after adding a shape to your photo.

- 1 Do one of the following:
  - Open a photo in Photoshop Elements.
  - Select a photo from the Photo Bin.
- 2 Select **Guided > Fun Edits > Shape Overlay Effect**.
- 3 Click **Select a shape** and choose a shape to add to your photo.  
You can resize and rotate the shape according to your liking.
- 4 Click the **Move Tool** to move the shape to a desirable position on the photo.
- 5 Click **Outside Effect** to apply an effect outside the shape you have added.  
You can adjust the intensity of the effect.
- 6 Click **Inside Effect** to apply an effect inside the shape you have added.  
You can adjust the intensity of the effect.
- 7 (Optional) Do one of the following:
  - Click the **Crop Tool** and crop the photo according to your liking.
  - Click **Crop to Shape** to automatically crop the photo according to the shape you have added to the photo.
- 8 After you get the desired result, click **Next** to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: You can upload your photo online through one of the social or sharing services available in Photoshop Elements.

## Speed Pan guided edit

The Speed Pan guided edit is a great way to add a sense of motion to your photo's subject by blurring the background. Here's how:

- 1 Open a photograph in Photoshop Elements.
- 2 Click **Guided > Fun Edits > Speed Pan**.
- 3 Click **Quick Selection Tool**, and then select the object in the photograph that must appear to be moving.
  - **Add**. Add areas to the object selection.
  - **Subtract**. Remove areas that must be part of the background that must appear with motion blur.
  - **Brush Size**. Use the slider to set the size of the brush.



*Mark your selection with the Quick Selection Tool*

- 4 Click Add Motion Blur, to introduce the sense of movement in the photo.
  - **Intensity.** Use the Intensity slider to vary the amount of blur introduced in the image.
  - **Angle.** Use the Angle control to vary the direction of the perceived motion.



*The Speed Pan effect applied at an approximate angle of 115 degrees.*

- 5 (Optional) Use the Refine Effect Brush to fine-tune the amount of motion blur applied to the photo.
- 6 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Zoom Burst Effect guided edit



The **Zoom Burst** effect creates the illusion of motion, with attention drawn to the central object in your photograph. This effect can, generally, be produced manually by zooming in on an object, while the shutter is open.

- 1 Use the **Crop** tool, to crop your image in a way that enables your primary object to be in focus .
- 2 Use the **Zoom Burst** button, to apply a selective radial blur effect to your image. This effect provides the illusion of motion.
- 3 Use the **Add Focus Area** button, to add an area of focus on the image. This button provides a gradient tool. Drag the gradient tool on the part of image you want to bring in focus.



*Add more focus areas if you would like more than one portion of the photo to appear in focus.*

- 4 Use the **Apply Vignette** button to automatically apply a vignetted effect. This helps to intensify the appearance of the **Guided Edit**.
- 5 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Guided mode Special edits

The **Guided** mode provides you with guided edits - a wizard-like interface to accomplish certain predefined effects. Each guided edit has an associated image. As you move the mouse horizontally over the image, the portion to the left of the slider displays the image before the effect is applied. The portion to the right of the slider displays the image after the effect is applied.

## Replace Background guided edit

The Replace Background guided edit lets you replace the background of your photos with other photos, colors, and included background presets. If you want to use your own photos as background images, you can import them and use them as a background.

- 1 Do one of the following:
  - Open a photo in Photoshop Elements.
  - Select a photo from the Photo Bin.
- 2 Select **Guided** > **Special Edits** > **Replace Background**.
- 3 Select one of the following tools and create a selection of the main subject of your photo:
  - **Auto**: Use the Auto Selection tool to automatically create a selection when you draw a shape around the object you want to select. For more information, see [Use the Auto Selection tool](#).
  - **Quick**: Use the Quick Selection tool to make a selection based on color and texture similarity when you click or click-drag the object you want to select. For more information, see [Use the Quick Selection tool](#).
  - **Brush**: Use the Selection Brush tool to paint over the object you want to select. For more information, see [Use the Selection Brush tool](#).
  - **Refine**: Use the Refine Selection Brush tool to add or remove areas to and from a selection by automatically detecting the edges. For more information, see [Edit and refine selections](#).
- 4 Do one of the following to choose a background:
  - Click **Import a photo** to add your photo as background.
  - Click **Preset** to add one of the background preset as the background.
  - Click **None** to remove the background.
  - Click **Color** to add a color as the background.
- 5 (Optional) Click the **Move Tool** and drag the foreground or the background if necessary.
- 6 Click the **Refine Edge Brush** and paint over the foreground to refine the edges of the foreground. Use the following options to adjust the settings of the brush:
  - **Add**: Use this option to add more area to the edges of the foreground.
  - **Subtract**: Use this option to subtract area from the edges of the foreground.
  - **Size**: Increases or decreases the brush size.
  - **Opacity**: Increases or decreases the opacity of the brush stroke.
- 7 (Optional) Click **Auto Match Color Tone** to match the color tone of the subject with the background.
- 8 After you get the desired result, click **Next** to choose how you would like to proceed:
  - **Save**- Save/Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick/In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr/Twitter: You can upload your photo online through one of the social or sharing services available in Photoshop Elements.

## Depth of Field guided edit

The **Depth of Field** effect allows you to focus on selected areas of the image by blurring out the rest of the image.

## Simple method

In this method, a copy of the background layer is created and a uniform blur applied to it. Choose selected areas that you want to focus on. You can customize the degree of blur applied to the rest of the image.

- 1 In **Guided** mode, from the **Special Edits** section, click **Depth of Field**.
- 2 Click **Simple**.
- 3 Click **Add Blur**. A uniform blur appears across the image.
- 4 To define areas of focus, click **Add Focus Area** and drag the cursor across areas of the image you want to focus on.
- 5 To customize the blur for the rest of the image, drag the **Blur** slider until you achieve the desired blur effect.
- 6 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Custom method

In this method, you choose the objects you want to focus on using the quick selection tool. The blur is applied to unselected areas of the image. You can customize the degree of blur applied to the rest of the image.

- 1 In **Guided** mode, from the **Special Edits** section, click **Depth of Field**.
- 2 Click **Custom**.
- 3 Click the **Quick Selection** tool and move over areas of the image you want to focus on.
- 4 Click **Add Blur**. A uniform blur is applied to the rest of the image.
- 5 To customize the blur for the rest of the image, drag the **Blur** slider until you achieve the desired blur effect.
- 6 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Frame Creator guided edit

You can now create a photo frame using any photo that you have in your library. Use the Frame Creator guided edit to quickly create a custom frame to outline your photos.

- 1 Open a photograph in Photoshop Elements.
- 2 Click Guided > Special > Frame Creator.
- 3 Select an area on the photo where other photos can be placed by using one of the following selection tools:
  - **Quick**. Easily select large areas by dragging the tool across the photo.
  - **Brush**. Paint over areas of the photo where photos can be inserted.
  - **Magic Wand**. Click areas of the photo where photos can be inserted.

### Guided edits, effects, and filters

- **Polygon Lasso.** Click the corners of the areas where a photo can be inserted.
- 4** Click Create Frame to create the frame. The part of the photo selected in the previous step is subtracted from the original photo to create the frame.
- 5** Click Save Frame. Provide a meaningful name for your new frame.
- 6** Click Continue in Expert to make further modifications to the frame, or to start using it.



*All frames you created are available in Expert mode > Graphics panel. Use the Filters By Type > Frames > My Frames to filter the frames you created.*

- 7** Click or drag a photo to place it in the frame.



*Add a photo to the frame.*



*You can share your custom frames with others from the Graphics panel in the Expert mode. Use the filters By Type > Frames > My Frames. Right-click the frame that you want to share and select Reveal in Finder.*

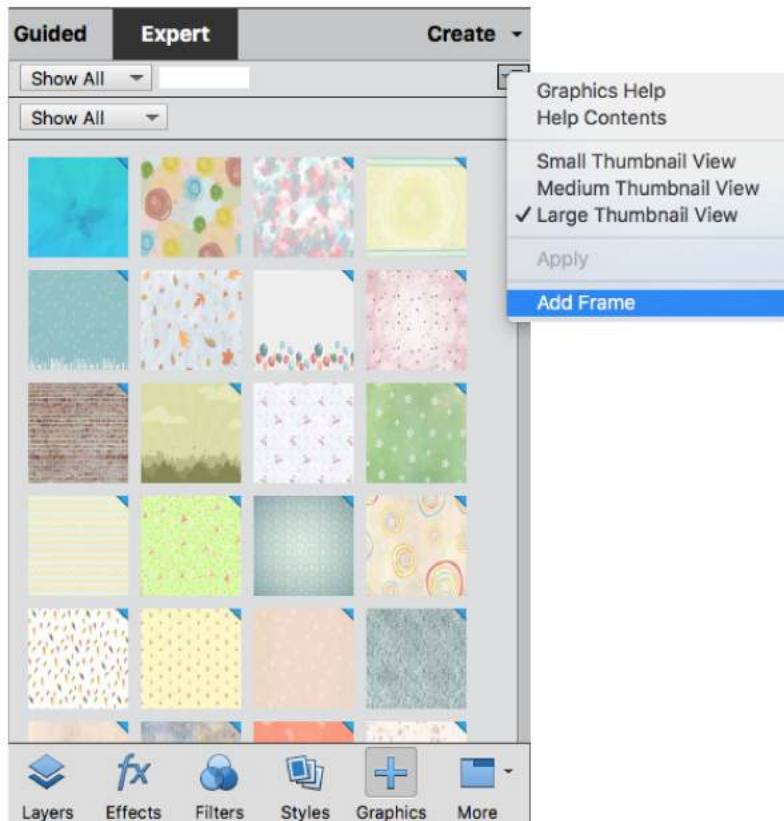
### Import a shared frame

Not only can you now create fun, customized frames that speak your story, you can also import frames that other Elements users have created.

**Import a frame** in a few simple steps:

- 1** In Photoshop Elements, switch to Expert mode.
- 2** Click Graphics, and then from the fly-out menu, click Add Frame.





3 Select the PSD file that represents the frame you are importing, and then click Load.

#### View an imported frame:

- 1 In Expert mode, click Graphics.
- 2 From the drop-downs available in the right panel, choose By Type > Frames > My Frames.

#### Note:

*The custom frames created using Frame Creator Guided Edit can be restored and reused on another device or with a different version of Photoshop Elements. To do this, take a backup of these frames before uninstalling Photoshop Elements, by copying your custom frames from the following location into a different folder:*

*/Applications/Adobe Photoshop Elements 2019/Contents/MacOS/Adobe Photoshop Elements 2019 Editor/Contents/Application Data/Photoshop Elements/17.0/Photo Creations?*

## Orton Effect guided effect

The **Orton** effect provides a dreamy effect to your photographs.

- 1 In **Guided** mode, from the **Special Edits** section, click **Orton Effect**.
- 2 In the **Create Orton Effect** panel, click **Add Orton Effect**.
- 3 Edit the following parameters according to your requirements:  
**Increase Blur** Specifies the amount of blur in the out-of-focus layer.  
**Increase Noise** Adds noise to the blurred layer.  
**Apply Brightness** Increases brightness of the blurred layer.

## Guided edits, effects, and filters

- 4 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.



Use the zoom option in the editor to identify how the effect is applied to different areas of the photograph.

## Recompose guided edit

For more information on the features used in the **Recompose Photo Guided Edit**, see [Recompose a photo in Guided mode](#).

## Perfect Portrait guided edit

In **Guided Edit**, create a perfect portrait by removing blemishes and enhancing various parts of the image with easy-to-use tools.

- 1 In **Guided** mode, from the **Special Edits** section, click **Perfect Portrait**.
- 2 Enhance the texture of the skin.
  - a Click the **Smooth Skin** button to apply smoothness to skin. You can move the **Strength** slider to increase or decrease the smoothness effect.
  - b Click **Increase Contrast** to add clarity.
- 3 Enhance facial features.
  - a Click **Remove Blemishes** to fix small flaws.
  - b Click **Whiten Teeth** to brighten your smile.
  - c Click **Brighten Eyes** to brighten the eyes.
  - d Click **Darken Eyebrows** to darken the eye lashes and eye brows. See [Quickly lighten or darken isolated areas](#).
- 4 Add special touch-ups.
  - a Click **Add Glow**. Adjust the sliders until you achieve the desired results.
  - b Click **Slim down** to make the selected face appear slimmer.

**Note:**

*Each click intensifies the effect.*

- 5 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Restore Old Photo guided edit

Photographs, over time, may get damaged due to the effects of the weather, quality of paper, or neglect. After digitization of a damaged photograph, various tools can be used to restore the image to remove cracks, discoloration, smudges, or other imperfections. The **Restore Old Photo** guided edit takes you through a step-by-step process, and presents you with all the tools you need to restore an image in one workflow.

- 1 Use the **Crop** (C) tool and the rotate cropping frame to decide on the section of the photograph that you would like to restore.
- 2 Use the **Spot Healing** tool to repair smaller spots, lines, and tears.
- 3 Use the **Healing Brush** tool to heal a damaged part of an image with an undamaged section of the same photograph. Press Alt + Click a suitable part of the image, and then drag the portion to the damaged part of the image.
- 4 Use the **Clone Stamp** tool to copy one part of an image to another. To repair portions, press Alt + click the source area, and then drag on the damaged area.
- 5 Use the **Blur** tool to smooth the areas where there is undesirable granulation of the photo.
- 6 Use the **Dust Remover** tool to heal smaller lines, dust impressions, and other imperfections.
- 7 Use the available buttons to apply corrections related to levels, contrast, and color. You can also convert the photo into a black and white image in a single click.
- 8 Use the **Sharpen** tool to enhance the clarity of the final output.
- 9 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Scratches and Blemishes guided edit

Use the Scratch and Blemishes to fix (large or small) flaws in an image (using the Healing Brush or the Spot Healing Brush).

You can view the after image only, or view both the before and after images either vertically or horizontally.

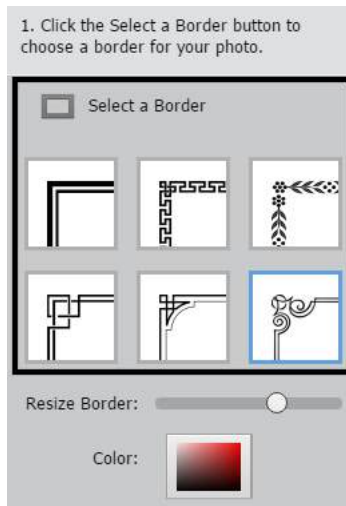
For more on correcting color casts, see [Fix large imperfections](#) or [Remove spots and unwanted objects](#).

## Text and Border Overlay guided edit

Add stylish borders to your photos with text that speak your story. Use the Text and Border Overlay guided edit to give a great new look to your photo with a combination of polished borders and text.

- 1 Do one of the following:
  - Open a photo in Photoshop Elements.
  - Select a photo from the Photo Bin.
- 2 Select **Guided > Special Edits > Text and Border Overlay**.
- 3 Click **Select a Border** and choose a border from the available options.

## Guided edits, effects, and filters




*Different border styles.*

- 4 Drag the **Resize Border** slider to increase or decrease the size of the border.
- 5 Click the **Color Picker** button, and then click the color you want to apply on the border.
- 6 Click **Add Text Overlay**. A text frame appears over the border and the **Type Tool** becomes active.
- 7 Type in the new text. You can change the font, size, color, and style of the text from the **Tool Options** bar in the Guided workspace. When you are done typing, click the green check mark (✓) to commit your changes.
- 8 Change the position of the text by clicking a dot on the border.



*Change the position of text by clicking on a dot.*

- 9 Click the **Text Style** button to display preconfigured text styles that you can apply on the text. You can revert to your original text style by clicking the **Reset** (  ) button.
- 10 After you get the desired result, click **Next** to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.

## Guided edits, effects, and filters

- **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
- **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Tilt-Shift guided edit

Apply the tilt-shift effect to focus attention on certain aspect or object in your photo, while selectively taking focus away from other things in your photo. The tilt-shift effect also causes a pseudo-miniature effect to be formed on the photo.



*Picture before applying the tilt-shift effect (left), and after*

- 1 Open a photo, and in the **Guided Edits** panel click **Photo Effects > Tilt-Shift**.
- 2 Click **Add Tilt-Shift** to apply the basic effect to the photo. The photo appears blurred out.
- 3 Click **Modify Focus Area** and then click and drag across the image to specify the areas that you would like to appear in sharp focus.
- 4 To experiment with more effects, click **Refine Effect** and modify:
  - **Blur:** Increase the intensity of blur applied to the photo.
  - **Contrast:** Increases or decreases the contrast levels of the photo.
  - **Saturation:** Increases or decreases the color saturation levels of the photo
- 5 After you get the desired result, click Next to choose how you would like to proceed:
  - **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.

- **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Watercolor Effect guided edit

Use the Watercolor Effect guided edit to add watercolor effect to your photos with texture and text effects.

- 1 Do one of the following:
  - Open a photo in Photoshop Elements.
  - Select a photo in the Photo Bin.
- 2 Choose **Guided** > **Special Edits** > **Watercolor Effect**.
- 3 Select a watercolor effect from the available options.
- 4 Choose a watercolor paper. You can adjust the opacity of the paper.
- 5 Choose a texture for the canvas. You can adjust the intensity of the texture.
- 6 (Optional) Adjust the details using the Refine Effect Brush. This tool helps you add or remove effect to and from the area you paint over with the brush.
- 7 (Optional) Click **Type Tool** to add text. Click anywhere on the photo, and then type your text. You can change the font, size, and style of the text from the Tool Options bar in the Guided workspace. When you are done typing, click the green check mark to apply your changes.

For more information about adding text, see [Add text](#).

- 8 (Optional) Apply style to the text from the available options. You can choose Advanced options to apply further changes in the effect. For more information on advance options, see [About layer styles](#).
- 9 After you get the desired result, click **Next** to choose how you would like to proceed:
  - **Save** - Save/Save As: Preserve the newly-created image in any of the available formats.
  - **Continue editing** - In Quick/In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
  - **Share** - Flickr/Twitter: You can upload your image online through one of the social or sharing services available in Photoshop Elements

## Artistic filters

### Colored Pencil

The Colored Pencil filter redraws an image using colored pencils on a solid background. This filter retains important edges and gives them a rough crosshatch appearance; the solid background color shows through the smoother areas. You can set the pencil width, stroke pressure, and paper brightness.

**Note:**

*For a parchment effect, change the background color before applying the Colored Pencil filter to a selected area.*

## Cutout

The Cutout filter portrays an image as though it were made from roughly cut-out pieces of colored paper. High-contrast images appear as if in silhouette, while colored images are built up from several layers of colored paper. You can set the number of levels, edge simplicity, and edge fidelity.

## Dry Brush

The Dry Brush filter paints an image using a dry brush technique (between oil and watercolor). The filter simplifies an image by reducing its range of colors to areas of common color. You can set the brush size, brush detail, and texture.

## Film Grain

The Film Grain filter applies an even, grainy pattern to an image. It adds a smoother, more saturated pattern to the image's lighter areas. This filter is useful for eliminating banding in blends and visually unifying elements from various sources. You can set the grain, highlight area, and intensity.

## Fresco

The Fresco filter paints a layer in a coarse style using short, rounded, and hastily applied dabs. You can set the brush size, brush detail, and texture.

## Neon Glow

The Neon Glow filter uses the foreground color, background color, and glow color to colorize an image while softening its look. You can set the glow size, glow brightness, and glow color. Lower glow size values restrict the glow color to the shadow areas, and higher values move the glow color to the midtones and highlight areas of a layer. To select a glow color, click the Glow Color box, and select a color in the Color Picker.

## Paint Daubs

The Paint Daubs filter makes an image appear painted. You can set the brush size, sharpness, and brush types.

## Palette Knife

The Palette Knife filter reduces detail in an image to give the effect of a thinly painted canvas that reveals the texture underneath. You can set the stroke size, stroke detail, and softness.

## Plastic Wrap

The Plastic Wrap filter renders a layer as if it were coated in shiny plastic, accentuating the surface detail. You can set the highlight strength, detail, and smoothness.

## Poster Edges

The Poster Edges filter reduces the number of colors in an image according to the posterization option you set, finds the edges of the image, and draws black lines on them. Large broad areas of the image receive simple shading, while fine dark details are distributed throughout the image. You can set the edge thickness, edge intensity, and posterization.

## Rough Pastels

The Rough Pastels filter makes an image appear as if it were made with rough strokes of pastel chalk on a textured background. In areas of bright color, the chalk appears thick with little texture; in darker areas, the chalk appears scraped off to reveal the texture. You can set the stroke length, stroke detail, and texture. Texture options make images appear as if they were painted onto textures, such as canvas, brick, burlap, or sandstone.

## Smudge Stick

The Smudge Stick filter softens an image using short diagonal strokes to smudge or smear the darker areas of the images. Lighter areas become brighter and lose detail. You can set the stroke length, highlight area, and intensity.

## Sponge

The Sponge filter paints a layer with highly textured areas of contrasting color. You can set the brush size, definition, and smoothness.

## Underpainting

The Underpainting filter paints a layer as if it were on a textured background. You can set the brush size, texture coverage area, and texture options. Texture options make images appear as if they were painted onto textures, such as canvas, brick, burlap, or standstone.

## Watercolor

The Watercolor filter paints an image in a watercolor style, simplifying details in an image by using a medium brush loaded with water and color. Where significant tonal changes occur at edges, the filter saturates colors. You can set the brush detail, shadow intensity, and texture.

# Guided mode Color edits

The **Guided** mode provides you with guided edits - a wizard-like interface to accomplish certain predefined effects. Each guided edit has an associated image. As you move the mouse horizontally over the image, the portion to the left of the slider displays the image before the effect is applied. The portion to the right of the slider displays the image after the effect is applied.

## Enhance Colors guided edit

Use the **Enhance Colors Guided Edit** to enhance the hue, saturation, and lightness in an image.

You can view the after image only, or view both the before and after images either vertically or horizontally.

For more on enhancing colors, see [Adjust color, saturation, and hue](#).

## Lomo Camera Effect guided edit

In **Guided Edit**, apply the effect of the Lomo camera.

### 1 Select Lomo Camera Effect.

The Lomo Effect panel on the right provides the options to apply the required effects.



## Guided edits, effects, and filters

2 Click **Lomo Camera Effect**.

3 Click **Apply Vignette**.

1 Open a photo, and in the Guided Edits panel click Lomo Camera Effect.

The Lomo Effect panel on the right provides the options to apply the required effects.

2 Click Lomo Camera Effect.

3 Click Apply Vignette.



*Each time you click **Lomo Camera Effect** or **Apply Vignette**, Photoshop Elements intensifies the last applied effect. At any point, you can click **Reset** to remove all the applied effects and restore the original image.*

4 After you get the desired result, click Next to choose how you would like to proceed:

- **Save** - Save / Save As: Preserve the newly-created image in any of the available formats.
- **Continue editing** - In Quick / In Expert: Choose where you would like to continue working on the image - in Quick mode or Expert mode.
- **Share** - Flickr / Twitter: Choose to place your image online through one of the social or sharing services available in Photoshop Elements.

## Remove a Color Cast guided edit

Use the **Remove a Color Cast Guided Edit** to correct color casts in an image.

You can view the after image only, or view both the before and after images either vertically or horizontally.

For more on correcting color casts, see [Fix color casts](#).

## Saturated Slide Film Effect guided edit

For more information on saturation adjustment, see [Adjust color, saturation, and hue](#).

# Blur filters

## Average

The Average filter finds the average color of an image or selection, and then fills the image or selection with the color to create a smooth look. For example, if you select an area of grass, the filter changes the area into a homogeneous patch of green.

## Blur and Blur More

The Blur filters soften a selection or an image and are useful for retouching. They smooth transitions by averaging the color values of pixels next to the hard edges of defined lines and shaded areas.

**Blur** Eliminates noise where significant color transitions occur in an image. Blur filters smooth transitions by averaging the color values of pixels next to the hard edges of defined lines and shaded areas.

**Blur More** Produces an effect several times stronger than that of the Blur filter.

**Note:**

*Before applying a Blur filter, deselect the Lock transparent pixels option in the Layers panel.*



*Blurring the background of a photo*

## Gaussian Blur

The Gaussian Blur filter quickly blurs a selection by an adjustable amount. Gaussian refers to the bell-shaped curve that Photoshop Elements generates when it applies a weighted average to the pixels. The Gaussian Blur filter adds low-frequency detail and can produce a hazy effect. You can set the blur radius in the filter options to determine how far the filter searches for dissimilar pixels to blur.

## Lens Blur

Lens Blur can be used to give the effect of narrower depth of field so that some objects in the image stay in the focus and others are blurred. The portions of the image that are blurred and those that remain in focus depend on the layer mask, saved selection, or transparency settings applied. The way the blur appears depends on the iris shape you choose. Iris shapes are determined by the number of blades they contain. You can change blades of an iris by curving them (making them more circular) or rotating them. Use the preview options to see how changing the settings in the Lens Blur dialog affect your photograph.

## Motion Blur

The Motion Blur filter blurs in a particular direction (from  $-360^\circ$  to  $+360^\circ$ ) and at a specific distance (from 1 to 999). The filter's effect is analogous to taking a picture of a moving object with a fixed exposure time. You can set the blur angle and distance.

## Radial Blur

The Radial Blur filter simulates the blur of a zooming or rotating camera to produce a soft blur. The Amount option controls the blur amount. Spin blurs along concentric circular lines and lets you specify a degree of rotation. Zoom blurs along radial lines, as if zooming in on or out of the image and lets you specify an amount from 1 to 100. Blur quality ranges from Draft for fast but grainy, results to Good and Best for smoother results, which are indistinguishable except on a large selection. You can specify the origin of the blur by dragging the pattern in the Blur Center box.

## Smart Blur

The Smart Blur filter precisely blurs an image. You can specify a radius to determine how far the filter searches for dissimilar pixels to blur, a threshold to determine how different the pixels' values must be before they are eliminated, and a blur quality. You can also set a mode for the entire selection (Normal) or for the edges of color transitions (Edge Only and Overlay Edge). Where significant contrast occurs, Edge Only applies black-and-white edges and Overlay Edge applies white.

## Surface Blur

The Surface Blur filter blurs an image while preserving edges. This filter is useful for creating special effects and for removing noise and graininess. The Radius option specifies the size of the area sampled for the blur. The Threshold option controls how much the tonal values of neighboring pixels must diverge from the center pixel value before becoming a part of the blur. Pixels with tonal value differences less than the Threshold value are excluded from the blur.

# Brush Stroke filters

## Accented Edges

The Accented Edges filter accentuates the edges of an image. When the edge brightness control is set to a high value, the accents resemble white chalk; when set to a low value, the accents resemble black ink. You can set the edge width, edge brightness, and smoothness.

## Angled Strokes

The Angled Strokes filter repaints an image using diagonal strokes. The strokes in the lighter areas of the image go in the opposite direction of the strokes in the darker areas. You can set the stroke direction balance, stroke length, and sharpness.

## Crosshatch

The Crosshatch filter preserves the details and features of the original image while adding texture and roughening the edges of the colored areas in the image with simulated pencil hatching. You can set the stroke length, sharpness, and strength (the number of hatching passes).

## Dark Strokes

The Dark Strokes filter paints dark areas of an image closer to black with short, tight strokes, and paints lighter areas of the layer with long, white strokes. You can set the stroke balance and black and white intensity levels.

## Ink Outlines

The Ink Outlines filter redraws an image with fine narrow lines over the original details, in pen-and-ink style. You can set the stroke length and dark and light intensity levels.

## Spatter

The Spatter filter replicates the effect of a spatter airbrush. You can set the spray radius and smoothness.

## Sprayed Strokes

The Sprayed Strokes filter repaints a layer using its dominant colors with angled, sprayed strokes of color. You can set the stroke length, spray radius, and stroke direction.

## Sumi-e

The Sumi-e filter redraws a layer in a Japanese style, as if with a wet brush full of black ink on rice paper. The effect is soft blurry edges with rich blacks. You can set stroke width, stroke pressure, and contrast.

# Distort filters

## Diffuse Glow

The Diffuse Glow filter renders an image as though it were viewed through a soft diffusion filter. This filter adds see-through white noise to an image, with the glow fading from the center of a selection.

## Displace

The Displace filter uses an image, called a displacement map, to determine how to distort a selection. For example, using a parabola-shaped displacement map, you can create an image that appears to be printed on a cloth held at its corners.

This filter requires a displacement map file composed of either a flattened image saved in Photoshop format or an image in bitmap mode. You can use your own files or the files included in the locations:

- C:\Program Files\Adobe\Photoshop Elements 2018\Presets\Textures
- C:\Program Files\Adobe\Photoshop Elements 2018\Required\Plug-Ins\Displacement Maps

## Apply the Displace filter

- 1 In the Edit workspace, select an image, layer, or a specific area.
- 2 Select **Filter** > **Distort** > **Displace**.
- 3 To define the magnitude of the displacement, enter a value between -999 and 999 in the Horizontal and Vertical Scale text boxes.

When the horizontal and vertical scales are 100%, the greatest displacement is 128 pixels (because middle gray produces no displacement).

- 4 If the displacement map is not the same size as the selection, select how you want the map to fit the image:

**Stretch To Fit** Resizes the map.

**Tile** Fills the selection by repeating the map in a pattern.


5 Select how to fill voids that are created by the filter in the image, and click OK.

**Wrap Around** Fills voids with content from the opposite edge of the image.

**Repeat Edge Pixels** Extends the colors of pixels along the image's edge in the direction you specify.

6 Select and open the displacement map. Photoshop Elements applies the map to the image.

## Glass

The Glass filter makes an image appear as if it were being viewed through different types of glass. You can choose a glass effect or create your own glass surface as a Photoshop file and apply it. You can adjust scaling, distortion, and smoothness settings. To apply your own texture file, click  icon and select **Load Texture**.

## Liquify

The Liquify filter makes it easy to manipulate areas of an image as if those areas had been melted. You work with a preview image of the current layer, using special tools to warp, twirl, expand, contract, shift, or reflect areas of the image. You can make subtle changes to retouch an image or drastic distortions to create an artistic effect.

### Apply the Liquify filter

1 In the Edit workspace, select an image, layer, or a specific area.

2 Choose Filter > Distort > Liquify.

3 To zoom in on or out of the image preview, do one of the following:

- Choose a zoom level from the pop-up menu in the lower-left area of the dialog box.
- Select the Zoom tool from the toolbox in the dialog box, and click in the image to zoom in, or Alt-click (Option-click in Mac OS) to zoom out. You can also use the Zoom tool to drag over an area of the preview you want to magnify.
- Select a tool from the toolbox.

4 Select one of the following tools from the toolbox:

**Warp** Pushes pixels forward as you drag.

**Twirl Clockwise** Rotates pixels clockwise as you hold down the mouse button or drag.

**Twirl Counter Clockwise** Rotates pixels counterclockwise as you hold down the mouse button or drag.

**Pucker** Moves pixels toward the center of the brush area as you hold down the mouse button or drag.

**Bloat** Moves pixels away from the center of the brush area as you hold down the mouse button or drag.

**Shift Pixels** Moves pixels perpendicularly to the stroke direction. Drag to move pixels to the left, and Alt-drag (Option-drag in Mac OS) to move pixels to the right.

**Reconstruct** Fully or partially reverses the changes you've made.

5 In the Tool Options section, adjust the brush size and pressure of the tool, as needed:

- To change the brush size, drag the pop-up slider, or enter a brush size value from 1 to 15000 pixels.
- To change the brush pressure, drag the pop-up slider, or enter a brush pressure value from 1 to 100.




*A low brush pressure makes more gradual changes.*

- If you're using a stylus tablet, select Stylus Pressure.



*To create the effect of dragging in a straight line between the current point and the previous point that you clicked, Shift-click with the Warp, Shift Pixels, or Reflection tool.*

- 6 To apply the changes in the preview image to the actual image, click OK.
- 7 (Optional) To revert to a previous state, do one of the following:
  - Select the Reconstruct tool , and hold down the mouse button or drag over the distorted areas. The restoration occurs more quickly at the brush center. Shift-click to reconstruct in a straight line between the current point and the previous point that you clicked.
  - To restore the entire preview image to its state when you opened the dialog box, press Alt (Option in Mac OS) and click Reset. Alternatively, click Revert to restore the original image and reset the tools to their previous settings.

## Ocean Ripple

The Ocean Ripple filter adds randomly spaced ripples to the image's surface, making the image look as if it were under water.

## Pinch

The Pinch filter squeezes a selection or layer inward or outward.

### Apply the Pinch filter

- 1 In the Edit workspace, select an image, layer, or a specific area.
- 2 Choose Distort > Pinch from the Filter menu.
- 3 Drag the slider to the right, into positive values, to pinch a selection inward toward its center; or to the left, into negative values, to shift a selection outward. Then click OK.

## Polar Coordinates

The Polar Coordinates filter converts a selection from its rectangular to polar coordinates, and vice versa, according to a selected option. You can use this filter to create a cylinder anamorphosis—art popular in the 18th century—in which the distorted image appears normal when viewed in a mirrored cylinder.

## Ripple

The Ripple filter creates an undulating pattern on a selection, like ripples on the surface of a pond. For greater control, use the Wave filter. Options include the amount and size of ripples.

## Shear

The Shear filter distorts an image along a curve.

## Apply the Shear filter

- 1 In the Edit workspace, select an image, layer, or a specific area.
- 2 Choose Distort > Shear from the Filter menu.
- 3 To define a distortion curve, do one of the following in the Shear dialog box:
  - Click anywhere on either side of the vertical line.
  - Click on the vertical line, and then drag the new curve point.

You can drag any point along the curve to adjust the distortion, and you can add additional curve points.

- 4 Select one of the following in the Undefined Areas options and click OK:

**Wrap Around** Fills new voids in the image with content from the opposite side of the image.

**Repeat Edge Pixels** Extends the colors of pixels. Banding may result if the edge pixels are different colors.

You can click Defaults to start over and return the curve to a straight line.

## Spherize

The Spherize filter gives objects a 3D effect by wrapping a selection around or inside a spherical shape, distorting and stretching the image.

### Apply the Spherize filter

- 1 In the Edit workspace, select an image, layer, or a specific area.
- 2 Choose Distort > Spherize from the Filter menu.
- 3 For Amount, enter a positive value to stretch the image outward as though it were wrapped around a sphere. Enter a negative amount to compress the image inward as though it were wrapped inside a sphere.
- 4 For Mode, choose normal, horizontal, or vertical, and then click OK.

## Twirl

The Twirl filter rotates an image or selection more sharply in the center than at the edges. Specifying an angle produces a twirl pattern. You can drag the slider to the right into positive values to twirl the image clockwise, drag the slider to the left into negative values to twirl counterclockwise, or enter a value between -999 and 999.

## Wave

The Wave filter creates an undulating pattern on a layer or selection.

### Apply the Wave filter

- 1 In the Edit workspace, select an image, layer, or a specific area.
- 2 Choose Distort > Wave from the Filter menu.
- 3 Select a wave type in the Type section: Sine (creates a rolling wave pattern), Triangle, or Square.
- 4 To set the number of wave generators, drag the slider or enter a number between 1 and 999.
- 5 Drag the minimum and maximum Wavelength sliders to set the distance from one wave crest to the next. Set both sliders to the same value to create a consistent pattern of wave crests.
- 6 Drag the minimum and maximum Amplitude sliders to set the wave strength.

### Guided edits, effects, and filters

- 7 Drag the horizontal and vertical Scale sliders to set the height and width of the wave effect.
- 8 To apply random results based on the set of values in the dialog box, click Randomize. You can click Randomize multiple times to get more results.
- 9 Select one of the following and click OK:
  - Wrap Around** Fills the voids in the image with content from the opposite edge of the image.
  - Repeat Edge Pixels** Extends the colors of pixels along the image's edge in the direction specified.

## ZigZag

The ZigZag filter distorts a selection radially, depending on the radius of the pixels in your selection.

### Apply the ZigZag filter

- 1 In the Edit workspace, select an image, layer, or a specific area.
- 2 Choose Distort > ZigZag from the Filter menu.
- 3 Drag the Amount slider to set the level and direction of distortion.
- 4 Drag the Ridges slider to set the number of direction reversals for the zigzag from the center to the edge of the selection.
- 5 Choose a displacement option from the Style menu and click OK:
  - Around Center** Rotates the pixels around the center of the selection.
  - Out From Center** Produces a rippling effect toward or away from the center of the selection.
  - Pond Ripples** Produces a rippling effect that distorts the selection to the upper left or lower right.

## Other filters

### Custom filters

Custom filters let you design your own filter effect. With the Custom filter, you can change the brightness values of each pixel in the image according to a predefined mathematical operation known as convolution. Each pixel is reassigned a value based on the values of surrounding pixels. You can save the custom filters you create and use them with other Photoshop images.

Use the Save and Load buttons to save and reuse custom filters.

### Apply a Custom filter

- 1 In the Edit workspace, select an image, layer, or area.
- 2 Choose Other > Custom from the Filter menu.
- 3 Select the center text box, which represents the pixel being evaluated. Enter the value by which you want to multiply that pixel's brightness value, from -999 to +999.
- 4 Select a text box representing an adjacent pixel. Enter the value by which you want the pixel in this position multiplied.



For example, to multiply the brightness value of the pixel to the immediate right of the current pixel by 2, enter 2 in the text box to the immediate right of the center text box.

**Note:**

*To avoid turning the image completely white or black, the sum of the values in the matrix should be equal to 1.*

- 5 Repeat steps 3 and 4 for all pixels you want to include in the operation. You don't have to enter values in all the text boxes.
- 6 For Scale, enter the value by which to divide the sum of the brightness values of the pixels included in the calculation.
- 7 For Offset, enter the value to be added to the result of the scale calculation.
- 8 Click OK. The custom filter is applied to each pixel in the image, one at a time.

**Note:**

*You can click **Save** button and save the custom filter as .ACF file. Click **Load** to load an already saved custom filter.*

## High Pass

The High Pass filter retains edge details in the specified radius where sharp color transitions occur and suppresses the rest of the image. (A radius of 0.1 pixel keeps only edge pixels.) The filter removes low-frequency detail in an image and has an effect opposite to that of the Gaussian Blur filter.



*You can use the High Pass filter to extract line art and large black-and-white areas from scanned images. To do so, apply the filter before using the Filter > Adjustments > Threshold command or converting the image to bitmap mode.*

- 1 Select **Filter > Other > High Pass**.
- 2 Adjust the radius of the filter by moving the **Radius** slider.
- 3 Click **OK**.

## Maximum and Minimum

The Maximum and Minimum filters look at individual pixels in a selection, like the Median filter. Within a specified radius, the Maximum and Minimum filters replace the current pixel's brightness value with the highest or lowest brightness value of the surrounding pixels. The Maximum filter has the effect of applying a choke—spreading out white areas and choking in black areas. The Minimum filter has the effect of applying a spread—spreading out black areas and shrinking white areas.

## Offset

The Offset filter moves a selection a specified amount to the right horizontally or down vertically, leaving an empty space at the selection's original location. Depending on the size of the selection, you can fill the empty area with a transparent background, with the edge pixels, or with pixels from the right or bottom edges of an image.

## Plug-in filters

You can install plug-in filters developed by non-Adobe software developers. Once installed, the plug-in filters appear at the bottom of the Filter menu unless the developer has specified another location.

If you are interested in creating plug-in modules, contact Adobe Systems Developer Support.

**Note:**

*In Windows Application version of Photoshop Elements, plug-ins are not available automatically and need to be added manually.*

**Note:**

*If you have problems or questions about a third-party plug-in, contact the plug-in's manufacturer for support.*

## Digimarc filter

Photoshop Elements automatically scans opened images for Digimarc® watermarks. If a watermark is detected, the application displays a copyright symbol in the image window's title bar and includes the information in the Copyright Status, Copyright Notice, and Owner URL sections of the File Info dialog box.

### Detect the Digimarc filter

- 1 Choose Filter > Digimarc > Read Watermark. If the filter finds a watermark, a dialog box displays the Digimarc ID, copyright year (if present), and image attributes.
- 2 Click OK. If you have a web browser installed, click Web Lookup to get more information about the owner of the image. This option opens the browser and displays the Digimarc website, where contact details appear for the given Digimarc ID.

## Noise filters

### Add Noise

The Add Noise filter applies random pixels to an image, simulating the result of shooting pictures on high-speed film. This filter can also be used to reduce banding in feathered selections or graduated fills, to give a more realistic look to heavily retouched areas, or to create a textured layer. You can set the amount of noise, the type of noise distribution, and color mode. The Uniform option creates a subtle distribution appearance and Gaussian creates a speckled distribution look. Monochromatic applies the filter using the existing tones of the image without changing the colors.

### Despeckle

The Despeckle filter detects the edges in a layer (areas where significant color changes occur) and blurs all of the selection except those edges. This blurring removes noise while preserving detail. You can use this filter to remove banding or visual noise that often appears in scans of magazines or other printed materials.

### Dust & Scratches

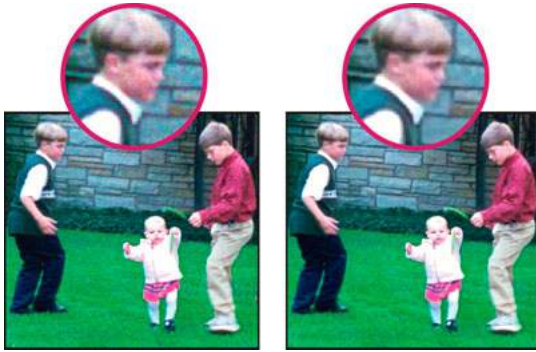
The Dust & Scratches filter reduces visual noise by changing dissimilar pixels.

### Median

The Median filter reduces noise in a layer by blending the brightness of pixels within a selection. The filter searches for pixels of similar brightness, discarding pixels that differ too much from adjacent pixels, and replaces the center pixel with the median brightness value of the searched pixels. This filter is useful for eliminating or reducing the appearance of motion in an image, or undesirable patterns that may appear in a scanned image.

## Reduce Noise

The Reduce Noise filter reduces luminous noise and color noise, such as the noise introduced by photographing with insufficient light. Select the Remove JPEG Artifacts option to remove the blotchy artifacts and halos that are caused by saving an image at a low JPEG quality setting.



*In this photo, taken with a mobile phone, there's noise in the boy's face (left). The Reduce Noise filter smoothes away the stray pixels (right).*

## Render filters

### Clouds

The Clouds filter generates a soft cloud pattern using random values that vary between the foreground and the background color in the toolbar.



*To generate a starker cloud pattern, hold down Alt (Option in Mac OS) as you choose Filter > Render > Clouds.*

### Difference Clouds

The Difference Clouds filter uses randomly generated values that vary between the foreground and background color in the toolbox to produce a cloud pattern. The first time you choose this filter, portions of the image are inverted in a cloud pattern. Applying the filter several times creates rib and vein patterns that resemble a marble texture.

### Fibers

The Fibers filter creates the look of woven fibers using the foreground and background colors. You can control how the colors vary with the Variance option (a low value creates longer streaks of color, while a high value makes very short fibers with more varied distribution of color). The Strength option controls how each fiber looks. A low setting creates spread out fibers, while a high setting produces short, stringy fibers. Randomize changes how the pattern looks; you can select this option until you find a pattern you like. When you apply the Fibers filter, the image data on the active layer is replaced with fibers.



Add a gradient map adjustment layer to colorize the fibers. (See [About adjustment and fill layers.](#))

## Lens Flare

The Lens Flare filter simulates the light refraction caused by shining a bright light into a camera lens. You can set the flare brightness, flare location, and flare shape (the lens type). Click in the preview window in the dialog box to set the flare location.

## Texture Fill

*Note:*

*The Texture Fill filter is not available in Photoshop Elements 12 and later releases.*

The Texture Fill filter uses a grayscale Photoshop image as a texture for an image.

## Sketch filters

### Bas Relief

The Bas Relief filter transforms an image to appear carved in low relief and lit to accent the surface variations. Dark areas of the image take on the foreground color, light areas use the background color. You can set relief detail and smoothness.

### Chalk & Charcoal

The Chalk & Charcoal filter redraws an image's highlights and midtones with a solid midtone gray background drawn in coarse chalk. Shadow areas are replaced with black diagonal charcoal lines. The charcoal is drawn in the foreground color, the chalk in the background color. You can set stroke pressure, and the charcoal and chalk areas.

### Charcoal

The Charcoal filter redraws an image to create a smudged effect. Major edges are boldly drawn, and midtones are sketched using a diagonal stroke. Charcoal is the foreground color, and the paper is the background color. You can set the charcoal thickness, level of image detail, and light/dark balance.

### Chrome

The Chrome filter gives the image a polished chrome surface using highlights as high points and shadows as low points in the reflecting surface. You can set the level of chrome surface detail and smoothness.



*After applying the Chrome filter, use the Levels dialog box to add more contrast to the image.*

## Comic

The Comic filter (Filter > Sketch > Comic) creates the impression that the image was hand-created by a comic artist. The final outcome can be adjusted to include the level of detailing that you need. The main controls are to change the range of colors (Soften), the number of colors reproduced (Shades), how the colors transition from one to another (steepness), and the vividness of the colors (Vibrance). In addition to this, you can adjust the thickness of the pen strokes that are used to outline shapes.

## Conté Crayon

The Conté Crayon filter replicates the texture of dense dark and pure white Conté crayons on an image. The Conté Crayon filter uses the foreground color for dark areas and the background color for light areas. You can set the level of foreground and background emphasis, and texture options. Texture options make images appear as if they were painted onto textures, such as canvas and brick, or viewed through glass blocks, for example.



*For a more realistic effect, change the foreground color to one of the common Conté Crayon colors (black, sepia, or sanguine) before applying this filter. For a muted effect, change the background color to white with some foreground color added to it.*

## Graphic Novel

The Graphic Novel filter (Filter > Sketch > Graphic Novel) creates the impression that the image was sketched for the graphic novel genre of artwork. Graphic novel artwork is restricted to shades of grey, and black and white. The adjustments you can make to the outcome include the overall amount of whites in the image (Darkness), the amount of details available in the outcome (Clean Look), the contrast levels (Contrast), and the thickness of the strokes used to define shapes and outlines.

## Graphic Pen

The Graphic Pen filter uses fine, linear ink strokes to capture the details in the original image and is especially striking with scanned images. The filter replaces color in the original image, using the foreground color for ink and background color for paper. You can set the stroke length and direction, and the light/dark balance.

## Halftone Pattern

The Halftone Pattern filter simulates the effect of a halftone screen while maintaining the continuous range of tones. You can set the halftone size, contrast, and pattern type.

## Note Paper

The Note Paper filter simulates the texture of handmade paper by combining the effects of the Emboss and Grain filters. Dark areas in the image appear as holes in the top layer of paper, revealing the background color. You can set the image balance, graininess, and relief.

## Pen and Ink

The Pen and Ink filter (Filter > Sketch > Pen and Ink) simulates artistic sketching to its closest form. To ensure that you get the best effects, adjust ink-related settings to preserve details (Detail), the thickness of artistic strokes (Width), the saturation of darker aspects (Darkness), and the contrast levels (Contrast). You can also manipulate the Pen settings to introduce a dominant color in the image with settings like choice of color (Hue), contrast values (Contrast), and degree to which the color must be filled (Fill).

## Photocopy

The Photocopy filter simulates the effect of photocopying an image. Large areas of darkness tend to copy only around their edges, and midtones fall away to either solid black or white. You can set the level of detail and darkness.

## Plaster

The Plaster filter molds the layer into a 3D plaster effect, and then colorizes the result using the foreground and background color. Dark areas are raised, light areas are sunken. You can set the image balance, smoothness, and light direction.

## Reticulation

The Reticulation filter simulates the controlled shrinking and distorting of film emulsion to create an image that appears clumped in the shadow areas and lightly grained in the highlights. You can set the density, foreground, and background levels.

## Stamp

The Stamp filter simplifies the image so that it seems made with a rubber or wood stamp. You can set the smoothness, and the balance between light and dark. This filter works best with black-and-white images.

## Torn Edges

The Torn Edges filter reconstructs the image as ragged, torn pieces of paper, and then colorizes the image using the foreground and background color. You can set the image balance, smoothness, and contrast. This filter is particularly useful for images consisting of text or high-contrast objects.

## Water Paper

The Water Paper filter uses blotchy daubs that appear to be painted onto fibrous, damp paper, causing the colors to flow and blend. You can set the paper's fiber length, brightness, and contrast.

# Stylize filters

## Diffuse

The Diffuse filter shuffles pixels in a selection to make the selection look less focused according to the option you select: Normal moves pixels randomly, ignoring color values; Darken Only replaces light pixels with darker pixels; Lighten Only replaces dark pixels with lighter pixels; and Anisotropic softens all pixels.

## Emboss

The Emboss filter makes a selection appear raised or stamped by converting its fill color to gray and tracing the edges with the original fill color. You can set the embossing angle, height, and a percentage for the amount of color within the selection.

## Extrude

The Extrude filter gives a three-dimensional texture to a selection or layer.

### Apply the Extrude filter

- 1 In the Edit workspace, select an image, layer, or area.
- 2 Choose Stylize > Extrude from the Filter menu.
- 3 Set the following options and click OK:

**Blocks** Creates objects with a square front face and four side faces.

**Pyramids** Creates objects with four triangular sides that meet at a point.

**Size** Determines the length of the object's base, from 2 to 255 pixels.

**Depth** Indicates how far the tallest object appears to protrude from the screen, from 1 to 255.

**Random** Gives each block or pyramid an arbitrary depth.

**Level-based** Makes each object's depth correspond to its brightness—bright objects protrude more than dark.

**Solid Front Faces** Fills the front face of each block with an averaged color of the block. Deselect Solid Front Faces to fill the front face of each block with the image. This option is not available for Pyramids.

**Mask Incomplete Blocks** Hides any object extending beyond the selection.

## Find Edges

The Find Edges filter identifies areas of the image with significant transitions and emphasizes edges. Like the Trace Contour filter, Find Edges outlines the edges of an image with dark lines against a white background and is useful for creating a border around an image.

### Note:

*After using filters like Find Edges and Trace Contour that highlight edges, you can apply the Invert filter to outline the edges of a color image with colored lines or a grayscale image with white lines.*

## Glowing Edges

The Glowing Edges filter identifies the edges of color and adds a neon-like glow to them. You can set the edge width, brightness, and smoothness.

## Solarize

The Solarize filter blends a negative and a positive image, for a result similar to exposing a photographic print briefly to light during development.

## Tiles

The Tiles filter breaks up an image into a series of tiles, offsetting the selection from its original position. You can set the number of tiles and the offset percentage. You can also choose one of the following to fill the empty area between the tiles: Background Color, Foreground Color, Inverse Image, or Unaltered Image, which puts the tiled version on top of the original and reveals part of the original image underneath the tiled edges.

## Trace Contour

The Trace Contour filter finds the transitions between major areas of brightness and thinly outlines them for an effect similar to the lines in a contour map. You can set the level for evaluating color values, and specify whether to outline pixels that are below (Lower) or above (Upper) that level.



*Use the Info panel in grayscale mode to identify a color value that you want traced. Then enter the value in the Level text box.*

## Wind

The Wind filter creates tiny horizontal lines in the image to simulate a wind effect. You can set the wind strength and direction.

# Texture filters

## Craquelure

The Craquelure filter paints an image onto a high-relief plaster surface, producing a fine network of cracks that follow the contours of the image. Use this filter to create an embossing effect with images that contain a broad range of color or grayscale values. You can set the crack spacing, depth, and brightness.

## Grain

The Grain filter adds texture to an image by simulating different kinds of grain. The sprinkles and stippled grain types use the background color. You can set the grain intensity, contrast, and type.

## Mosaic Tiles

The Mosaic Tiles filter draws the image as if it were made up of small chips or tiles and adds grout between the tiles. (In contrast, the Pixelate > Mosaic filter breaks up an image into blocks of different-colored pixels.) You can set the tile size, grout width, and lighten grout.



## Patchwork

The Patchwork filter breaks up an image into squares filled with the predominant color in different areas of the image. The filter randomly reduces or increases the tile depth to replicate the highlights and shadows. You can set the square size and relief.

## Stained Glass

The Stained Glass filter repaints an image as single-colored adjacent cells outlined in the foreground color. You can set the cell size, border thickness, and light intensity.

## Texturizer

The Texturizer filter allows you to simulate different texture types or select a file to use as a texture. Texture options make images appear as if they were painted onto textures, such as canvas and brick, or viewed through glass blocks.

# Chapter 6: Working with colors

## Understanding color

In Adobe Photoshop Elements, you use two color models to manipulate color. One model is based on the way the human eye sees color—hue, saturation, and brightness (HSB), while the other model is based on the way computer monitors display color (in amounts of red, green, and blue or RGB). The color wheel is another tool that helps you understand the relationships between colors. Photoshop Elements provides four image modes that determine the number of colors displayed in an image: RGB, bitmap, grayscale, and indexed color.

### About color

The human eye perceives color in terms of three characteristics—hue, saturation, and brightness (HSB)—whereas computer monitors display colors by generating varying amounts of red, green, and blue (RGB) light. In Photoshop Elements, you use the HSB and RGB color models to select and manipulate color. The color wheel can help you understand the relationships between colors.

### HSB model

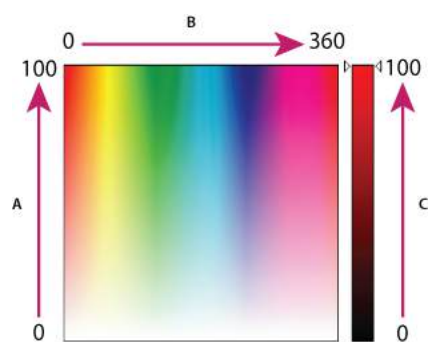
Based on the human perception of color, the HSB model describes three fundamental characteristics of color:

**Hue** The color reflected from or transmitted through an object. It is measured as a location on the standard color wheel, expressed as a degree between 0 and 360. In common use, hue is identified by the name of the color, such as red, orange, or green.

**Saturation** The strength or purity of the color. Saturation, which is sometimes called *chroma*, represents the amount of gray in proportion to the hue, measured as a percentage from 0 (gray) to 100 (fully saturated). On the standard color wheel, saturation increases from the center to the edge.

**Brightness** The relative lightness or darkness of the color, usually measured as a percentage from 0 (black) to 100 (white).

Although you can use the HSB model in Photoshop Elements to define a color in the Color Picker dialog box, you cannot use the HSB mode to create or edit images.

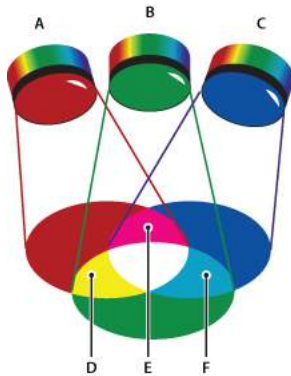


HSB view in the Adobe Color Picker  
A Saturation B Hue C Brightness

## RGB model

A large percentage of the visible spectrum can be represented by mixing red, green, and blue (RGB) light in various proportions and intensities. These three colors are called the *additive primaries*. Added together, red, green, and blue light make white light. Where two colors overlap, they create cyan, magenta, or yellow.

The additive primary colors are used for lighting, video, and monitors. Your monitor, for example, creates color by emitting light through red, green, and blue phosphors.

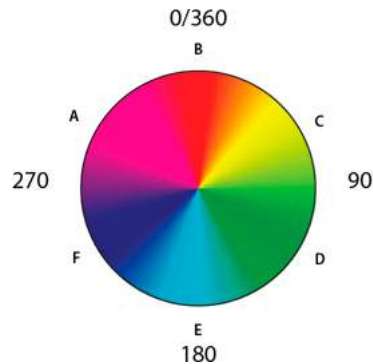


*Additive colors (RGB).*  
A Red B Green C Blue D Yellow E Magenta F Cyan

## Color wheel

The color wheel is a convenient way to understand and remember the relationship between colors. Red, green, and blue are the additive primaries. Cyan, magenta, and yellow are the subtractive primaries. Directly across from each additive primary is its complement: red-cyan, green-magenta, and blue-yellow.

Each subtractive primary is made up of two additive primaries, but not its complement. So, if you increase the amount of a primary color in your image, you reduce the amount of its complement. For example, yellow is composed of green and red light, but there is no blue light in yellow. When adjusting yellow in Photoshop Elements, you change the color values in the blue color channel. By adding blue to your image, you subtract yellow from it.

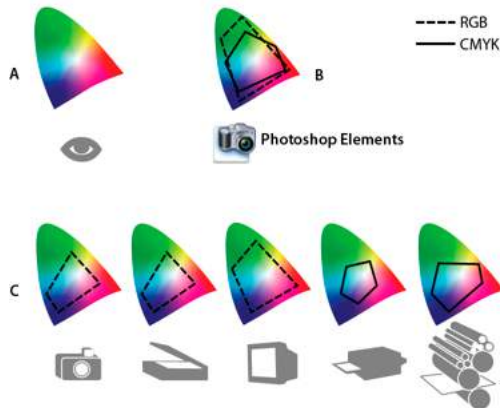


*Color wheel.*  
A Magenta B Red C Yellow D Green E Cyan F Blue

## Set up color management

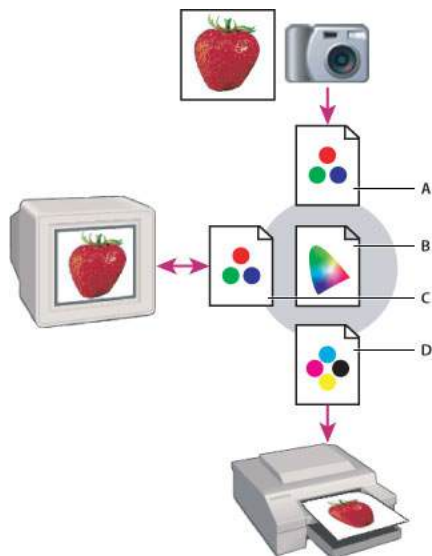
## About color management

Color management helps you to achieve consistent color among digital cameras, scanners, computer monitors, and printers. Each of these devices reproduces a different range of colors, called a *color gamut*. As you move an image from your digital camera to your monitor, and finally to a printer, the image colors shift. This shift occurs because every device has a different color gamut and thus reproduces the colors differently.



*The color gamuts of different devices and documents*  
**A** Lab color space (entire visible spectrum) **B** Documents (working space) **C** Devices

Color management translates the image colors so that each device can reproduce them in the same way and the colors you see on your monitor will be close to the colors in your printed image. All colors may not match exactly because the printer may not reproduce the same range of colors as the monitor.



*Managing color with profiles*  
**A** Profiles describe the color spaces of the input device and the document. **B** Using the profiles' descriptions, the color management system identifies the document's actual colors. **C** The monitor's profile tells the color management system how to translate the numeric values into the monitor's color space. **D** Using the output device's profile, the color management system translates the document's numeric values into the color values of the output device, so the actual colors are printed.

## Profiling devices

For color management to work, you must profile your devices or use an ICC profile created by the device's manufacturer.

**Capture devices** Profiling is not critical for capture devices such as digital cameras or scanners. You may want to profile a scanner, however, if you want to accurately reproduce the colors in scanned transparencies, and reduce your color correction workload in Photoshop Elements.

**Monitors** Calibrating and profiling your monitor is important. If you are using a laptop or other LCD monitor, you can use the profile provided by the manufacturer. If you own a colorimeter and corresponding software to create profiles, you can use those profiles in Photoshop Elements.

**Printers** Profiling your inkjet printer will generally give you better results, though you can make excellent prints without a printer profile by using the controls in your printer driver. Many printer manufacturers provide ICC printer profiles on their websites. You need a separate profile for each printer, ink, and type of paper. You can also have profiles made for your favorite combination of ink and paper.

When you work on a photo and save it, Photoshop Elements can embed (tag) an ICC profile that reflects the colors on your computer monitor or the device that produced it. Embedding profiles with an image makes its color portable, so that different devices can translate its color values. For example, if you send the photo to your inkjet printer, the color management system reads the embedded profile and translates the color data using the printer's profile. Your printer can then use the translated color data to accurately translate its color into the selected media.

## Color management tasks

If you want to use color management, you need to perform the following tasks:

- Set up color management by embedding a color profile and using device profiles when scanning or printing. (See [Set up color management](#).)
- Calibrate and profile your computer monitor. If you use an LCD monitor, use the profile that came with your monitor. See your LCD monitor documentation for instructions.
- When you print an image from Photoshop Elements, make sure that the correct color profile is specified in the Color Management area of the More Options dialog box. Or, if you don't have a printer profile, specify colors using the color controls in the printer driver. In addition, choose a color setting that's appropriate for your workflow, such as Optimize For Printing.

## Set up color management

1 In Photoshop Elements, choose Edit > Color Settings.

2 Select one of the following color management options, then click OK.

**No Color Management** Leaves your image untagged. This option uses your monitor profile as the working space. It removes any embedded profiles when opening images, and does not tag when saving.

**Always Optimize Colors For Computer Screens** Uses sRGB as the RGB working space; the Grayscale working space is Gray Gamma 2.2. This option preserves embedded profiles, and assigns sRGB when opening untagged files.

**Always Optimize For Printing** Uses Adobe RGB as the RGB working space; the Grayscale working space is Dot Gain 20%. This option preserves embedded profiles and assigns Adobe RGB when opening untagged files.

**Allow Me To Choose** Lets you choose sRGB (the default) or Adobe RGB when opening untagged files.

3 When you save a file, select ICC Profile in the Save As dialog box.

## Convert color profile

You don't often change the color profile of a document. Photoshop Elements automatically assigns the color profile based on the setting you select in the Color Settings dialog box. However, one reason to manually change a color profile is when preparing a document for a different output destination. The other time to change a color profile is for correcting a policy behavior that you no longer want implemented in the document. Changing the color profile is recommended for advanced users only.

? Choose Image > Convert Color Profile and then choose one of the following:

**Remove Profile** Removes the profile so that the document is no longer color-managed.

**Convert To sRGB Profile** Embeds an sRGB profile in the document.

**Convert To Adobe RGB Profile** Embeds an Adobe RGB profile in the document.

## Color and tonal correction basics

### Color correction overview

Photoshop Elements provides several tools and commands for fixing the tonal range, color, and sharpness in your photos, and for removing dust spots or other defects. You can work in one of three modes, depending on your experience and needs.

**Quick** If you have limited knowledge of digital imaging, Quick mode is a good place to start fixing photos. It has many of the basic tools for correcting color and lighting.

**Guided** If you are new to digital imaging and Photoshop Elements, you can use Guided Edit to guide you through the color correction task. This is also a good way to increase your understanding of the workflow.

**Expert** If you've worked with images before, you'll find that the Expert mode provides the most flexible and powerful image-correction environment. It has the lighting and color-correction commands, along with tools for fixing image defects, making selections, adding text, and painting on your images.

When working with some of the adjustment commands, you can make adjustments directly to the image pixels. Or you can use adjustment layers to make nondestructive adjustments that you can easily tweak until your image is right. In this mode, the Smart Brush tool and Detail Smart Brush tool automatically create an adjustment layer for the correction you're applying. See [Apply the Smart Brush tools](#).

**Camera Raw** If you shoot digital images in your camera's raw format, you can open and correct raw files in the Camera Raw dialog box. Because your camera has not yet processed the raw files, you can adjust the color and exposure to improve the images. Often you may not need to make other adjustments in Photoshop Elements. To open camera raw files in Photoshop Elements, first save them in a supported file format.

## Correct color in Quick mode

The Quick mode conveniently groups many of the basic photo-fixing tools in Photoshop Elements. As you work in Quick mode, limit the number of color and lighting controls that you apply to a photo. Generally, you use only one of the auto controls on a photo. If that control doesn't achieve what you want, click the Reset and try another one. You can also adjust your image using the slider controls, whether you've used an auto control or not. Perform the Sharpening fix last on an image.

- 1 Do one of the following:
  - With a photo open, click Quick.
  - Any photos that you have stored in the Photo Bin are accessible while you are in Quick mode.
- 2 (Optional) Set preview options by making a selection from the menu (located in the bar above the image that is open). You can set the preview to show how the photo looks before and after you make a fix, or to show both previews side by side (horizontally or vertically).
- 3 (Optional) Use the tools in the toolbox to zoom, move, and crop the image. You can also make a selection, fix red eye, whiten teeth, and add text to the image.
- 4 To rotate the image in 90° increments in the counterclockwise direction (rotate left), click the **Rotate** button in the taskbar. To rotate the image in the clockwise direction, click the arrow next to the Rotate button, and then click the rotate right button.
- 5 Select one of the image fixing controls (for example, Lighting, Color, or Balance). If a control has additional options (for example, the Color control contains the Saturation, Hue and Vibrance tabs), select the corresponding tab to fix that aspect of the image.
- 6 To apply a fix, do one of the following:
  - Make the necessary adjustment using the sliders, and preview the adjustment on the photo, or enter a value in the text box next to the sliders.
  - Hover the mouse over the thumbnails to preview the adjustment on the photo. Click the thumbnail to apply the adjustment on the image temporarily.
  - Fine-tune a picture using a preview as the starting point, click and hold the mouse button on a preview thumbnail, and then drag right or left.

**Note:** When you apply fixes in a sequence, all previous fixes are automatically applied as soon as you move to a new control. For example, if you move from the Balance control to the Exposure control, any changes you performed in the Balance control are automatically applied.

- 7 To undo a fix or reset the picture, do the following:
  - To cancel the fix applied while still in the same control, press Ctrl-Z, or choose Edit > Undo.

**Note:** If you have performed a sequence of fixes (for example, Exposure, Balance, and Contrast, it is not possible to undo changes performed in the step where the Balance was fixed. You can undo only the control that you are currently in.

  - To cancel all fixes applied to picture, click **Reset**. The picture is restored to the state it was in at the beginning of the current editing session.

## Quick mode tools

To fine-tune a picture using a preview as the starting point, click and hold the mouse button, and then drag right or left.

## Working with colors

The Quick mode provides the following tools to refine your photos:

**Smart Fix** Adjusts lighting and color. Smart Fix corrects overall color balance and improves shadow and highlight detail, if necessary. The **Auto** button automatically adjusts the image to apply optimum values for settings.

**Exposure** Adjusts the overall picture brightness. Use this control to ensure that the image you are viewing is of the desired brightness.

**Lighting** Adjusts the overall contrast of an image, and sometimes affects its color. If your image needs more contrast and it has a color cast, you can use the following options:

- **Auto Levels** and **Auto Contrast**: The Auto Levels and Auto Contrast options work by individually mapping the lightest and darkest pixels in each color channel to monochrome. To apply the settings, click the Auto button beside any of these options. (See [About Levels adjustments](#) or [The Levels Guided Edit](#).)
- **Shadows**: Drag the slider to lighten the darkest areas of your photo without affecting the highlights. Pure black areas are not affected.
- **Midtones**: Adjusts the contrast within the middle tonal values (values that are about half way between pure white and pure black). It does not affect the extreme highlights and shadows.
- **Highlights**: Drag the slider to darken the lightest areas of your photo without affecting the shadows. Pure white areas are not affected.

**Color** Adjusts the color by identifying shadows, midtones, and highlights in the image rather than in individual color channels. It neutralizes the midtones, and clips the white and black pixels using a default set of values. Click the Auto button to apply this command.

- **Saturation**: Drag the slider to make colors more vivid or more muted, or choose the preview thumbnail that best suits your requirement.
- **Hue**: Shifts all colors in an image. This control is best used in small amounts or with selected objects whose color you want to change.
- **Vibrance**: Causes lower saturated colors to turn vivid, without allowing clipping to occur for the higher-saturation colors. This control enables you to vary skin tones without becoming oversaturated.

**Balance** Adjusts the color balance of an image without affecting its contrast.

- **Temperature**: Drag the slider to make the colors warmer (red) or cooler (blue). Use this control to enhance sunsets or skin tones, or when the color balance set by your camera is off.
- **Tint**: Drag the slider to make the color more green or more magenta. Use this control to fine-tune the colors after using the Temperature control.

**Sharpen** Adjusts the sharpness of your image. Click **Auto** to use the default amount of sharpening. Drag the slider to vary the amount of sharpening. Zoom your preview at 100% to get a more accurate view of the amount of sharpening you are trying to apply.



## Fix photos with touch up buttons

The touch up buttons are available in Quick mode, in the **Modify** panel. These buttons enable you to apply corrections and adjustments to selected parts of an image. The Eye tool, Spot healing tool, and Healing Brush tool modify the same layer. The Whiten Teeth tool creates and works on a new adjustment layer. Also, the text tools create a new layer for edits. As a result, some tools do not permanently edit information on the image layer. You can always change adjustment settings without degrading the original image. The Whiten Teeth, Touch Up buttons apply adjustments found in the Smart Brush tool. See [Adjust color and tonality using the Smart Brush tools](#) and [About adjustment and fill layers](#).

**1** In the Quick mode, do any of the following:

- Click the Eye tool to remove red eye from a photo. This tool removes red eye in flash photos of people. Drag the tool in the image around an eye you want to fix, or click the Auto button in the options bar. See [Precisely remove red eye](#).
- Click the Whiten Teeth button to apply a whiten teeth in an image. Drag in the image area with the teeth that you want to brighten.

**2** (Optional) If you carried out Whiten Teeth adjustment, you can do any of the following:

- Add the adjustment to more parts of the photo, by clicking the Add To Selection button, and dragging in the image.
- Remove the adjustment from parts of the photo, by clicking the Subtract From Selection button, and dragging in the image.

## Quick mode options

**Zoom tool** Sets the magnification of the preview image. Controls and options work like the Zoom tool in the toolbox. (See [Zoom in or out](#).)

**Hand tool** Moves the image around in the preview window if the entire image is not visible. Press the spacebar to access the Hand tool when another tool is selected.

**Quick Selection tool** Selects portions of the image based on where you click or drag the tool. (See [Use the Quick Selection tool](#).)

**Crop tool** Removes part of an image. Drag the tool within the preview image to select the portion you want to keep, and then press Enter. (See [Crop an image](#).)

## Correcting color in Expert mode

If you've worked with images before, you'll find that Photoshop Elements provides the most flexible and powerful image-correction environment. It has lighting and color-correction commands, along with tools for fixing image defects, making selections, adding text, and painting on your images. When working with some of the adjustment commands, you can make adjustments directly on the image pixels. Or you can use adjustment layers to make nondestructive adjustments that you can easily tweak until your image is right. The Smart Brush tool and Detail Smart Brush tool automatically create an adjustment layer as you apply a correction. See [Apply the Smart Brush tools](#) or [About adjustment and fill layers](#).

As you work on your photos, perform the following tasks that apply to your image. Not all tasks are required for every image, but the following list is a recommended workflow:

**Specify a color management option.**

Specify color management options.

**View the image at 100% and crop, if necessary.**

## Working with colors

Before making any color corrections, view the image at a zoom percentage of 100%. At 100%, Photoshop Elements displays the image most accurately. You can also check for image defects, such as dust spots and scratches. If you plan to crop the file, do it now to reduce memory requirements and to ensure that the histogram uses only relevant information. Using the Zoom tool to zoom out may optimize the view before cropping an image, so that you crop a well-centered selection.

### Check the scan quality and tonal range.

Look at the image's histogram to evaluate whether the image has sufficient detail to produce high-quality output.

### Resize your image, if necessary.

Resize your image to the size that you need if you are going to use it in another application or project. If you are going to print it or use it in a Photoshop Elements project, you generally don't need to resize it. (See [About image size and resolution](#).)

### Adjust the highlights and shadows.

Begin corrections by adjusting the values of the extreme highlight and shadow pixels in the image (also known as the tonal range). Setting an overall tonal range allows for the most detail possible throughout the image. This process is known as setting the highlight and shadow or setting the white and black points. (See [About Levels adjustments](#) or [The Levels Guided Edit](#).)

### Adjust the color balance.

After correcting the tonal range, you can adjust the image's color balance to remove unwanted color casts or to correct oversaturated or muted colors. With some Photoshop Elements auto commands, both the tonal range and color are corrected in one step. (See [Adjust saturation and hue](#).)

### Make other special color adjustments.

Once you have corrected the overall color balance of your image, you can make optional adjustments to enhance colors. For example, you can increase the saturation to make the colors in your image more vivid.

### Retouch the image.

Use the retouching tools, like the Spot Healing Brush, to remove any dust spots or defects in the image. (See [Remove spots and small imperfections](#).)

### Sharpen the clarity of the image.

As a final step, sharpen the clarity of edges in the image. This process helps restore detail and sharpness that tonal adjustments may reduce. (See [Sharpening overview](#).)

## Automatically correct lighting and color

Photoshop Elements provides several automatic lighting and color-correction commands in both Quick mode and Expert mode. The command you choose depends on the needs of your image.

You can experiment with each of the auto commands. If you don't like the result of one, undo the command by choosing Edit > Undo, and try another command. You will rarely need to use more than one auto command to fix an image.

- 1 To adjust a specific image area, select it with one of the selection tools. If no selection is made, the adjustment applies to the entire image.
- 2 Choose one of the following commands from the Enhance menu:
  - Auto Smart Fix** Corrects overall color balance and improves shadow and highlight detail, if necessary.

## Working with colors

**Auto Levels** Adjusts the overall contrast of an image and may affect its color. If your image needs more contrast, and it has a color cast, try this command. Auto Levels works by individually mapping the lightest and darkest pixels in each color channel to black and white.

**Auto Contrast** Adjusts the overall contrast of an image without affecting its color. Use when your image needs more contrast, but the colors look right. Auto Contrast maps the lightest and darkest pixels in the image to white and black, which makes highlights appear lighter and shadows appear darker.

**Auto Smart Tone** Applies smart tone to your image automatically.

**Auto Haze Removal** Removes haze from your image automatically.

**Auto Color Correction** Adjusts the contrast and color by identifying shadows, midtones, and highlights in the image, rather than in individual color channels. It neutralizes the midtones and sets the white and black points using a default set of values.

**Auto Shake Reduction** Automatically removes shake from your image to make it sharper.

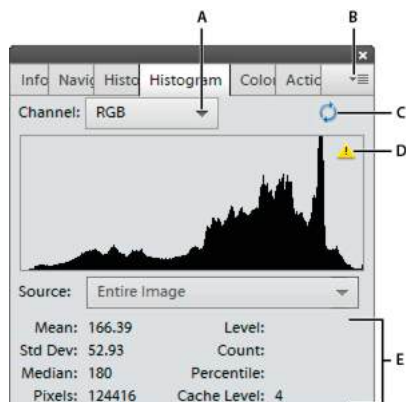
**Auto Sharpen** Adjusts the sharpness of the image by clarifying the edges and adding detail that tonal adjustments may reduce.

**Auto Red Eye Fix** Automatically detects and repairs red eye in an image.

## About histograms

You can use the histogram to analyze the image's tonal distribution to see if you need to correct it. A histogram shows the distribution of an image's pixel values in a bar chart. The left side of the chart shows the values of the image shadow (starting at level 0), and the right side shows the highlight (level 255). The vertical axis of the chart represents the total number of pixels within a given level.

You can view an image's histogram in the Histogram panel (F9). Histograms are also available in the Levels dialog box and the Camera Raw dialog box. You can update the histogram as you work so that you can see how your adjustments are affecting the tonal range. When the Cached Data Warning icon ⚠ appears, click it to refresh the histogram's data.



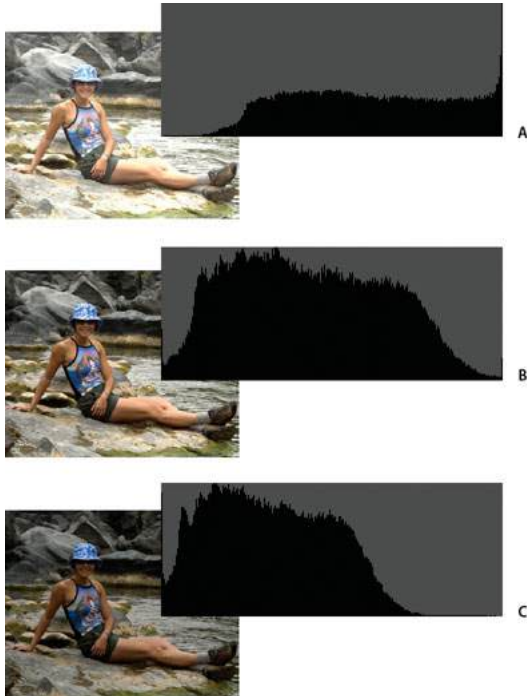
*Histogram panel*

*A Channel menu B Panel menu C Uncached Refresh button D Cache Data Warning icon E Statistics*

If many pixels are bunched up at either the shadow or highlight ends of the chart, it may indicate that image detail in the shadows or highlights may be clipped—blocked up as pure black or pure white. There is little you can do to recover this type of image. If you are working with a scanned image, you can try rescanning to produce a better tonal range. If your digital camera can display an image histogram, check it to see whether your exposure is correct and make exposure adjustments if necessary. See your camera's documentation for more information.

## Working with colors

The histogram may show that an image is not using the full tonal range available if some pixels aren't available in the shadows and highlights. You can fix an image with limited tonal range by stretching the tonal range using either the Levels command or one of the **Enhance > Auto** commands.



*How to read a histogram*

*A Overexposed photo with clipped highlights B Properly exposed photo with full tonality C Underexposed photo with clipped shadows*

## View a histogram

- 1 If the Histogram panel is not open in the Panel Bin, choose Window > Histogram.
- 2 Choose the source of the histogram's display from the Source menu:
  - Entire Image** Displays a histogram of the entire image, including all layers in the multilayered document.
  - Selected Layer** Displays a histogram of the selected layer in the Layers panel.
  - Adjustment Composite** Displays a histogram of an adjustment layer selected in the Layers panel, including all the layers below the adjustment layer.
- 3 To view the histogram for a portion of your image, make a selection in your image, and choose an option from the Channel menu:
  - RGB** Displays a histogram that is a composite of individual color channels placed on top of each other.
  - Red, Green, and Blue** Displays the histograms for the individual color channels.
  - Luminosity** Displays a histogram representing the luminance or intensity values of the composite channel.
  - Colors** Displays the composite RGB histogram individually by color. Red, green, and blue represent the pixels in those channels. Cyan, magenta, and yellow represent where the histograms of two channels overlap. Gray represents areas where all three color channel histograms overlap.

Grayscale images have a single channel option: Gray.

## Working with colors

- 4 To view the following statistical information about a range of values, drag in the histogram and hold down the mouse button to highlight the range. To view information about a specific area of the histogram, place the pointer over the area:

**Mean** Represents the average intensity value.

**Standard Deviation (Std Dev)** Represents how widely intensity values vary.

**Median** Shows the middle value in the range of intensity values.

**Pixels** Represents the total number of pixels used to calculate the histogram.

**Level** Displays the intensity level of the area underneath the pointer.

**Count** Shows the total number of pixels at the intensity level underneath the pointer.

**Percentile** Displays the percentage of pixels at and below the level underneath the pointer. This value is expressed as a percentage of all the pixels in the image, from 0% at the far left to 100% at the far right.

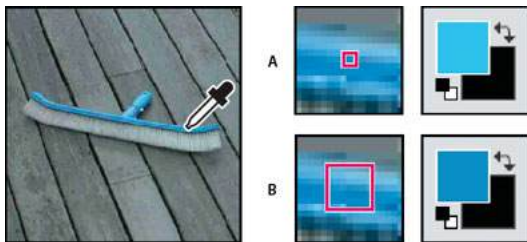
**Cache Level** Shows the setting for the image cache. If Use Cache For Histograms is selected in the Preferences dialog box, Photoshop Elements displays histograms more quickly but less accurately. To display more accurate histograms, deselect this option.

## Choose colors

### Choose a color with the Eyedropper tool

The Eyedropper tool makes it easy to copy a color without having to select a swatch. It copies, or samples, the color of an area in your photo to set a new foreground or background color. You can sample from the active image, from another open image, or from your computer's desktop.

If you want the color always to be available, you can add the sampled color to the Color Swatches panel. You can also specify the size of the area that the Eyedropper tool samples. For example, you can set the eyedropper to sample the average color values of a 5-by-5- or 3-by-3-pixel area under the pointer.



Selecting a foreground color with the eyedropper.  
A Point sample B 5 by 5 Average sample

- 1 Select the Eyedropper tool in the toolbox.
- 2 (Optional) To change the sample size of the eyedropper, choose an option from the Sample Size menu in the Tool Options bar:
  - Point Sample to get the precise value of the pixel you click.
  - 3 By 3 Average or 5 By 5 Average to get the average value of the specified number of pixels within the area you click.

## Working with colors

- 3 In the Tool Options bar, select where the color picker tool must sample from. Choose from All Layers or Current Layer.
- 4 Do one of the following to choose a color:
  - To select a new foreground color from an image, click the desired color in your image. To select a color that appears elsewhere on your computer screen, click inside your image and drag away from it.
  - To select a new background color from an image, Alt-click (Option-click in Mac OS) the color you want. As you click and drag the Eyedropper tool, the foreground color box changes.
- 5 Release the mouse button to pick the new color.

### Note:

*You can temporarily switch to the Eyedropper tool while using most painting tools, which allows you to change colors quickly without selecting another tool. Simply hold down the Alt key (Option key in Mac OS). Once you've chosen your color, release the Alt key (Option key in Mac OS).*

## Choose a color from the toolbox

- ? Do one of the following:
  - To set the foreground and background boxes to black and white, click the Default Colors icon.
  - To switch the colors in the two boxes, click the Switch Colors icon.
  - To change the foreground color, click the topmost color box in the toolbox, and then choose a color from the Color Picker.
  - To change the background color, click the bottom color box in the toolbox, and then choose a color from the Color Picker.

## Use the Color Swatches panel

The Color Swatches panel (Window > Color Swatches) is a good place to store the colors that you use often in your images. You can select a foreground or background color by clicking a color swatch in the Color Swatches panel. You can add or delete colors to create a custom swatch library, save a library of swatches, and reload them for use in another image. You can change the way thumbnails are displayed in the Color Swatches panel by choosing an option from the More menu.

Although you can add many colors to the Color Swatches panel, you should manage its size and organization to improve performance. Creating libraries can help you group related or special swatches and manage panel size.

The Photoshop Elements installation folder\Presets\Color Swatches (for Mac, Photoshop Elements installation folder\Support Files\Presets\Color Swatches) folder contains the various swatch libraries. When you create custom libraries, saving them to the Color Swatches folder makes them automatically appear in the panel libraries pop-up menu.

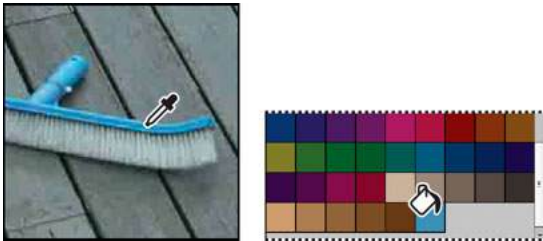
## Choose a color using the Color Swatches panel

- 1 If the Color Swatches panel is not already open, choose Window > Color Swatches.
- 2 (Optional) In the Color Swatches panel, choose a swatch library name from the Swatches menu.
- 3 Do one of the following:
  - To choose a foreground color, click a color in the panel.
  - To choose a background color, Ctrl-click (Command-click in Mac OS) a color in the panel.

### Add a color to the Color Swatches panel

If there is a color you'd like to use often, you can save the color as a swatch in the Color Swatches panel. Saved swatches are added to the library of colors in the panel. To permanently save your custom swatches, you must save the entire library.

- 1 Set the foreground color in the toolbox to the color you want to add.
- 2 Do one of the following in the Color Swatches panel:
  - Click the New Swatch button at the bottom of the panel. The color swatch is added and automatically named Color Swatch 1.
  - Choose New Swatch from the More menu.
  - Position the pointer over an empty space in the bottom row of the Color Swatches panel (the pointer turns into the Paint Bucket tool), and click to add the color.



Selecting a color with the eyedropper and adding it as a new swatch

- 3 Enter a name for the new color and click OK.
- 4 If prompted to save the swatch library, enter a new name in the Save dialog box and click Save.

### Save and use custom swatch libraries

- ? Do any of the following in the Color Swatches panel:
- To save a library of swatches, choose Save Swatches from the More menu. To make the set appear in the panel's swatch libraries pop-up menu, save the file to the Photoshop Elements\Presets\Color Swatches (For Mac, Photoshop Elements\Support Files\Presets\Color Swatches) folder.

**Note:**

*To see the new swatch set in the menu, you must restart Photoshop Elements.*

- To select and load a swatch library, choose Load Swatches from the More menu in the panel.
- To replace the current swatch library with a different library, choose Replace Swatches from the More menu in the panel and select a library.

### Reset a swatch library to its default color swatches

- 1 Choose a swatch library from the pop-up menu in the Color Swatches panel.
- 2 From the More menu in the Color Swatches panel, choose Preset Manager.
- 3 In the Preset Manager dialog box, choose Swatches from the Preset Type menu.
- 4 Choose Reset Swatches from the More menu, and confirm the action when prompted.

## Delete a color from the Color Swatches panel

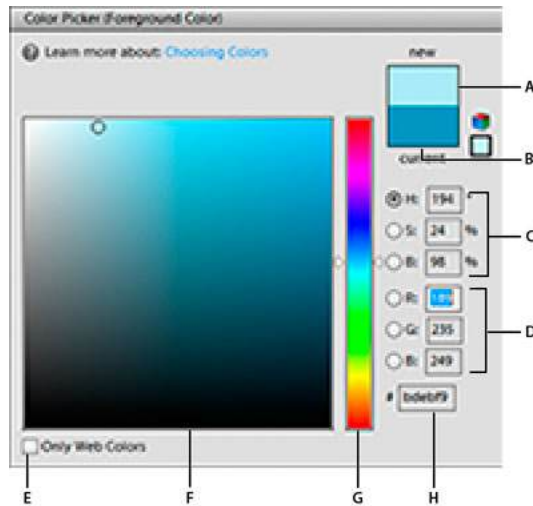
- Do one of the following:
  - Drag the color swatch to the Trash button in the panel, and click OK to confirm the deletion.
  - Press Alt (Option key in Mac OS) to change the pointer to a scissors icon, and click a color in the Color Swatches panel.
- If prompted to save the library, enter a name in the Save dialog box and click Save.

### Note:

To permanently remove swatches you delete, you must resave the library that contained them.

## Use the Adobe Color Picker

You can use the Adobe Color Picker to select the foreground or background color by choosing from a color spectrum or by defining colors numerically. In addition, you can select colors based on HSB or RGB color models, or choose to select only web-safe colors.



### Adobe Color Picker

A Adjusted color B Original color C HSB color values D RGB color values E Displays only web colors F Color field G Color slider H Hexadecimal color value

- Click the foreground or background color boxes in the toolbox to display the Color Picker.
- Click inside the color field. When you click in the color field, a circular marker indicates the color's position in the field, and the numerical values change to reflect the new color.
- Drag the white triangles along the slider to move to another color.
- Alternately, to specify a number visually, do any of the following:
  - Enter the hexadecimal value for your color in the text box under the RGB values. (Hexadecimal color values are often used by web designers.)
  - For RGB color, select a radio button and specify component values from 0 to 255 (0 is no light and 255 is the brightest light).
  - For HSB color, select a radio button and specify saturation and brightness as percentages; specify hue as an angle from 0° to 360° that corresponds to a location on the color wheel.



## Working with colors

- 5 The color rectangle to the right of the color slider displays the new color in the top section of the rectangle. The original color appears at the bottom of the rectangle.
- 6 Click OK to begin painting with the new color.

### Note:

You can select colors using your system's built-in color picker or a plug-in color picker. Choose Preferences > General and choose the color picker.

## Adjust color, saturation, and hue

### Adjust saturation and hue

The Hue/Saturation command adjusts the hue (color), saturation (purity), and lightness of the entire image or of individual color components in an image.

Use the Hue slider to add special effects, to color a black and white image (like a sepia effect), or to change the range of colors in a portion of an image.



Changing colors in an image using the Hue/Saturation command  
 A Original B Entire image changed to sepia using the Colorize option C Magenta colors targeted in the Edit menu and changed using the Hue slider

Use the Saturation slider to make colors more vivid or more muted. For example, you could add a color punch to a landscape by saturating the colors in it. Or, tone down a distracting color, like a vivid red sweater in a portrait.



Before and after adjusting color saturation

Use the Lightness slider with the other adjustments to lighten or darken a portion of an image. Take care not to use it on an entire image—this adjustment reduces the overall tonal range.

### Change color saturation or hue

1 Do one of the following:

- Choose Enhance > Adjust Color > Adjust Hue/Saturation.
- Choose Layer > New Adjustment Layer > Hue/Saturation, or open an existing Hue/Saturation adjustment layer.
- The two color bars in the dialog box represent the colors in their order on the color wheel. The upper bar shows the color before the adjustment; the lower bar shows how the adjustment affects all hues at full saturation.

2 In the Edit drop-down menu, choose which colors to adjust:

- Choose Master to adjust all colors at once.
- Choose one of the other preset color ranges listed for the color you want to adjust. An adjustment slider appears between the color bars, which you can use to edit any range of hues.

3 For Hue, enter a value or drag the slider until the colors appear as you want.

The values displayed in the text box reflect the number of degrees of rotation around the color wheel from the pixel's original color. A positive value indicates clockwise rotation, a negative value counterclockwise rotation. Values range from  $-180$  to  $+180$ .

4 For Saturation, enter a value or drag the slider to the right to increase the saturation or to the left to decrease it. Values range from  $-100$  to  $+100$ .

5 For Lightness, enter a value or drag the slider to the right to increase the lightness or to the left to decrease it. Values range from  $-100$  to  $+100$ . Be careful when using this slider on an entire image. It will reduce the tonal range of the overall image.

6 Click OK. Or, to cancel your changes and start over, hold down Alt (Option in Mac OS), and click Reset.

### Modify the range of Hue/Saturation sliders

1 Do one of the following:

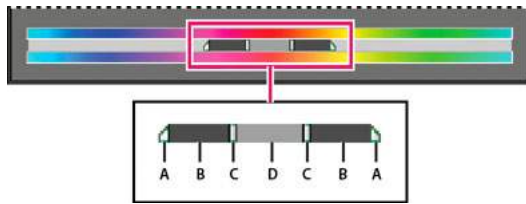
- Choose Enhance > Adjust Color > Adjust Hue/Saturation.
- Choose Layer > New Adjustment Layer > Hue/Saturation, or open an existing Hue/Saturation adjustment layer.

2 Choose an individual color from the Edit menu.

3 Do any of the following to the adjustment slider:

- Drag one of the triangles to adjust the amount of color fall-off without affecting the range.
- Drag one of the gray bars to adjust the range without affecting the amount of color fall-off.
- Drag the gray center part to move the entire adjustment slider, selecting a different color area.
- Drag one of the vertical white bars next to the dark gray center part to adjust the range of the color component. Increasing the range decreases the color fall-off, and vice versa.
- To move the color bar and the adjustment slider bar together, Ctrl-drag (Command-drag in Mac OS) the color bar.

## Working with colors



*Adjustment slider*

*A Adjusts color fall-off without affecting range B Adjusts range without affecting color fall-off C Adjusts the range of color component D Moves entire slider*

- If you modify the adjustment slider so that it falls into a different color range, the name changes to reflect this. For example, if you choose Yellow and alter its range so that it falls in the red part of the color bar, the name changes to Red 2. You can convert up to six of the individual color ranges to varieties of the same color range (for example, Red 1 through Red 6).

### **Note:**

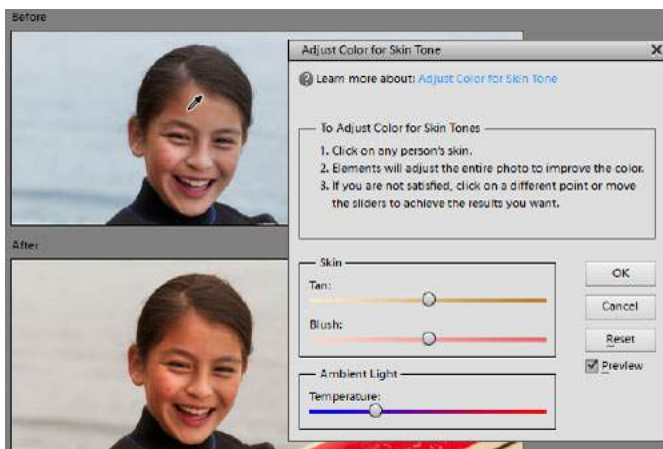
*By default, the color range selected when you choose a color component is 30° wide, with 30° color fall-off on either side. Setting the fall-off too low can produce banding in the image.*

- 4 To edit the range by choosing colors from the image, select the color picker, and click the image. Use the color picker + tool to add to the range; use the color picker – tool to subtract from the range.

While the color picker tool is selected, you can also press Shift to add to the range or press Alt (Option in Mac OS) to subtract from it.

## Adjust the color of skin tone

The Adjust Color For Skin Tone command adjusts the overall color in a photo to bring out more natural skin tones. When you click an area of skin in the photo, Photoshop Elements adjusts the skin tone—as well as all other colors in the photo. You can manually adjust the brown and red colors separately to achieve the final color you want.



*Original (top), and after adjusting skin tone (bottom)*

- 1 Open the photo and select the layer that needs correction.
- 2 Choose Enhance > Adjust Color > Adjust Color For Skin Tone.
- 3 Click an area of skin.

## Working with colors

Photoshop Elements automatically adjusts the colors in the image. Changes might be subtle.

### Note:

*Make sure Preview is selected so that you can see the color changes as they occur.*

- 4 (Optional) Drag any of the following sliders to fine-tune the correction:

**Tan** Increases or decreases the level of brown in skin tones.

**Blush** Increases or decreases the level of red in skin tones.

**Temperature** Changes the overall color of skin tones.

- 5 When you're finished, click OK. Or, to cancel your changes and start over, click Reset.

## Adjust saturation in isolated areas

The Sponge tool changes the color saturation of an area.



*Increasing saturation by scrubbing with the Sponge tool*

- 1 Select the Sponge tool.
- 2 Set tool options in the options bar:
  - Mode** Increases or decreases color saturation. Choose Saturate to intensify the color's saturation. In grayscale, Saturate increases contrast. Choose Desaturate to dilute the color's saturation. In grayscale, Desaturate decreases contrast.
  - Brush** Sets the brush tip. Click the arrow next to the brush sample, choose a brush category from the Brushes pop-up menu, and then select a brush thumbnail.
  - Size** Sets the size of the brush, in pixels. Drag the Size slider or enter a size in the text box.
  - Flow** Sets the rate of saturation change. Drag the Flow pop-up slider or enter a value in the text box.
- 3 Drag over the part of the image you want to modify.

## Change the color of an object

The Replace Color command replaces a specific color in an image. You can set the hue, saturation, and lightness of the replacement color.

- 1 Choose Enhance > Adjust Color > Replace Color.
- 2 Select a display option under the image thumbnail:
  - Selection** Displays the mask, which looks like a black and white version of the image, in the preview box.

## Working with colors

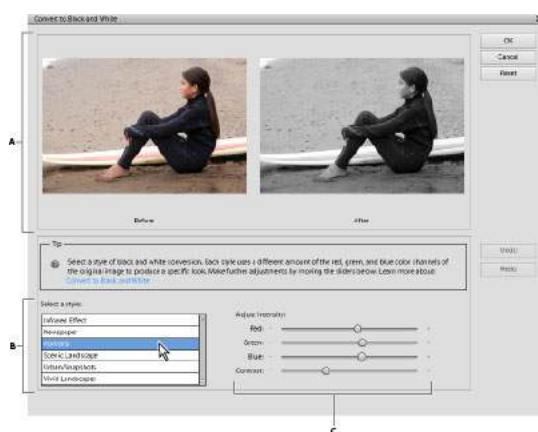
**Image** Displays the image in the preview box. This option is useful when you are working with a magnified image or have limited screen space.

- 3 Click the color picker button, and then click the color you want to change in the image or in the preview box. Use the color picker + tool to add colors, or use the color picker – tool to remove colors to keep them from changing.
- 4 Drag the Fuzziness slider to control the degree to which related colors are included in the selection.
- 5 Do one of the following to specify a new color:
  - Drag the Hue, Saturation, and Lightness sliders (or enter values in the text boxes).
  - Click the Results box and specify a new color in the Color Picker, then click OK.
- 6 To cancel your changes and start over, hold down Alt (Option in Mac OS), and click Reset.

## Precisely convert to black and white

The Convert To Black And White command lets you choose a specific conversion style to be applied to the image. This is unlike the Remove Color command, which automatically converts to black and white for you.

In the Convert To Black And White dialog box, the available image styles help you compare and choose from different conversion presets. Select a style and then use the available sliders to fine-tune the conversion.



*Convert to black and white*

*A Displays Before and After views B Select a style C Adjust intensity*

- 1 Open an image, and select an area or layer to convert. If you do not select an area or layer, the entire image is converted.



*To experiment with black and white conversion while preserving the original photo, convert a duplicate layer.*

- 2 Choose Enhance > Convert To Black And White.
- 3 Select a style option that reflects the content of your image (for example, Portraits or Scenic Landscape).
- 4 Drag the Adjustment Intensity sliders to adjust red, green, blue, or contrast.

### **Note:**

*The Adjustment Intensity sliders for red, green, and blue don't colorize your image; they simply include more or less data from the original color channels in the new black and white image.*

- 5 To convert your image, click OK. Or, to cancel your changes and start over, click Reset. To close the Convert To Black And White dialog box, click Cancel.

## Automatically convert to black and white

The Remove Color command converts to black and white by assigning equal red, green, and blue values to each pixel in an RGB image. The overall brightness of each pixel remains constant. This command has the same effect as setting Saturation to -100 in the Hue/Saturation dialog box.

- 1 To adjust a specific image area, select it with one of the selection tools. If no selection is made, the adjustment applies to the entire image.
- 2 Choose Enhance > Adjust Color > Remove Color.

## Add custom presets for black and white conversion

You can manually add custom presets to the black and white converter by editing a specific text file.

### Note:

*Adding custom presets for conversion to black and white is a task for advanced users.*

- 1 Close the Photoshop Elements, and navigate to the folder that contains the bwconvert.txt file:
  - Windows: [Photoshop Elements installation directory]\Required\bwconvert.txt
  - Mac OS: /Applications/Adobe Photoshop Elements/Support Files/Adobe Photoshop Elements Editor.app/Contents/Required/bwconvert.txt. Command-click Adobe Photoshop Elements and select Show Package Contents. Navigate to the folder Contents/Required.
- 2 Open the bwconvert.txt file in a plain text editor (such as Notepad).
- 3 Following the same naming convention as the presets already in the file, add your new preset and give it a unique name.
- 4 Save the file (keeping the original filename).
- 5 Start the Photoshop Elements and choose Enhance > Convert To Black And White to view the presets.

## Add color to a grayscale image

You can colorize an entire grayscale image, or select areas to colorize with different colors. For example, you can select a person's hair and color it brown, and then add pink to the person's cheeks after making another selection.

### Note:

*If the image you are coloring is in grayscale mode, convert it into RGB by choosing Image > Mode > RGB Color.*

- 1 Choose Enhance > Adjust Color > Adjust Hue/Saturation, or Layer > New Adjustment Layer > Hue/Saturation to work on an adjustment layer.
- 2 Select Colorize. If the foreground color isn't black or white, Photoshop Elements converts the image into the hue of the current foreground color. The lightness value of each pixel does not change.
- 3 Use the Hue slider to select a new color if desired. Use the Saturation slider to adjust the saturation. Then click OK.

## Fix color casts

### Remove a color cast automatically

A *color cast* is an unpleasant color shift in a photo. For example, a photo taken indoors without a camera flash may have too much yellow. The Remove Color Cast command changes the overall mixture of colors to remove color casts from an image.



Original (left), and after removing the green color cast (right)

- 1 Choose Enhance > Adjust Color > Remove Color Cast.
- 2 In your image, click an area that should be white, black, or neutral gray. The image changes based on the color you selected.
- 3 To start over and undo the changes made to the image, click Reset.
- 4 Click OK to accept the color change.

### Remove a color cast using Levels

This technique requires color correction experience and some knowledge of the RGB color wheel.

- 1 Do one of the following:
  - Choose Enhance > Adjust Lighting > Levels.
  - Choose Layer > New Adjustment Layer > Levels, or open an existing Levels adjustment layer.
- 2 Choose a color channel to adjust from the Channel pop-up menu:
  - Red to add red or cyan to the image.
  - Green to add green or magenta to the image.
  - Blue to add blue or yellow to the image.
- 3 Drag the middle input slider left or right to add or subtract color.
- 4 Click OK when you are satisfied with the overall color.

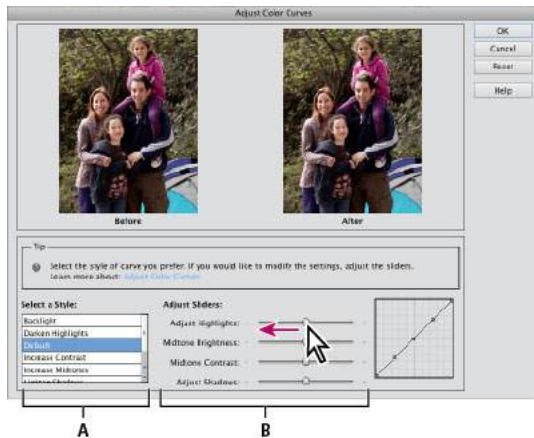


*You can use the gray color picker in the Levels dialog box to quickly remove a color cast. Double-click the color picker and make sure that the RGB values are equal. After you close the Color Picker, click an area in your image that should be a neutral gray.*

## Adjust color curves

The Adjust Color Curves command improves color tones in a photo by adjusting highlights, midtones, and shadows in each color channel. For example, this command can fix photos with silhouetted images resulting from strong backlighting, or slightly washed-out objects that were too close to the camera's flash.

In the Adjust Color Curves dialog box, you can compare and choose different tonal presets. Select from the list of styles in the Select A Style box. To fine-tune the adjustment, adjust the highlights, midtone brightness and contrast, and shadows.



Adjusting color curves in an image

A Select a Style (choose from presets) B Adjust Sliders (custom options)

- 1 In Photoshop Elements, open an image.
- 2 To adjust a specific image area or layer, select it with one of the selection tools. (If no selection is made, the adjustment applies to the entire image.)



*To preserve the original photo while experimenting with tonal adjustments, adjust the color curves in a duplicate layer.*

- 3 Choose Enhance > Adjust Color > Adjust Color Curves.
- 4 Select a style (for example, Backlight or Solarize).
- 5 Adjust the sliders for Highlights, Midtone Brightness, Midtone Contrast, and Shadows.
- 6 To apply the adjustment to your image, click OK. To cancel the adjustment and start over, click Reset. To close the Adjust Color Curves dialog box, click Cancel.

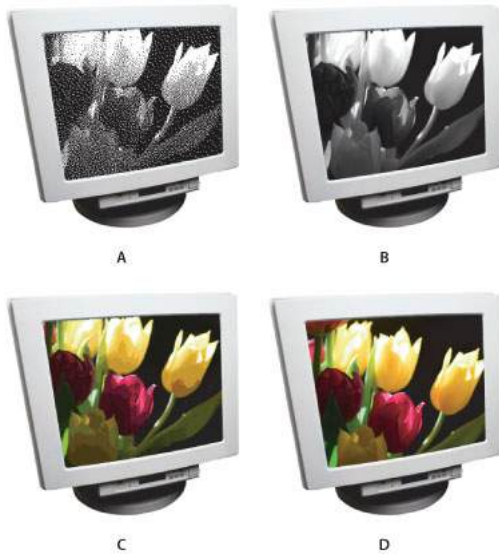
## Using image modes and color tables

### About image modes

An image mode determines the number of colors that can be displayed in an image and can also affect the file size of the image. Photoshop Elements provides four image modes: RGB, bitmap, grayscale, and indexed color.



## Working with colors



*Image modes*

*A Bitmap mode B Grayscale mode C Indexed-color mode D RGB mode*

**Bitmap mode** Uses one of two color values (black or white) to represent the pixels in an image. Images in bitmap mode are called 1-bit images because they have a bit depth of 1.

**Grayscale mode** Uses up to 256 shades of gray. Grayscale images are 8-bit images. Every pixel in a grayscale image has a brightness value ranging from 0 (black) to 255 (white). Grayscale values can also be measured as percentages of black ink coverage (0% is equal to white, 100% to black).

**Indexed Color mode** Uses up to 256 colors. Indexed-color images are 8-bit images. When converting into indexed color, Photoshop Elements builds a color lookup table (CLUT), which stores and indexes the colors in the image. If a color in the original image does not appear in the table, the program chooses the closest one or simulates the color using available colors. By limiting the panel of colors, indexed color can reduce file size while maintaining visual quality—for example, for a web page. Limited editing is available in this mode. For extensive editing, you should convert temporarily into RGB mode.

When you choose a different color mode for an image in the Edit workspace (Image > Mode > [image mode]), you permanently change the color values in the image. You might want to convert into a different mode for several reasons. For example, you may have an old scanned photo in grayscale mode in which you want to add color, so you would need to convert it into RGB mode. Before converting images, it's best to do the following:

- Edit as much as possible in RGB mode.
- Save a backup copy before converting. Be sure to save a copy of your image that includes all layers in order to edit the original version of the image after the conversion.
- Flatten the file before converting it. The interaction of colors between layer blending modes will change when the mode changes.

**Note:**

*Hidden layers are discarded and images are flattened automatically when you convert them into bitmap or indexed-color mode, because these modes do not support layers.*

**RGB Color mode** The default mode of new Photoshop Elements images and images from your digital camera. In RGB mode, the red, green, and blue components are each assigned an intensity value for every pixel—ranging from 0 (black) to 255 (white). For example, a bright red color might have an R value of 246, a G value of 20, and a B value of 50. When

the values of all three components are equal, the result is a shade of neutral gray. When the value of all components is 255, the result is pure white; when the value is 0, the result is pure black.

## Convert an image to bitmap mode

To convert an image to bitmap mode, you must first convert it to grayscale mode, simplifying the color information in the image and reducing its file size. Converting to grayscale removes the hue and saturation information from the pixels and leaves just the brightness values. However, because few editing options are available for bitmap-mode images, it's usually best to edit the image in grayscale mode and then convert it.

- 1 Choose Image > Mode > Bitmap.
- 2 If the image is RGB, click OK to convert it to grayscale.
- 3 For Output, enter a value for the output resolution of the bitmap-mode image, and choose a unit of measurement. By default, the current image resolution appears as both the input and the output resolutions.
- 4 Select one of the following bitmap conversion methods, and click OK:

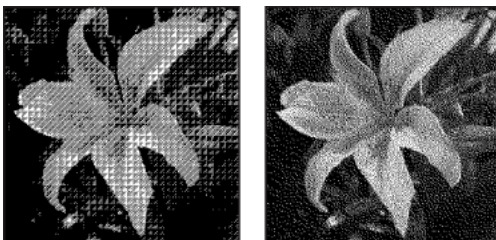
**50% Threshold** Converts pixels with gray values above the middle gray level (128) to white, and those below to black. The result is a very high-contrast, black-and-white representation of the image.



*Original grayscale image (left) and 50% Threshold conversion method applied (right).*

**Pattern Dither** Converts an image by organizing the gray levels into geometric configurations of black and white dots.

**Diffusion Dither** Converts an image by using an error-diffusion process, starting at the pixel in the upper-left corner of the image. If the pixel's value is above middle gray (128), the pixel is changed to white—if it's below middle gray, it's changed to black. Because the original pixel is rarely pure white or pure black, error is inevitably introduced. This error is transferred to surrounding pixels and diffused throughout the image, resulting in a grainy, film-like texture. This option is useful for viewing images on a black-and-white screen.



*Pattern Dither and Diffusion Dither conversion methods*

## Convert a bitmap-mode image to grayscale

Before converting, keep in mind that a bitmap-mode image edited in grayscale mode may not look the same when converted back to bitmap mode. For example, consider a pixel that is black in bitmap mode and then edited to a shade of gray in grayscale mode. If the gray value of the pixel is light enough, it will become white when converted back to bitmap mode.

- 1 Choose Image > Mode > Grayscale.
- 2 Enter a value from 1 to 16 for the size ratio.

The size ratio is the factor for scaling down the image. For example, to reduce a grayscale image by 50%, enter 2 for the size ratio. If you enter a number greater than 1, the program averages multiple pixels in the bitmap-mode image to produce a single pixel in the grayscale image. This process lets you generate multiple shades of gray from an image scanned on a 1-bit scanner.

## Convert an image to indexed color

Converting to indexed color reduces the number of colors in the image to a maximum of 256—the standard number of colors supported by the GIF and PNG-8 formats and many web browsers. This conversion reduces file size by deleting color information from the image.

### *Note:*

*To convert to indexed color, you must start with either a grayscale or an RGB image.*

- 1 Choose Image > Mode > Indexed Color.
- 2 Click OK to flatten layers.

### *Note:*

*This will flatten all visible layers and discard hidden layers.*

For grayscale images, the conversion happens automatically. For RGB images, the Indexed Color dialog box appears.

- 3 Select Preview in the Indexed Color dialog box to display a preview of the changes.
- 4 Specify any of the following conversion options and click OK.

**Palette** Specifies the color palette to apply to the indexed-color image. There are 10 color palettes available:

**Exact** Creates a panel using the exact colors that appear in the RGB image—an option available only if the image uses 256 or fewer colors. Because the image's panel contains all of the colors in the image, there is no dithering.

**System (Mac OS)** Uses the Mac OS default 8-bit panel, which is based on a uniform sampling of RGB colors.

**System (Windows)** Uses the Windows system's default 8-bit panel, which is based on a uniform sampling of RGB colors.

**Web** Uses the 216 colors that web browsers, regardless of platform, use to display images on a monitor limited to 256 colors. Use this option to avoid browser dither when images are viewed on a monitor display limited to 256 colors.

**Uniform** Creates a panel by uniformly sampling colors from the RGB color cube. For example, if Photoshop Elements takes 6 evenly spaced color levels, each of red, green, and blue, the combination produces a uniform panel of 216 colors ( $6 \times 6 \times 6 = 216$ ). The total number of colors displayed in an image corresponds to the nearest perfect cube (8, 27, 64, 125, or 216) that is less than the value in the Colors text box.

**Local or Master Perceptual** Creates a custom panel by giving priority to colors to which the human eye has greater sensitivity. Local Perceptual applies the panel to individual images; Master Perceptual applies the selected panel to multiple images (for example, for multimedia production).

**Local or Master Selective** Creates a color table similar to the Perceptual color table, but favoring broad areas of color and the preservation of web colors. This option usually produces images with the greatest color integrity. Local Selective applies the panel to individual images; Master Selective applies the selected panel to multiple images (for example, for multimedia production).

**Local or Master Adaptive** Creates a panel by sampling the colors from the spectrum appearing most often in the image. For example, an RGB image with only the colors green and blue produces a panel made primarily of greens and blues. Most images concentrate colors in particular areas of the spectrum. To control a panel more precisely, first select a part of the image that contains the colors you want to emphasize. Photoshop Elements weights the conversion toward these colors. Local Adaptive applies the panel to individual images; Master Adaptive applies the selected panel to multiple images (for example, for multimedia production).

**Custom** Creates a custom panel by using the Color Table dialog box. Either edit the color table and save it for later use, or click Load to load a previously created color table. This option also displays the current Adaptive panel, which is useful for previewing the colors most often used in the image.

**Previous** Uses the custom panel from the previous conversion, making it easy to convert several images with the same custom panel.

**Colors** Specifies the number of colors to include in the color table (up to 256) for Uniform, Perceptual, Selective, or Adaptive panels.

**Forced** Provides options to force the inclusion of certain colors in the color table. Black And White adds a pure black and a pure white to the color table; Primaries adds red, green, blue, cyan, magenta, yellow, black, and white; Web adds the 216 web-safe colors; and Custom lets you define custom colors to add.

**Transparency** Specifies whether to preserve transparent areas of the image during conversion. Selecting this option adds a special index entry in the color table for a transparent color. Deselecting this option fills transparent areas with the matte color, or with white if no matte color is chosen.

**Matte** Specifies the background color used to fill anti-aliased edges that lie adjacent to transparent areas of the image. With Transparency selected, the matte is applied to edge areas to help blend the edges into a web background of the same color. With Transparency deselected, the matte is applied to transparent areas. Choosing None for the matte creates hard-edged transparency, if Transparency is selected; otherwise, all transparent areas are filled with 100% white.

**Dither** Specifies whether to use a dither pattern or not. Unless you're using the Exact color table option, the color table may not contain all the colors used in the image. To simulate colors not in the color table, you can dither the colors. Dithering mixes the pixels of the available colors to simulate the missing colors.

**None** Does not dither colors but, instead, uses the color closest to the missing color. This tends to result in sharp transitions between shades of color in the image, creating a posterized effect.

**Diffusion** Uses an error-diffusion method that produces a less structured dither than the Pattern option. To protect colors in the image that contain entries in the color table from being dithered, select Preserve Exact Colors. This is useful for preserving fine lines and text for web images.

**Pattern** Uses a halftone-like square pattern to simulate any colors not in the color table.

**Noise** Helps to reduce seam patterns along the edges.

**Amount** Specifies the percentage of image colors to dither. A higher amount dithers more colors, but may increase file size.

**Preserve Exact Colors** Prevents colors in the image that are in the color table from being dithered.

## Edit colors in an indexed-color table

You can edit colors in the color table to produce special effects, or assign transparency in the image to a single color in the table.

- 1 Open the indexed-color image in Photoshop Elements.
- 2 Choose Image > Mode > Color Table.
- 3 Click or drag within the table to choose the color or range of colors you want to change.
- 4 Choose a color from the Color Picker or sample a color from the image.

If you are changing a range of colors, Photoshop Elements creates a gradient in the color table between the starting and ending colors. The first color you choose in the Color Picker is the beginning color in the range. When you click OK, the Color Picker reappears, so that you can choose the last color in the range.

The colors you selected in the Color Picker are placed in the range you selected in the Color Table dialog box.

- 5 Click Preview to view the results of the changes you have made to the image.
- 6 Click OK in the Color Table dialog box to apply the new colors to the indexed-color image.

## Assign transparency to a single color in an indexed-color table

- 1 Choose Image > Mode > Color Table.
- 2 Select the eyedropper, and click the desired color in the table or in the image. The sampled color is replaced with transparency in the image. Click OK.

## Use a predefined indexed-color table

- 1 Choose Image > Mode > Color Table.
- 2 Select an option from the Table menu:
  - Black Body** Displays a panel based on the different colors a black body radiator emits as it is heated—from black to red, orange, yellow, and white.
  - Grayscale** Displays a panel based on 256 levels of gray—from black to white.
  - Spectrum** Displays a panel based on the colors produced as white light passes through a prism—from violet, blue, and green to yellow, orange, and red.
  - System** Displays the standard 256-color system panel for Mac OS or Windows.

## Save or load an indexed-color table

- To save a table, click the Save button in the Color Table dialog box.
- To load a table, click the Load button in the Color Table dialog box. After you load a color table into an image, the colors in the image change to reflect the color positions they reference in the new color table.

### Note:

*You can also load saved color tables into the Color Swatches panel.*

## Color and camera raw

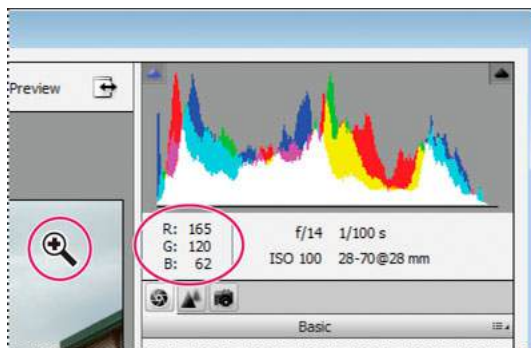
In the Camera Raw dialog, you can perform preliminary adjustments and modifications to a raw image before editing it in Photoshop Elements. With the Preview option enabled, you can see how the modified image appears.

The options available include sliders to modify the attributes of the image. For example, you can change the exposure, brightness, clarity, and saturation and vibrance. The number of options available to modify the image also depends on the Process Version used. For example, some sliders like Shadows and Whites that appear while using Process Version 2012 do not appear when Process Version 2010 is used. Likewise, the Fill Light slider that appears when Process Version 2010 is used does not appear when Process Version 2012 is used.

### Using the histogram and RGB values in camera raw

The Camera Raw histogram shows all three channels (red, green, and blue) of the image simultaneously. The histogram changes automatically as you adjust the settings in the Camera Raw dialog box.

As you move the Zoom tool, Hand tool, or White Balance tool over the preview image, you see the RGB values in the upper-right corner of the dialog box.



RGB values of an image

### White balance controls for camera raw

A digital camera records the white balance at the time of exposure as metadata, which you can see when you open the file in the Camera Raw dialog box. This setting usually yields the correct color temperature. You can adjust it if the white balance is not quite right.

The Adjust tab in the Photoshop Camera Raw dialog box includes the following three controls for correcting a color cast in your image:

**White Balance** Sets the color balance of the image to reflect the lighting conditions under which the photo was taken. In some cases, choosing a white balance from the White Balance menu provides satisfactory results. In many cases, you may want to customize the white balance using the Temperature and Tint adjustments.

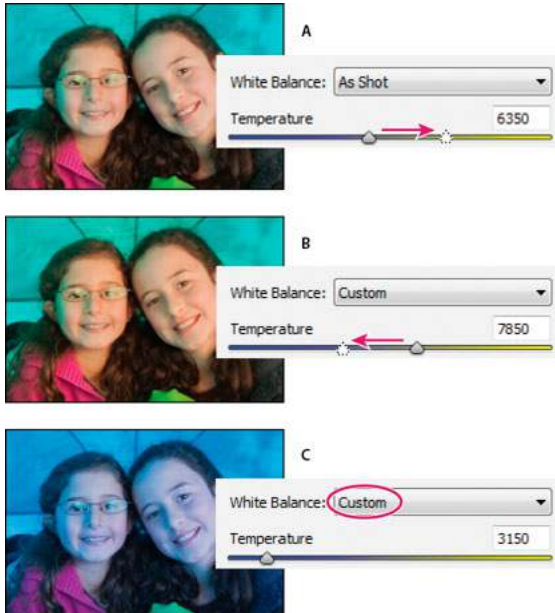
**Note:**

*The Camera Raw plug-in can read the white balance settings of some cameras. Leave White Balance set to As Shot to use the camera's white balance settings. For cameras whose white balance settings are not recognized, selecting As Shot is the same as choosing Auto: the Camera Raw plug-in reads the image data and automatically adjusts the white balance.*

**Temperature** Fine-tunes the white balance to a custom color temperature. Set the color temperature using the Kelvin color temperature scale. Move the slider to the left to correct a photo taken at a lower color temperature of light: the plug-in makes the image colors cooler (bluish) to compensate for the lower color temperature (yellowish) of the


## Working with colors

ambient light. Conversely, move the slider to the right to correct a photo taken at a higher color temperature of light: the plug-in makes the image colors warmer (yellowish) to compensate for the higher color temperature (bluish) of the ambient light.



*A Moving the Temperature slider to the right corrects a photo taken at a higher color temperature of light. B Moving the Temperature slider to the left corrects a photo taken at a lower color temperature of light. C Photo after the color temperature has been adjusted.*

**Tint** Fine-tunes the white balance to compensate for a green or magenta tint. Move the slider to the left (negative values) to add green to the photo; move it to the right (positive values) to add magenta.

 **Tip:** To adjust the white balance quickly, select the White Balance tool, and then click an area in the preview image that should be a neutral gray or white. The Temperature and Tint sliders automatically adjust to make the selected color exactly neutral (if possible). If you're clicking whites, choose a highlight area that contains significant white detail rather than a specular highlight.




*Using White Balance to click a neutral white area, and resulting correction*

## Tonal and image adjustments in camera raw files

**Exposure** Adjusts the brightness or darkness of an image. Move the slider to the left to darken the image; move it to the right to brighten the image. The values are in increments equivalent to f-stops. An adjustment of +1.50 is similar to

## Working with colors

widening the aperture one and one-half stops. Likewise, an adjustment of -1.50 is similar to reducing the aperture one and one-half stops.

 **Tip:** Hold down Alt (Option key in Mac) while moving the Exposure slider to preview where the highlights are clipped. (Clipping is the shifting of pixel values to either the highest highlight value or the lowest shadow value. Clipped areas are either completely white or completely black and have no image detail.) Move the slider until the highlights (not specular highlights) are completely clipped, and then reverse the adjustment slightly. Black indicates unclipped areas, and color indicates areas clipped in only one or two channels.



Hold down Alt (Option key in Mac) while moving the Exposure slider to show clipped highlights.

**Contrast** Adjusts the midtones in an image. Higher values increase the midtone contrast, and lower values produce an image with less contrast. Generally, use the Contrast slider to adjust the contrast of the midtones after setting the Exposure, Shadow, and Brightness values.

**Recovery** Attempts to recover details from highlights. Camera Raw can reconstruct some details from areas in which one or two color channels are clipped to white.

**Highlights** Recovers detail in overexposed highlight areas of an image.

**Shadows** Recovers detail in underexposed shadow areas of an image.

**Whites** Adjusts the highlights in an image.

**Blacks** Adjusts the shadows and underexposed areas in an image.

**Clarity** Sharpens the clarity of edges in the image. This process helps restore detail and sharpness that tonal adjustments may reduce.

**Vibrance** Adjusts the saturation so that clipping is minimized as colors approach full saturation, changing the saturation of all lower-saturated colors with less impact on the higher-saturated colors. Vibrance also prevents skin tones from becoming oversaturated.

**Saturation** Adjusts the color saturation of the image from -100 (pure monochrome) to +100 (double the saturation).

**Fill Light** Attempts to recover details from shadows, without brightening blacks. Camera Raw can reconstruct some details from areas in which one or two color channels are clipped to black. Using Fill Light is similar to using the shadows portion of the Photoshop Shadow/Highlight filter or the *After Effects* Shadow/Highlight effect.

**Blacks** Specifies which input levels are mapped to black in the final image. Increasing Blacks expands the areas that are mapped to black. This sometimes creates the appearance of increased contrast in the image. The greatest change is in the shadows, with less change in the midtones and highlights. Using the Blacks slider is similar to using the black point slider for input levels when using the Photoshop Levels command or the *After Effects* Levels effect.



## Working with colors

**Brightness** Adjusts the brightness of the image, much as the Exposure slider does. Brightness compresses the highlights and expands the shadows when you move the slider to the right. Brightness does not clip image highlights (areas that are completely white, with no detail) or shadows (areas that are completely black, with no detail). In general, use the Brightness slider to adjust the overall brightness after you set the white and black clipping points with the Exposure and Shadow sliders.

**Sharpening** Sharpening enhances the definition of edges in an image. Additional controls are available in the Detail panel. To view the effects of these controls, set the zoom level to 100% or greater.

- **Amount:** Adjusts edge definition. Increase the Amount value to increase sharpening. A value of zero turns off sharpening. In general, set Amount to a lower value for cleaner images. The adjustment locates pixels that differ from surrounding pixels based on the threshold you specify and increases the pixels' contrast by the amount you specify.
- **Radius:** Adjusts the size of the details that sharpening is applied to. Photos with fine details may need a lower radius setting. Photos with larger details may be able to use a larger radius. Using too large a radius generally results in unnatural results.
- **Detail:** Adjusts how much high-frequency information is sharpened in the image and how much the sharpening process emphasizes edges. Lower settings primarily sharpen edges to remove blur. Higher values are useful for making the textures in the image more pronounced.
- **Masking:** Controls an edge mask. At a setting of zero, everything in the image receives the same amount of sharpening. At a setting of 100, sharpening is mostly restricted to areas near the strongest edges.

**Noise Reduction** Adjusts the color saturation of the image from -100 (pure monochrome) to +100 (double the saturation).

- **Luminance:** Adjusts grayscale noise.
- **Luminance Detail:** Controls the luminance noise threshold. Useful for noisy photos. Higher values preserve more detail but can produce noisier results. Lower values produce cleaner results but also remove some detail.
- **Luminance Contrast:** Controls the luminance contrast. Useful for noisy photos. Higher values preserve contrast but can produce noisy blotches or mottling. Lower values produce smoother results but can also have less contrast.
- **Color:** Adjusts chroma noise.
- **Color Detail:** Controls the color noise threshold. Higher values protect thin, detailed color edges but can result in color specking. Lower values remove color speckles but can result in color bleeding.
- **Color Smoothness:** Controls the color mottling. Higher value removes color mottling.

**Camera Profile** Chooses the Adobe Camera Raw (ACR) profile. For more information, see [Adjust color rendering for your camera in Camera Raw](#).

# Chapter 7: Working with selections

## Make selections in Photoshop Elements

A selection is an area of a photo that you define. When you create a selection, the area is editable (for example, you can lighten one part of a photo without affecting the rest). You can make a selection with either a selection tool or a selection command. A selection border, which you can hide, surrounds the selection. You can change, copy, or delete pixels inside the selection border, but you can't touch areas outside the selection border until you deselect the selection.

Adobe Photoshop Elements provides selection tools for different kinds of selections. For example, the Elliptical Marquee tool selects circular and elliptical areas, and the Magic Wand tool can select an area of similar colors with one click. More complex selections can be made with one of the Lasso tools. You can even smooth the edges of a selection with feathering and anti-aliasing.

### **Note:**

*Selections are limited to the active layer. To make changes to all layers at once, you need to first flatten the image.*



*Selection made with Elliptical Marquee tool, color adjusted in selected area*

## Quickly select a person or thing in your photo

### **Automatically select a subject**

Now you can automatically select the main subject in your photo with just one click. Photoshop Elements uses Adobe Sensei AI technology\* to identify a variety of subjects, including people, pets, animals, vehicles, and toys.

## Working with selections

To access the **Select Subject** option:

- 1 In the **Quick** or **Expert** workspace, open a photo.



- 2 Choose **Select > Subject**.

- 3 Allow Photoshop Elements a few seconds to automatically select the most prominent subject(s) in your photo. The selection is visible with a moving, dotted line.





### Note:

You can also do the following to automatically select the subject:

- Press Option+Command+S (macOS)/Alt+Ctrl+S (Win)
- Choose one of these tools from the toolbar: Quick Selection, Selection brush, Magic Wand, Refine Selection, or Auto Selection. Click **Tool Options** and click the **Select Subject** button.
- In the Guided workspace, click the **Special Edits** tab and choose **Replace Background**. In the first step of this Guided Edit, click the **Select Subject** button.

## Working with selections

### Refine the automatic selection

In **Tool Options**, select one of the Selection Brushes and click **Add to selection**  or **Subtract from selection**  to edit the selection. You can also choose **Select > Refine Edge** to refine the selection.

### Use selection tools

The selection tools are located in the Tools panel, which is located, by default, on the left side of your screen.

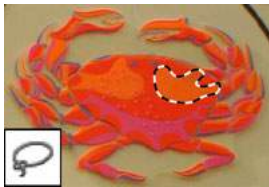
In Photoshop Elements, you must be in Expert mode to see the selection tools.



Use the [Rectangular and Elliptical Marquee tools](#): Draws square or rectangular selection borders.



Use the [Rectangular and Elliptical Marquee tools](#): Draws round or elliptical selection borders.



Use the [Lasso tool](#): Draws freehand selection borders, best for precision.



Use the [Polygonal Lasso tool](#): Draws multiple straight-edged segments of a selection border.

## Working with selections



Use the [Magnetic Lasso tool](#): Draws a selection border that automatically snaps to edges when you drag over in the photo.



Use the [Magic Wand tool](#): Selects pixels of similar color with one click



Use the [Quick Selection tool](#): Quickly and automatically makes selection based on color and texture when you click or click-drag an area.



Use the [Selection Brush tool](#): Automatically selects or deselects the area you paint, depending on whether you're in Selection or Mask mode.



Use the [Refine Selection Brush tool](#):

Helps you add or remove areas to and from a selection.

## Working with selections



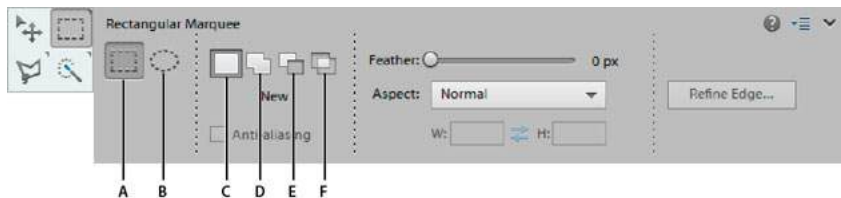
Use the [Auto Selection tool](#): Automatically makes a selection when you draw a shape around an object.



Apply the [Smart Brush tools](#): Applies color and tonal adjustments and effects to a selection. The tool automatically creates an adjustment layer for non-destructive editing.

## Use the Rectangular and Elliptical Marquee tools

The Rectangular Marquee tool draws square or rectangular selection borders, and the Elliptical Marquee tool draws round or elliptical selection borders.



*Rectangular and Elliptical Marquee tool options*

*A Rectangular Marquee tool B Elliptical Marquee tool C New selection D Add to selection E Subtract from selection F Intersect with selection*

- 1 Select the Rectangular Marquee tool (**A**) or the Elliptical Marquee tool (**B**) in the toolbox.
- 2 (Optional) Set marquee tool options in the Tool Options bar:
  - Specify whether to create a new selection, add to a selection, subtract from a selection, or select an area intersected by other selections.
  - To soften the selection border so that it blends into the area outside the selection, enter a Feather value.
  - To smooth the edges of your selection, select Anti-aliased (Elliptical Marquee tool only).
  - From the Mode pop-up menu, choose Normal to visually set the size and proportions of the selection border; Fixed Ratio to set a width-to-height ratio for the selection border; or Fixed Size to specify the marquee's height and width.
- 3 Drag over the area you want to select. Hold down the Shift key as you drag to constrain the selection marquee to a square or circle.



*To drag a marquee from the center, hold down Alt (Windows) or Option (Mac OS) after you begin dragging.*

## Working with selections

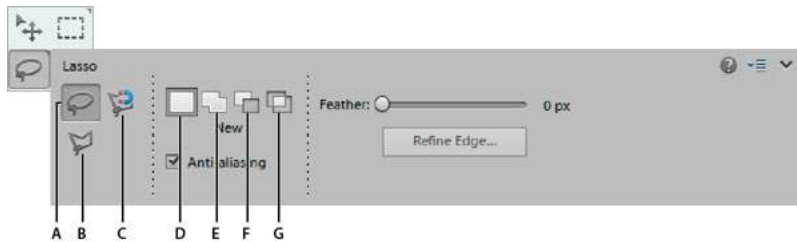


To reposition a marquee tool selection border, hold down the spacebar as you drag with the selection tool. Release the spacebar once the selection border is in the correct area.

- Click Refine Edge to make further adjustments to your selection and make it more precise. See how you can [Refine edges of a selection](#).



## Use the Lasso tool

The Lasso tool draws freehand selection borders. This tool lets you make very precise selections.



*Lasso tool options*

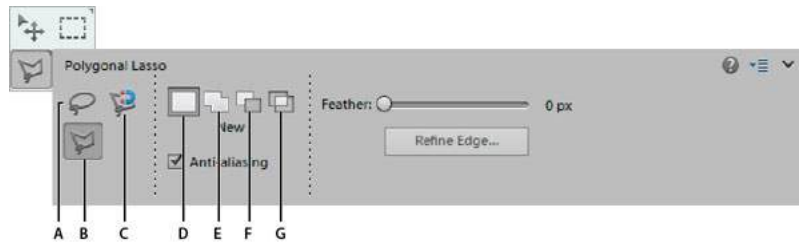
*A Lasso tool B Polygonal Lasso tool C Magnetic Lasso tool D New selection E Add to selection F Subtract from selection G Intersect with selection*

- Select the Lasso tool from the toolbox.
- (Optional) Set Lasso tool options in the Tool Options bar:
  - Specify whether to create a new selection, add to an existing selection, subtract from a selection, or select an area intersected by other selections.
  - To soften the selection border so that it blends into the area outside the selection, enter a Feather value.
  - To smooth the edges of your selection, select Anti-aliased.
- Drag to draw a freehand selection border:
  - To add to the selection, release the mouse button; then press Shift and, when the pointer changes to , drag.
  - To subtract from the selection, release the mouse button; then press Alt (Option in Mac OS) and when the pointer changes to , drag.
  - To add straight-edge segments, hold the mouse button and press Alt (Option in Mac OS); then release the mouse button and, when the pointer changes click where you want to position the end of the segment.
- To close the selection border, release the mouse button. A straight selection segment is drawn from where you released the mouse button to the starting point of your selection.
- Click Refine Edge to make further adjustments to your selection and make it more precise. See how you can [Refine edges of a selection](#).

## Use the Polygonal Lasso tool

The Polygonal Lasso tool draws straight-edged segments of a selection border. You can create as many segments as you need to draw a selection border.

## Working with selections




### *Polygonal Lasso tool options*

*A Lasso tool B Polygonal Lasso tool C Magnetic Lasso tool D New selection E Add to selection F Subtract from selection G Intersect with selection*

- 1 Select the Polygonal Lasso tool from the toolbox.
- 2 (Optional) Set Polygonal Lasso tool options in the Tool Options bar:
  - Specify whether to create a new selection, add to an existing selection, subtract from a selection, or select an area intersected by other selections.
  - To soften the selection border so that it blends into the area outside the selection, enter a Feather value.
  - To smooth the edges of your selection, select Anti-aliased.
- 3 Click where you want the first straight segment to begin, and click a second time where you want the segment to end and the next one to begin. Continue clicking to create segments.
 

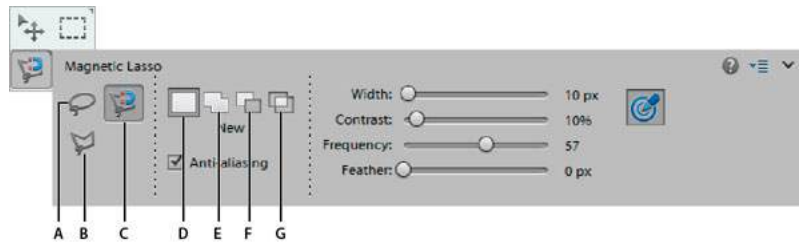
If you make a mistake, press the Delete key to erase segments. You can switch from creating straight-edge segments to drawing freehand by pressing Alt (Option in Mac OS).
- 4 Close the selection border by doing one of the following:
  - Position the pointer over the starting point and click. A closed circle appears next to the pointer when you are over the starting point.
  - If the pointer is not over the starting point, double-click, or Ctrl-click (Command-click in Mac OS). A straight selection segment is drawn from your pointer to the starting point of your selection.
- 5 Click Refine Edge to make further adjustments to your selection and make it more precise. See how you can [Refine edges of a selection](#).

## Use the Magnetic Lasso tool

The Magnetic Lasso tool draws a selection border that automatically snaps to the edges of objects you drag over in the photo. This makes it easy to draw precise selection borders. The Magnetic Lasso tool  is useful for quickly selecting objects with complex edges set against high-contrast backgrounds.



## Working with selections



### Magnetic Lasso tool options

A Lasso tool B Polygonal Lasso tool C Magnetic Lasso tool D New selection E Add to selection F Subtract from selection G Intersect with selection

#### 1 Select the Magnetic Lasso tool from the toolbox.

To switch between the Magnetic Lasso and other lasso tools when the Magnetic Lasso tool is selected, do one of the following:

- To activate the Lasso tool, press Alt (Option in Mac OS) and drag.
- To activate the Polygonal Lasso tool, press Alt (Option in Mac OS) and click.

#### 2 (Optional) Set Magnetic Lasso tool options in the Tool Options bar:

- Specify whether to create a new selection, add to an existing selection, subtract from a selection, or select an area intersected by other selections.
- To soften the selection border so that it blends into the area outside the selection, enter a Feather value.
- To smooth the edges of your selection, select Anti-aliased.
- To specify the area of edge detection, enter a pixel value between 1 and 256 for Width. The tool detects edges only within the specified distance from the pointer.



To change the Magnetic Lasso pointer so that it indicates the area of edge detection (the Width value), press the Caps Lock key.

- To specify the Magnetic Lasso tool's sensitivity to edges in the photo, enter a value between 1% and 100% for Edge Contrast. A higher value detects only edges that contrast sharply with their surroundings; a lower value detects lower-contrast edges.
- To specify the rate at which the Magnetic Lasso tool sets fastening points, enter a value between 0 and 100 for Frequency. A higher value anchors the selection border in place more quickly.

#### 3 Add segments of a selection border by doing one of the following:

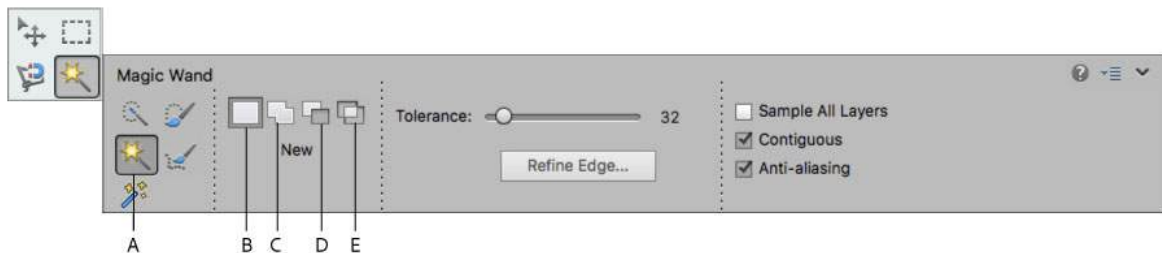
- Click points along the edge.
- Drag along the edge while pressing the mouse button.
- The selection border snaps to the edge in the photo. If the border doesn't snap to the desired edge, click once to add a point manually; then continue tracing the border and clicking points as needed. If you make a mistake, press the Delete key to erase points along the border.

## Working with selections

- 4 Close the selection border by doing one of the following:
  - To close the border manually, drag back over the starting point and click. A closed circle appears next to the pointer when you are over the starting point.
  - To close the border with a freehand magnetic segment, double-click or press Enter.
  - To close the border with a straight segment, double-click while pressing Alt (Option in Mac OS).

## Use the Magic Wand tool

The Magic Wand tool selects pixels within a similar color range with one click. You specify the color range, or tolerance, for the Magic Wand tool's selection. Use the Magic Wand tool when you have an area of similar colors, like a blue sky.



*Magic Wand tool options*

*A Magic Wand tool B New selection C Add to selection D Subtract from selection E Intersect with selection*

- 1 Select the Magic Wand tool.
- 2 (Optional) Set Magic Wand tool options in the Tool Options bar:
  - For Tolerance, enter a value between 0 to 255. Enter a low value to select colors very similar to the pixel you click, or enter a higher value to select a broader range of colors.
  - To define a smooth selection edge, select Anti-aliased.
  - To select only adjacent areas using the same colors, select Contiguous. When this option is deselected, pixels using the same colors are selected throughout the entire photo.
  - To select colors using data from all the visible layers, select Sample All Layers. When this option is deselected, the Magic Wand tool selects colors from only the active layer.
- 3 In the photo, click the color you want to select.
- 4 To add to the selection, Shift+click unselected areas. To remove an area from the selection, press Alt (Option in Mac OS) and click the area you want to remove.
- 5 Click Refine Edge to make further adjustments to your selection and make it more precise. See how you can [Refine edges of a selection](#).

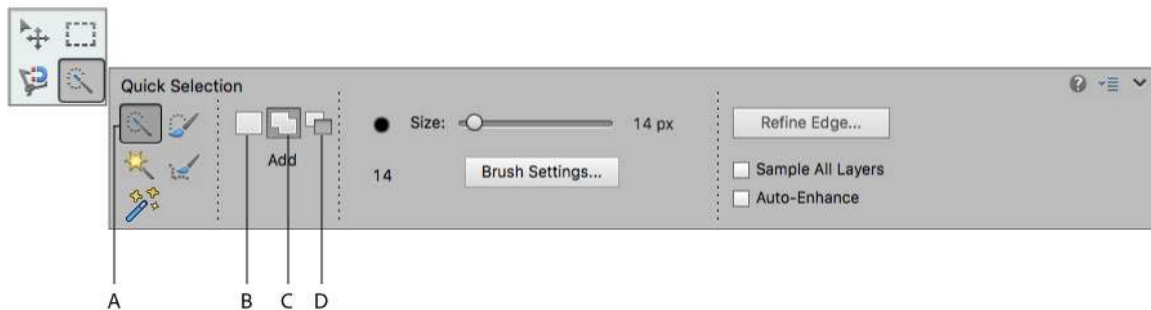
## Use the Quick Selection tool

The Quick Selection tool makes a selection based on color and texture similarity when you click or click-drag the area you want to select. The mark you make doesn't need to be precise, because the Quick Selection tool automatically and intuitively creates a border.

### **Note:**

*The Smart Brush tool makes selections like the Quick Selection tool and simultaneously applies a color or tonal adjustment. See [Apply the Smart Brush tools](#).*

## Working with selections



### Quick Selection Brush tool options

A Quick Selection tool B New selection C Add to selection D Subtract from selection

- 1 Select the Quick Selection Brush tool.
- 2 In the Tool Options bar, choose one of the following:
  - New Selection** Lets you draw a new selection. This option is selected by default.
  - Add To Selection** Lets you add to an existing selection.
  - Subtract From Selection** Lets you subtract from an existing selection. This option is only available after you make a selection.
- 3 Choose a brush from the Brush Picker in the options bar. If you want to select a large area, you can use a larger brush. For more precise selections, choose a smaller brush size.
- 4 Click or click-drag over the area that covers the range of colors in the object you want to select, and then release the mouse button.
 

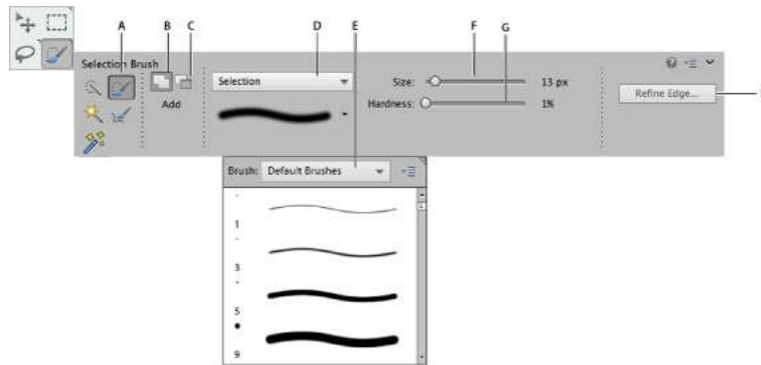
The selection border appears.
- 5 Do any of the following to refine the selection:
  - To add to the selection, click the Add To Selection button in the options bar, and click or click-drag across the area you want to add.
  - To remove an area from the selection, click the Subtract From Selection button in the options bar, and click or click-drag across the area you want to subtract from the selection.
  - To start a new selection, click the New Selection button in the options bar, and click or draw to specify the new selection area.
- 6 Click Refine Edge to make further adjustments to your selection and make it more precise. See how you can [Refine edges of a selection](#).

## Use the Selection Brush tool

The Selection Brush tool makes selections two ways: you can paint over the area you want to select in Selection mode, or you can paint over areas you don't want to select using a semiopaque overlay in Mask mode.



You can first make a rough selection with a marquee tool, Quick Selection tool, or other selection tool, and then fine-tune your selection with the Selection Brush tool. You can add to the selection using the Selection Brush tool in Selection mode, or subtract from it in Mask mode.

## Working with selections



### Selection Brush tool options

A Selection Brush B Add to selection C Subtract from selection D Selection pop-up E Brush pop-up F Brush size G Hardness H Refine Edge dialog button

- 1 Select the Selection Brush tool from the toolbox. You may need to click the Quick Selection tool in the toolbox and select the Selection Brush from the list of hidden tools that appears.
- 2 By default, the tool is set to Add To Selection . To subtract from the selection, click Subtract From Selection  in the options bar.
- 3 (Optional) Set Selection Brush tool options in the Tool Options bar:
  - Choose a brush from the brush presets pop-up panel.
  - Specify the brush size.
  - Choose Selection (to add to the selection) or Mask (to subtract from the selection) from the Mode menu.
  - Set the brush tip's hardness to a value between 1% and 100%.



*If you use a soft-edged brush with the Selection Brush tool, changing the Mode option to Mask can help you see the soft edges of the selection.*

- When using Mask mode, specify an Overlay Opacity between 1% and 100%.
  - When using Mask mode, click the Overlay Color swatch and select a color in the Color Picker to set the mask color. This is useful when the mask color (Overlay Color) is too similar to the colors in the photo.
- 4 Draw your photo to select or deselect areas.



*Adding to a selection while in Selection mode (left) and subtracting from a selection while in Mask mode (right)*

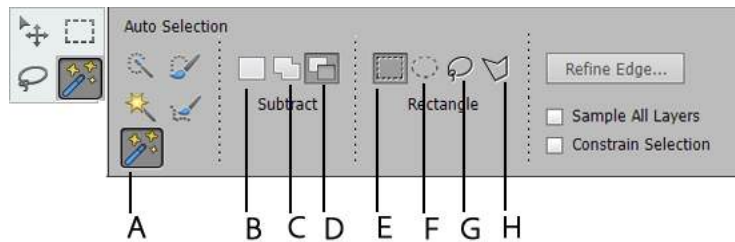
## Use the Refine Selection Brush tool

The Refine Selection Brush helps you add or remove areas to and from a selection by automatically detecting the edges. For more information, see [Edit and refine selections](#).

## Use the Auto Selection tool

The Auto Selection tool automatically makes a selection when you draw a shape around the object you want to select. The shape you draw doesn't have to be precise, it just needs to outline the object you want to select.

The tool is available in the toolbar of the Quick and Expert modes.



*Auto Selection tool options*

**A** Auto Selection Tool **B** New Selection **C** Add to selection **D** Subtract from selection **E** Rectangle **F** Ellipse **G** Lasso **H** Polygon Lasso

- 1 Select the Auto Selection tool.
- 2 In the Tool Options bar, choose one of the following:
  - New selection: Lets you draw a new selection. This option is selected by default.
  - Add to selection: Lets you add to an existing selection.
  - Subtract from selection: Lets you subtract from an existing selection. This option is only available after you make a selection.
- 3 Select one of the following to draw around the object you want to select:
  - Rectangle: Use this option for drawing a rectangular segment of a selection border.
  - Ellipse: Use this option for drawing an elliptical or circular segment of a selection border.
  - Lasso: Use this option for drawing free-form segments of a selection border.
  - Polygon lasso: Use this option for drawing straight-edged segments of a selection border.
- 4 Draw around the object you want to select in the photo.

The selection border appears.

**Note:**

*For better results, select one object at a time. After you select one object, you can use Add to selection option to add another object to your selection.*

- 5 Do any of the following to refine the selection:
  - To add to the selection, click the Add to selection button in the options bar, and draw across the area you want to add.
  - To remove an area from the selection, click the Subtract from selection button in the options bar, and draw across the area you want to subtract from the selection.
  - To start a new selection, click the New selection button in the options bar, and draw to specify the new selection area.
- 6 Click **Refine Edge** to make further adjustments to your selection and make it more precise. For more information, see [Refine edges of a selection](#).

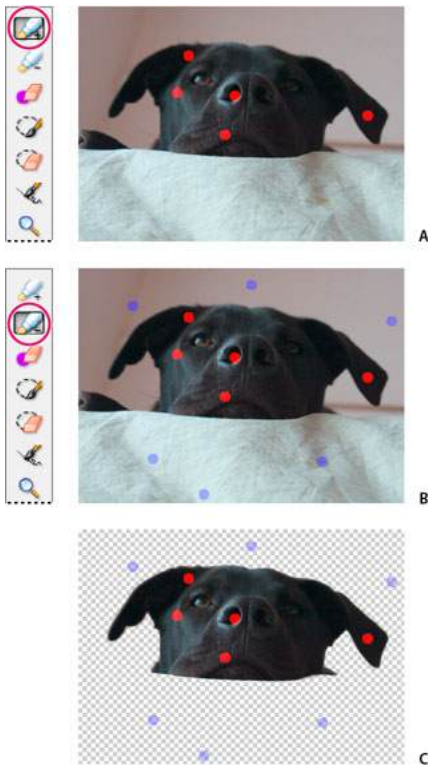
## Use the Magic Extractor

### Note:

The Magic Extractor feature is not available in Adobe Photoshop Elements 12 and above.


Use the Magic Extractor to make accurate selections based on the appearance of foreground and background areas that you specify. You can specify these areas by placing colored marks in the areas you want to select. After you mark the areas and close the dialog box, only the foreground area appears in the photo.

The Magic Extractor makes it easy to select people or objects so that you can superimpose them on other backgrounds. For example, you can remove yourself from a photo of you on your bicycle at home, and superimpose it on a photo of cyclists in the Tour de France. You can save the extracted image as a file that you can use again and again.



Using the Magic Extractor

**A** Area you want to extract marked with red dots **B** Background marked with blue dots **C** Extracted image

- 1 Open the photo containing the object you want to extract.
- 2 To limit what appears in the Magic Extractor dialog box, make a preliminary selection using the Oval or Rectangular selection tool.
- 3 Choose Image > Magic Extractor.  
The Magic Extractor dialog box opens with the Foreground Brush tool  selected by default.
- 4 Click multiple times or draw lines to mark the area you want to extract.
- 5 Select the Background Brush tool and click multiple times or draw lines to mark the area that you do not want included in your selection.

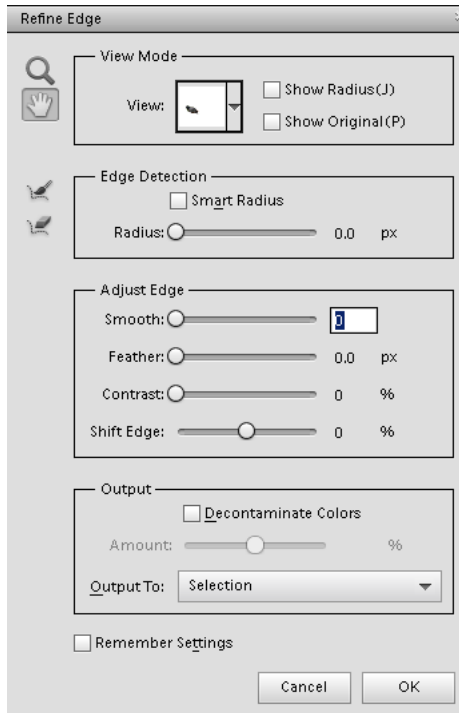


**Working with selections**

*When selecting objects with varied colors and textures, drag across all the colors and textures to ensure a more accurate selection.*

- 6** To help mark your selection, use the Zoom tool or the Hand tool to magnify and navigate around the photo. Press Alt (Option in Mac OS) as you use the Zoom tool to zoom out.
- 7** To specify a different brush size or color, do one of the following:
  - Choose a new size from the Brush Size menu.
  - Click the Foreground Color or Background Color swatch, choose a new color in the Color Picker, and then click OK.
- 8** Click Preview to see the current selection.
- 9** To specify preview settings, do one of the following:
  - To change what is displayed in the preview area, choose either Selection Area or Original Photo from the Display menu. Or press the X key on your keyboard to switch between the two views.
  - To specify a different background, choose an option from the Background menu.
- 10** Do any of the following to fine-tune the selection, and then preview the results again:
  - To add to or subtract from the selection, draw more dots or lines using either the Foreground or Background Brush tool.
  - To erase foreground or background dots, select the Point Eraser tool and click or drag over the marks you want to remove.
  - To add areas to a selection, select the Add To Selection tool, and click or drag over the area you want to add.
  - To remove areas from the selection, select the Remove From Selection tool and drag over the areas you want to remove.
  - To smooth the edges of your foreground selection, select the Smoothing Brush tool and drag over the areas you want to smooth.
  - To soften the edges of your selection, specify a higher value in the Feather box.
  - To fill remaining holes in the main selection, click Fill Holes.
  - To separate and remove an area from the main selection, select the Remove From Selection Tool and drag a line between the main selection and the area you want to remove. Then click Fill Holes.
  - To remove fringe colors left between the foreground and background, click Defringe. To increase or decrease the amount of fringe removed, specify a value from the Defringe Width menu.
- 11** Click OK to extract the selected areas. If you want to start over, click Reset to remove all marks.

## Refine edges of a selection





In Photoshop Elements, you can fine-tune your selection using the Refine Edge (select a portion of an image, right-click the selection, and choose Refine Edge from the context menu) dialog box. You can also open the Refine Edge dialog by choosing Select > Refine Edge.

To open the Refine Edge dialog on a Mac, select a portion of an image, Control-click the selection, and choose Refine Edge.

**View Mode.** From the View pop-out menu, choose a view mode for your selection. Press F to cycle through the modes

**Show Radius.** Displays the radius of the edge refinement.

**Refine Radius**  and **Erase Refinements**  tools. Precisely adjust the border area in which edge refinement occurs. To quickly toggle from one tool to the other, press E. To change the brush size, press the bracket keys. Note: Brush over soft areas such as hair or fur, to add fine details to the selection.

**Smart Radius.** Automatically adjusts the radius for hard and soft edges found in the border region. Deselect this option if the border is uniformly hard- or soft-edged, or if you want to control the Radius setting and refinement brushes more precisely.

**Radius.** Determines the size of the selection border in which edge refinement occurs. Use a small radius for sharp edges, and a large one for softer edges.

**Smooth.** Reduces irregular areas (“hills and valleys”) in the selection border to create a smoother outline.

**Feather.** Blurs the transition between the selection and surrounding pixels.

**Contrast.** When increased, soft-edged transitions along the selection border become more abrupt. Typically, the Smart Radius option and refinement tools are more effective.



## Working with selections

**Shift Edge.** Moves soft-edged borders inward with negative values or outward with positive ones. Shifting these borders inward can help remove unwanted background colors from selection edges.

**Decontaminate Colors.** Replaces color fringes with the color of fully selected pixels nearby. The strength of color replacement is proportionate to the softness of selection edges.

**Important:** Because this option changes pixel color, it requires output to a new layer or document. Retain the original layer so you can revert back to it if needed. (To easily see changes in pixel color, choose Reveal Layer for the View Mode.)

**Amount.** Changes the level of decontamination and fringe replacement.

**Output To.** Determines whether the refined selection becomes a selection or mask on the current layer, or produces a new layer or document.

## Delete a selected area

When you delete a selection on a background layer, the selected area is replaced with the background color or checkerboard background pattern (transparent pixels).

Do any of the following:

- Choose Edit > Delete to remove the selection. (If you delete a selection by mistake, you can choose Edit > Undo to get it back.)
- Press the Backspace or Delete key to remove the selection.
- Choose Edit > Cut to move the selection to the clipboard. You can then paste it elsewhere.

## Select and deselect areas using commands

1 Do any of the following:

- To deselect selections, choose Select > Deselect.
- To select all pixels in a layer, select the layer in the Layers panel and choose Select > All.
- To reselect the most recent selection, choose Select > Reselect.

2 To show or hide selection borders, choose View > Selection.

**Note:**

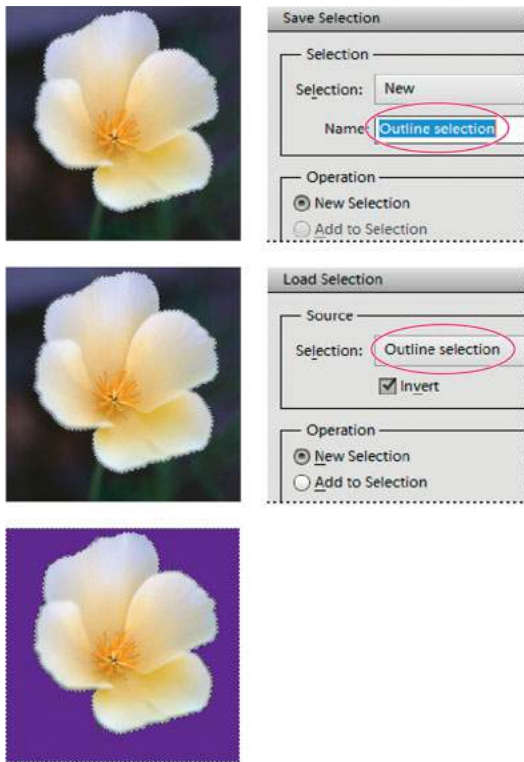
*You can also deselect by clicking anywhere in the photo outside the selected area. However, you might accidentally make further selections if you're using a selection tool that selects based on clicking, such as the Magic Wand tool.*

## Saving selections

### Save, load, or delete a selection

Saving a selection allows you to edit a selected area of a photo at a later time. You can work on other parts of the photo before loading the saved selection.

## Working with selections



*Saving selection (top), loading selection (center), and using the selection to fill with a solid color (bottom)*

- 1 In the Edit workspace, make a selection in your photo.
- 2 Choose Select > Save Selection.
- 3 In the Save Selection dialog box, choose New from the Selection pop-up menu.
- 4 Enter a name for the selection in the Name box, and then click OK.
- 5 To load the selection, choose Select > Load Selection, choose the saved selection from the Selection menu, and then click OK.
- 6 To delete a selection, choose Select > Delete Selection, choose a saved selection from the Selection menu, and then click OK.

## Modify a saved selection

You can modify saved selections by replacing, adding to, or subtracting from them.

- 1 In the Edit workspace, make a selection in your photo.
- 2 Choose Select > Save Selection.
- 3 In the Save Selection dialog box, choose the selection you want to modify from the Selection menu.
- 4 Select one of the following and click OK:
  - Replace Selection** Replaces the saved selection with the current selection.
  - Add To Selection** Adds the current selection to the saved selection.
  - Subtract From Selection** Subtracts the current selection from the saved selection.

## Working with selections

**Intersect With Selection** Replaces the saved selection with the intersection between the current selection and the saved selection.



*You can also modify a saved selection by loading it and using selection tools to add to it (Shift-drag) or subtract from it (Alt-drag in Windows, Option-drag in Mac). (See [Add to or subtract from a selection](#))*

## Modify a new selection with a saved selection

- 1 In the Edit workspace, open a photo that contains a saved selection.
- 2 Make a new selection in your photo.
- 3 Choose Select > Load Selection.
- 4 Choose a saved selection from the Selection menu.
- 5 Select one of the following operations:

**Add To Selection** Adds the saved selection to the current selection.

**Subtract From Selection** Subtracts the saved selection from the current selection.



**Intersect With Selection** Replaces the current selection with the intersection between the current selection and the saved selection.

- 6 To invert the selected area, select Invert and click OK.

# Modifying selections

## Move a selection border

Moving a selection border repositions just the border without altering the photo.

- 1 Using any selection tool, click New Selection  in the options bar, and position the pointer inside an existing selection border. The pointer changes to indicate that you can move the selection .

**Note:**

*The New Selection option appears in the options bar when any selection tool is selected—except the Selection Brush tool. Switch to another selection tool temporarily, if necessary, to select this option.*

- 2 Do one of the following:
  - Drag the border to enclose a different area of the photo. You can drag a selection border beyond the canvas boundaries; however, this makes it hard to get back. You can also drag the selection border to another image window.
  - To move the selection in 1-pixel increments, use an arrow key.
  - To move the selection in 10-pixel increments, hold down Shift, and use an arrow key.
  - To constrain the direction to multiples of 45°, begin dragging, and then hold down Shift as you continue to drag.

## Invert a selection

Inverting a selection changes the unselected areas into selected areas, protecting the area you previously selected.

? In a photo with an existing selection border, choose Select > Inverse.





*You can use this command to easily select an object that appears against a solid-colored area. Select the solid color using the Magic Wand tool, and then choose Select > Inverse.*

## Add to or subtract from a selection

You can add to or subtract from an existing selection to fine-tune selection borders. For example, you could make a donut-shaped selection by first making a circular selection and then subtracting a circular selection within it.

? Select a selection tool, and do one of the following:

- Hold down Shift (a plus sign appears next to the pointer) to add to the selection, or hold down Alt (Option in Mac OS) to subtract (a minus sign appears next to the pointer) from a selection. Then select the area to add or subtract and make another selection.
- Click Add To Selection  or Subtract From Selection  in the options bar, and make another selection. (The Add To Selection and Subtract From Selection options appear in the options bar when any selection tool is selected.)

## Select an area that intersects an existing selection


You can limit the area a selection affects. For example, in a picture of snow-capped mountains, you can select white clouds in the sky without selecting parts of the white mountain below them by selecting the entire sky, and then using the Magic Wand tool with Intersect With Selection selected and Contiguous deselected to select only the white areas included within the existing sky selection.

## Working with selections



Selecting the sky and top of mountains with the Rectangular Marquee tool (top). Selecting the Intersect With Selection option and using the Magic Wand tool to select the clouds (middle). Resulting image after increasing the brightness of the clouds (bottom).

? Select a selection tool, and do one of the following:

- Select Intersect With Selection  in the options bar, and select an area that intersects the existing selection.
- Hold down Alt (Option in Mac OS) + Shift so that cross-hairs appear next to the pointer, and select an area that intersects the existing selection.

## Expand or contract a selection by a specific number of pixels

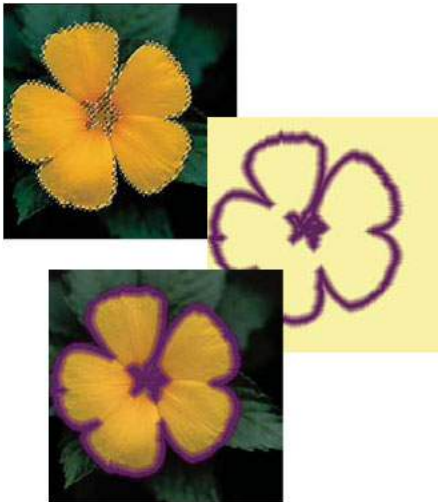
You can use commands in the Select menu to increase or decrease the size of an existing selection and to clean up stray pixels left inside or outside a color-based selection.

- 1 Use a selection tool to make a selection.
- 2 Choose Select > Modify > Expand or Contract.
- 3 For Expand By or Contract By, enter a pixel value between 1 and 100, and click OK.

The selection border is moved outward or inward by the specified number of pixels. Any portion of the selection border that runs along the canvas edge is unaffected.

## Frame an existing selection with a new selection border

The Border command creates a soft-edged, anti-aliased selection border. When you add the new selection border, only pixels between the two selection borders are selected.



Using the Border command to create a 4-pixel border selection (top). Copying the selection to a new layer and filling to make an outline of the image (center). Filling the selection into the original image to create an outline around the image (bottom).

- 1 Use a selection tool to make a selection.
- 2 Choose Select > Modify > Border.
- 3 Enter a value between 1 and 200 pixels in the Width text box, and click OK.

### Include areas of similar color in a selection

- 1 Make a selection with a selection tool and do one of the following:
  - Choose Select > Grow to include all adjacent pixels falling within the tolerance range specified in the options bar. (You may have to switch to a selection tool that includes a tolerance range, such as the Magic Wand tool.) A higher Tolerance value adds a broader range of colors.
  - Choose Select > Similar to include pixels throughout the photo, not just adjacent ones, that fall within the tolerance range.
- 2 To increase the selection incrementally, choose either command multiple times.

**Note:**

*You cannot use the Grow and Similar commands on photos in bitmap mode.*

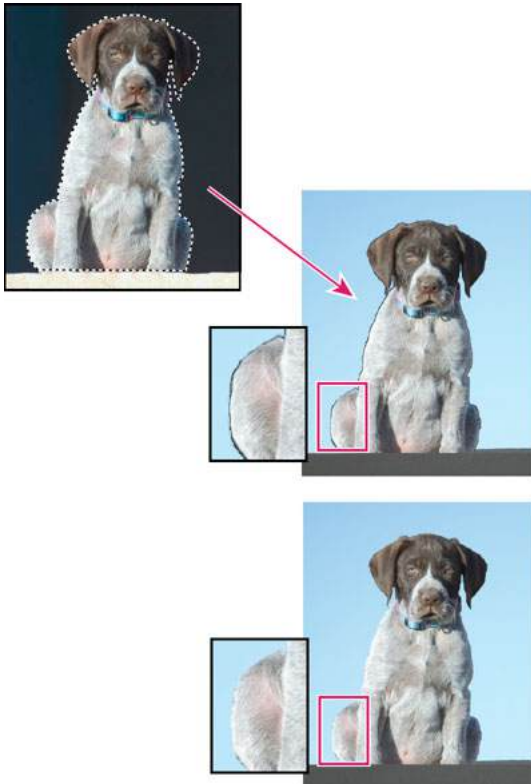
### Remove stray pixels from a color-based selection

The Smooth command searches around each selected pixel for other pixels within the specified color range and selects them.

- 1 Make a selection with a selection tool and choose Select > Modify > Smooth.
- 2 For Sample Radius, enter a pixel value between 1 and 100, and click OK.

## Defringe a selection

When you move or paste a selection, some of the pixels surrounding the selection border are included with the selection. These extra pixels can result in a fringe or halo around the edges of the selection. The Defringe Layer command replaces the color of any fringe pixels with the colors of nearby pixels containing pure colors (those without background color). For example, if you select a yellow object on a blue background and then move the selection, some of the blue background is moved with the object. Defringe Layer replaces the blue pixels with yellow pixels.



*Dog selected and copied to a new image where artifacts from the dark background are visible (top). Image after using the Defringe Layer command (bottom).*

- 1 Copy and paste a selection into a new or existing layer.
- 2 Choose Enhance > Adjust Color > Defringe Layer.
- 3 In the Defringe dialog box, type the number of pixels you'd like to replace around the object. A value of 1 or 2 should be sufficient.
- 4 Click OK.

## Move and copy selections

## Move a selection

The Move tool lets you cut and drag a pixel selection to a new location in the photo. You can also use the tool to move or copy selections between photos in Photoshop Elements, and to photos in other applications that support selections.



Moving a selection from one photo into another using the Move tool



To activate the Move tool when another tool is selected, hold down **Ctrl** (Command in Mac OS). (This technique does not work when the Hand tool is selected.)

- 1 In the Edit workspace, make a selection with a selection tool and select the Move tool from the toolbox.
- 2 (Optional) Change Move tool settings in the options bar.
- 3 Move the pointer inside the selection border, and drag the selection to a new position. If you've selected multiple areas, all pixel selections move as you drag.

## Move tool options

When you select the Move tool, you can change the following settings in the options bar:

**Auto Select Layer** Selects the topmost layer that has pixels under the Move tool cursor, rather than the currently selected layer.

**Show Bounding Box** Displays the bounding box around the selection in the image, or around the currently selected layer (if there is no active selection on the image). The boxes on the sides and corners allow you to resize the selection or layer.

**Note:**

*A bounding box is not visible for a Background layer.*

**Show Highlight On Rollover** Highlights individual layers as the mouse hovers over the image. Click on a highlighted layer to select and move it. Layers that are already selected do not highlight on rollover.

**Arrange menu** Moves the selected layer in front, in between, or in back of other layers. Options include Bring To Front, Bring Forward, Send Backward, and Send To Back. To arrange a layer, select the layer, and then choose an item from the Arrange menu.

**Align menu** Aligns the selected layers. Options include Top Edges, Vertical Centers, Bottom Edges, Left Edges, Horizontal Centers, and Right Edges. Multiple layers can be aligned simultaneously. To align layers, select a layer, hold down Shift, select another layer, and then choose an item from the Align menu.



**Distribute menu** Spaces selected layers equally apart. Options include Top Edges, Vertical Centers, Bottom Edges, Left Edges, Horizontal Centers, and Right Edges. Multiple layers can be spaced simultaneously. For this option to be enabled, you must have a minimum of three selected layers. To space layers apart, select a layer, hold down Shift, select other layers, and then choose an item from the Distribute menu.

## Copying selections or layers


You can copy and paste selections using the Move tool or the Copy, Copy Merged, Cut, Paste, or Paste Into Selection commands in the Edit menu.

Keep in mind that when a selection or layer is pasted between photos with different resolutions, the pasted data retains its original pixel dimensions. This can make the pasted portion appear out of proportion to the new image. Use the Image > Resize > Image Size command to make the source and destination photos the same resolution before copying and pasting.

Selections that you cut or copy are stored in the clipboard. Only one selection is stored in the clipboard at a time.

### Copy selections with the Move tool

When copying between photos, drag the selection from the active image window into the other image window. A border highlights the image window when you can drop the selection into it.

- 1 Select the part of the image you want to copy.
- 2 In the Edit workspace, select the Move tool  from the toolbox.
- 3 Press Alt (Option in Mac OS) while dragging the selection you want to copy and move.
- 4 To make additional copies of the same selection, do one of the following:
  - Hold down Alt (Option in Mac OS) while dragging the selection to each new location.
  - To offset the duplicate by 1 pixel, hold down Alt (Option in Mac OS), and press an arrow key. (This moves the pixels and copies the pixels, creating a blur effect.)
  - To offset the duplicate by 10 pixels, press Alt (Option in Mac OS) + Shift and press an arrow key. (This moves the pixels rather than copying them.)

**Note:**

*When you drag a selection (with Shift key pressed) from one image to another image, the selection is pasted at the center.*

### Copy a selection using commands

- 1 In the Edit workspace, use a selection tool to select the area you want to copy.
- 2 Do one of the following:
  - Choose Edit > Copy to copy the selection to the clipboard.
  - Choose Edit > Copy Merged to copy all layers in the selected area to the clipboard.

### Paste one selection into another

You can use the Paste Into Selection command to paste clipboard, or copied content, within a selection. This command lets you take advantage of elements within the selected area and prevent the pasted image from looking flat and unnatural. For example, you can use a Hard Light blending mode at 85% opacity to retain the reflection in a pair of sunglasses. When using blending modes this way, you need to create a new layer and paste the selection into that layer.

## Working with selections



*Copying a selection from one image to another  
A Part of the original photo selected B Photo to copy and paste into original C Resulting image*

- 1 In the Edit workspace, use the Copy command to copy the part of the photo you want to paste. (You can even copy from photos in other applications.)
- 2 Make a selection in the photo into which you want to paste the copied photo.
- 3 Choose Edit > Paste Into Selection.

**Note:**

*The copied photo appears only within the selection border. You can move the copied photo within the border, but if you move it completely out of the border, it won't be visible.*

- 4 With your pointer within the selection border, drag the pasted image to the proper location.
- 5 When you're satisfied with the results, deselect the pasted image to commit the changes.



*To activate the Move tool when another tool is selected, hold down Ctrl (Command in Mac OS). (This technique does not work with the Hand tool.)*

## Edit and refine selections

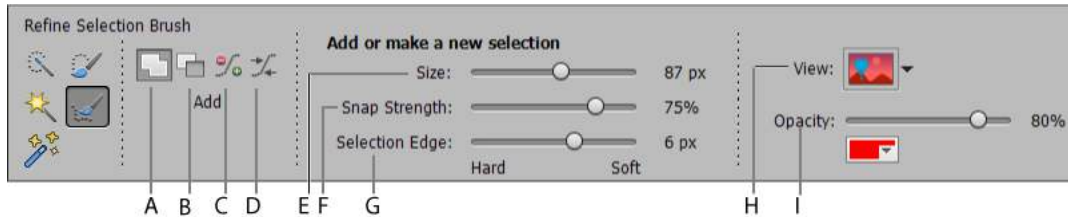
### Edit selections

Making selections is a crucial part of editing. Photoshop Elements has a tool named Refine Selection Brush tool. This tool helps you add or remove areas to and from a selection by automatically detecting the edges.

The cursor for the tool is a set of two concentric circles. While the inner circle is the size of the brush, the outer circle indicates the area within which to look for an edge.

## Working with selections

The Selection Edit toolbox provides the tools to refine your selection:



**Add to selection (A)** Manually add to the current selection

**Subtract from selection (B)** Manually subtract the current selection

**Push Selection (C)**

- Placing the cursor inside a selection expands the selection within the outer circle to snap to the first image edge found
- Placing the Cursor outside the selection contracts the selection within the outer circle to snap to the first image edge found

**Smooth selection (D)** Smoothen the current selection

**Size (E)** Set the selection cursor size

**Snap Strength (F)** Set the snapping of selection boundary to the edges

**Selection Edge (G)** Set the selection edge radius

**View (H)** Options to help view the selection being made. Select to have an overlay color with an opacity that you can set, or hard black or white.

**Opacity (I)** Set the opacity of the overlay selected in the View option.

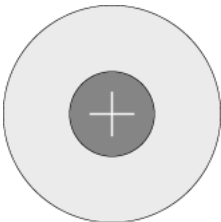
To refine the selection of an image:

- 1 Open an image in Quick/Expert mode.



Select an image that has minute and detailed edges

- 2 Select Refine Selection Brush tool (A).
- 3 From the four modes available (Add, Subtract, Push, Smooth), select the Add mode.

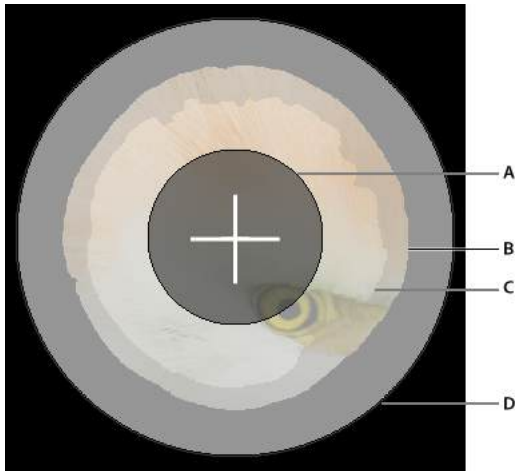


Selection cursor in Add mode

- 4 Press and hold cursor on the image you want to make precise and refined selections on. The selection within the concentric circles of the cursor begins to grow. Note a lighter-colored region on the outer periphery of the growing selection. This is the Selection Edge that will help you make a precise selection.

**Selection Edge** (region enclosed between areas B and C in the image below)

The size of the Selection Edge is determined by the Selection Edge slider. Experiment with the hardness and softness of this setting to get the right effect.



*A growing selection within the Refine Selection Brush cursor (Add mode)*

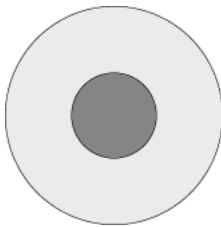
- **A** - Inner circle of the cursor, where the selection area begins to grow. Region within is automatically selected.
- **B** - Outer edge of the Selection Edge.
- **C** - Inner edge of the Selection Edge
- **D** - Outer circle of the cursor, where the selection area stops growing if you keep the mouse pressed indefinitely.



*You can also use the cursor to 'paint' the region you want to select.*

- 5** Any texture like fur, hair, grass in the Selection Edge area are captured in fine detail.

To capture more of the fine details, hover the mouse pointer over the edge of the selection, until the cursor turns to the Selection Edge cursor mode. With the tool in this mode, click and paint the areas that contain fine details.



*Selection Edge cursor*



*The cursor turns to this mode when you hover the inner dark grey portion of the cursor over the edge of a selection. Also, the size of the darker portion of the cursor is determined by the Selection Edge slider setting. The larger the setting, more area can be painted over.*

- 6** Continue to select more regions, and refine the selected edges, until the areas you want to select have been selected. Use a different overlay option to view the details you are able to capture.



*Select the minute details captured in your photograph, using the Selection Edge cursor.*

- 7 Continue to experiment and perform Step 6, changing your selections and using the Subtract, Push, and Smooth modes of the Refine Selection Brush tool.

## Smooth selection edges with anti-aliasing and feathering

### Smooth the edges of a selection by anti-aliasing

You can smooth the hard edges of a selection by anti-aliasing or feathering. Anti-aliasing smooths the jagged edges of a selection by softening the color transition between edge pixels and background pixels. Because only the edge pixels change, no detail is lost. Anti-aliasing is useful when cutting, copying, and pasting selections to create composite images.

## Working with selections

You can select anti-aliasing with the Lasso, Polygonal Lasso, Magnetic Lasso, Elliptical Marquee, and Magic Wand tools. To anti-alias, you must select the Anti-Alias option before making the selection; you cannot add anti-aliasing to an existing selection.

- 1 In the Edit workspace, select the Lasso, Polygonal Lasso, Magnetic Lasso, Elliptical Marquee, or Magic Wand tool.
- 2 Select Anti-aliased in the options bar.
- 3 Make a selection in the image window.

## Blur the edges of a selection by feathering

? You can smooth the hard edges of a selection by feathering. Feathering blurs edges by building a transition between the selection and surrounding pixels. This blurring can cause some loss of detail at the edge of the selection.

You can create a feathered selection with the Elliptical Marquee, Rectangular Marquee, Lasso, Polygonal Lasso, or Magnetic Lasso tool. You can also add feathering to an existing selection by using the Select menu. Feathering effects are apparent when you move, cut, copy, or fill the selection.



Original image (left), and after making a feathered selection, applying the Inverse command, and filling with white (right)

## Define a feathered edge for a selection tool

- 1 In the Edit workspace, do one of the following:
  - Select any of the lasso or marquee tools from the toolbox, and enter a Feather value in the options bar to define the width of the feathering. The feathering begins at the selection border.
  - Select the Selection Brush tool, and select a soft-edged brush from the brushes pop-up panel in the options bar.
- 2 Make a selection in the image window.

## Define a feathered edge for an existing selection

- 1 In the Edit workspace, use a selection tool from the toolbox to make a selection.
- 2 Choose Select > Feather.
- 3 Type a value between .2 and 250 in the Feather Radius text box, and click OK. The feather radius defines the width of the feathered edge.

# Chapter 8: Working with layers

## Create layers

### Understanding layers

Layers are useful because they let you add components to an image and work on them one at a time, without permanently changing your original image. For each layer, you can adjust color and brightness, apply special effects, reposition layer content, specify opacity and blending values, and so on. You can also rearrange the stacking order, link layers to work on them simultaneously, and create web animations with layers.

Layers are like stacked, transparent sheets of glass on which you can paint images. You can see through the transparent areas of a layer to the layers below. You can work on each layer independently, experimenting to create the effect you want. Each layer remains independent until you combine (merge) the layers. The bottommost layer in the Layers panel, the Background layer, is always locked (protected), meaning you cannot change its stacking order, blending mode, or opacity (unless you convert it into a regular layer).



*Transparent areas on a layer let you see through to the layers below.*

Layers are organized in the Layers panel. Keep this panel visible whenever you're working in Adobe Photoshop Elements. With one glance, you can see the active layer (the selected layer that you are editing). You can link layers, so they move as a unit, helping you manage layers. Because multiple layers in an image increase the file size, you can reduce the file size by merging layers that you're done editing. The Layers panel is an important source of information as you edit photos. You can also use the Layer menu to work with layers.

Ordinary layers are pixel-based (image) layers. There are several other layer types you can use to create special effects:

**Fill layers** Contain a color gradient, solid color, or pattern.

**Adjustment layers** Enable you to fine-tune color, brightness, and saturation without making permanent changes to your image (until you flatten, or collapse, the adjustment layer).



## Working with layers

**Type layers and shape layers** Let you create vector-based text and shapes.

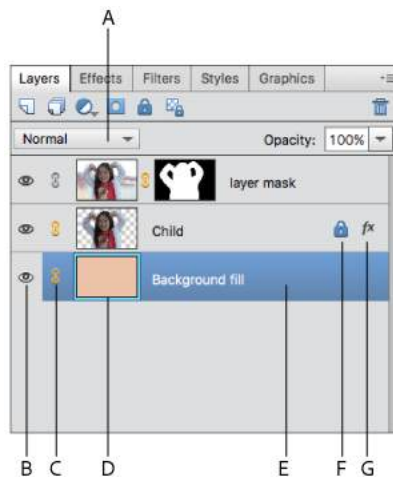
You can't paint on an adjustment layer, although you can paint on its mask. To paint on fill or type layers, you must first convert them into regular image layers.

## About the Layers panel

The Layers panel (Window > Layers) lists all layers in an image, from the top layer to the Background layer at the bottom. In Expert mode, if you are working in the Custom Workspace, you can drag the Layers panel out and tab it with other panels.

The active layer, or the layer that you are working on, is highlighted for easy identification. As you work in an image, check which layer is active to make sure that the adjustments and edits you perform affect the correct layer. For example, if you choose a command and nothing seems to happen, check to make sure that you're looking at the active layer.

Using the icons in the panel, you can accomplish many tasks—such as creating, hiding, linking, locking, and deleting layers. With some exceptions, your changes affect only the selected, or active, layer, which is highlighted.



Layers panel

**A** Blending mode menu **B** Show/Hide layer **C** Layer is linked to another layer **D** Preview of a layer **E** Highlighted layer is active layer **F** Locked layer **G** Layer has style applied

In the list of layers, the panel shows a thumbnail, a title, and one or more icons that give information about each layer:

The layer is visible. Click the eye to show or hide a layer. When the layer is hidden, the icon is . Hidden layers are not printed.

The layer is linked to the active layer.

The layer is locked.

The image contains layer groups and was imported from Adobe Photoshop. Photoshop Elements doesn't support layer groups and displays them in their collapsed state. You must simplify them to create an editable image.

You use the buttons in the panel to perform actions:

Create a new layer.

Create a new group.

Create a new fill or adjustment layer.

## Working with layers

🗑️ Delete a layer.

🔒 Lock transparent pixels.

Also at the top are the panel Blending Mode menu (Normal, Dissolve, Darken, and so on), an Opacity text box, and a More button displaying a menu of layer commands and panel options.

## Adding layers

Newly added layers appear above the selected layer in the Layers panel. You can add layers to an image by using any of the following methods:

- Create new, blank layers or turn selections into layers.
- Convert a background into a regular layer or vice versa.
- Paste selections into the image.
- Use the Type tool or a shape tool.
- Duplicate an existing layer.

You can create up to 8000 layers in an image, each with its own blending mode and opacity. However, memory constraints may lower this limit.

## Create and name a new blank layer

? Do one of the following in the Photoshop Elements:

- To create a layer with default name and settings, click the New Layer button in the Layers panel. The resulting layer uses Normal mode with 100% opacity, and is named according to its creation order. (To rename the new layer, double-click it and type a new name.)
- To create a layer and specify a name and options, choose Layer > New > Layer, or choose New Layer from the Layers panel menu. Specify a name and other options, and then click OK.

The new layer is automatically selected and appears in the panel above the layer that was last selected.

## Create a new layer from part of another layer

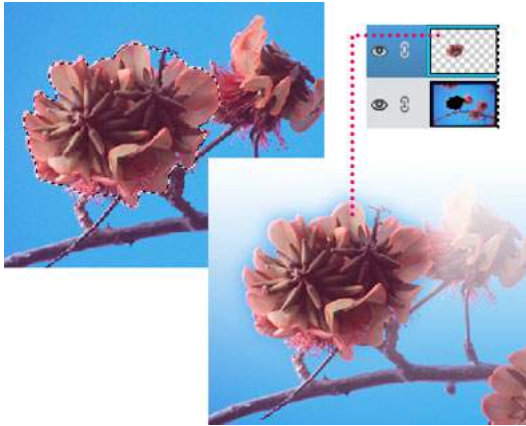
You can move part of an image from one layer to a newly created one, leaving the original intact.

**1** Select an existing layer, and make a selection.

**2** Choose one of the following:

- Layer > New > Layer Via Copy to copy the selection into a new layer.
- Layer > New > Layer Via Cut to cut the selection and paste it into a new layer.

The selected area appears in a new layer in the same position relative to the image boundaries.



*Creating a new layer by copying part of another layer and pasting it into a new layer*

## Convert the Background layer into a regular layer

The Background layer is the bottom layer in an image. Other layers stack on top of the Background layer, which usually (but not always) contains the actual image data of a photo. To protect the image, the Background layer is always locked. If you want to change its stacking order, blending mode, or opacity, you must first convert it into a regular layer.

### 1 Do one of the following:

- Double-click the Background layer in the Layers panel.
- Choose Layer > New > Layer From Background.
- Select the Background layer, and choose Duplicate Layer from the Layers panel flyout menu, to leave the Background layer intact and create a copy of it as a new layer.



*You can create a duplicate layer of the converted Background layer no matter how you convert the layer; simply select the converted Background layer and choose Duplicate Layer from the Layer menu.*

### 2 Name the new layer.



*If you drag the Background Eraser tool onto the Background layer, it is automatically converted into a regular layer, and erased areas become transparent.*

## Make a layer the Background layer

You can't convert a layer into the Background layer if the image already has a Background layer. In this case, you must first convert the existing Background layer into a regular layer.

- 1 Select a layer in the Layers panel.
- 2 Choose Layer > New > Background From Layer.

Any transparent areas in the original layer are filled with the background color.

## Manage layers

### Create a new group

You can create a new group to prevent cluttering and organize the layers. Do one of the following:

- To create a new group with default settings, create Click A New Group icon in the Layers panel in the Expert mode.
- To create a new group with customized settings, follow these steps:
  - Select Layer > New > Group.
  - In the dialog box, specify a name and other options, and click OK.

### Assign a color to a layer or a group

Color-coding layers and groups helps you to identify related layers in the Layers panel. Simply right-click the layer or group and select a color.

## Edit layers

### Select a layer

Any change you make to an image only affects the active layer. If you don't see the desired results when you manipulate an image, make sure that the correct layer is selected.

? Do one of the following:

- In the Layers panel, select a layer's thumbnail or name.
- To select more than one layer, hold down Ctrl (Command in Mac OS) and click each layer.

### Show or hide a layer

In the Layers panel, the eye icon, in the leftmost column next to a layer means that the layer is visible. A line across the eye symbol indicates that the layer is not visible.

**1** Choose Window > Layers if the Layers panel is not already open.

**2** Do one of the following:

- To hide a layer, click the eye icon. When a line appears across the eye icon, the layer is not visible. Click in the eye column again to show the layer.
- Drag through the eye column to show or hide more than one layer.
- To display just one layer, Alt-click (Option-click in Mac OS) the eye icon for that layer. Alt-click (Option-click in Mac OS) in the eye column again to show all the layers.

### Resize or hide layer thumbnails

**1** Choose Panel Options from the Layers panel flyout menu.

**2** Select a new size, or select None to hide the thumbnails. Then click OK.

## Lock or unlock a layer

You can fully or partially lock layers to protect their contents. When a layer is locked, a lock icon appears to the right of the layer name, and the layer cannot be edited or deleted. Except for the Background layer, you can move locked layers to different locations in the stacking order of the Layers panel.

? Select the layer in the Layers panel, and do one of the following:

- Click the Lock all pixels icon in the Layers panel, to lock all layer properties. Click the icon again to unlock them.
- Click the Lock Transparency icon in the Layers panel, to lock the transparent areas of the layer, so that no painting occurs in them. Click the icon again to unlock.

**Note:**

*For type and shape layers, transparency is locked by default and cannot be unlocked without first simplifying the layer.*

## Rename a layer



*As you add layers to an image, rename layers according to their content. Use descriptive layer names so that you can easily identify layers in the Layers panel.*

**Note:**

*You can't rename the Background layer unless you change it into a normal layer.*

Do one of the following:

- Double-click the layer's name in the Layers panel, and enter a new name.
- Right-click the layer and choose Rename Layer from the context menu.

## Simplify a layer

You simplify a smart object, frame layer, type layer, shape layer, solid color layer, gradient layer, or pattern fill layer (or a layer group imported from Photoshop) by converting it into an image layer. You need to simplify these layers before you can apply filters to them or edit them with the painting tools. However, you can no longer use the type- and shape-editing options on simplified layers.

- 1 Select a type layer, shape layer, fill layer, or a Photoshop layer group in the Layers panel.
- 2 Simplify the layer or imported layer group:
  - If you selected a shape layer, click Simplify in the Tools Options bar.
  - If you selected a type, shape, or fill layer, or a Photoshop layer group, choose Simplify Layer from either the Layer menu, or from the Layers panel flyout menu.

## Delete a layer

Deleting layers that you no longer need reduces the size of your image file.

- 1 Select the layer in the Layers panel.
- 2 Do one of the following:
  - Click the Delete Layer icon in the Layers panel, and click Yes in the delete confirmation dialog box. To bypass this dialog box, press Alt (Option in Mac OS) as you click the Delete icon.

## Working with layers

- Choose Delete Layer from either the Layer menu or the Layers panel More menu, and click Yes.

## Sample color from all visible layers

By default, when you work with certain tools, the color you apply is sampled only from the active layer. With this default behavior, you can smudge or sample in a single layer even when other layers are visible, and you can sample from one layer and paint in another one.

If you want to paint using sampled data from all visible layers, do the following:

- 1 Select the Color Picker tool, Magic Wand tool, Paint Bucket tool, Smudge tool, Blur tool, Sharpen tool, or Clone Stamp tool.
- 2 In the Tool Options bar, select All Layers.

## Copy and arrange layers

### Duplicate a layer within an image

You can duplicate any layer, including the Background layer, within an image.

- ? Select one or more layers in the Layers panel, and do one of the following to duplicate it:
  - To duplicate and rename the layer, choose Layer > Duplicate Layer, or choose Duplicate Layer from the Layers panel More menu. Name the duplicate layer, and click OK.
  - To duplicate without naming, select the layer and drag it to the New Layer button in the Layers panel.
  - Right-click the layer name or thumbnail, and choose Duplicate Layer.

### Duplicate one or more layers in another image

You can take any layer, including the Background layer, from one image and duplicate it in another. Keep in mind that the pixel dimensions of the destination image determine how large the printed copy of the duplicated layer can be. Also, if the pixel dimensions of the two images are not the same, the duplicated layer may appear smaller or larger than you'd expect.

- 1 Open the source image. If you plan to copy a layer to an existing image rather than a new one, open the destination image as well.
- 2 In the source document's Layers panel, select the name of the layer or layers you want to duplicate. To select more than one layer, hold down the Ctrl key (Command key in Mac OS) and click each layer's name.
- 3 Choose Layer > Duplicate Layer, or choose Duplicate Layer from the More menu in the Layers panel.
- 4 Type a name for the duplicate layer in the Duplicate Layer dialog box, and choose a destination document for the layer, and then click OK:
  - To duplicate the layer in an existing image, choose a filename from the Document pop-up menu.
  - To create a new document for the layer, choose New from the Document menu, and enter a name for the new file. An image created by duplicating a layer has no background.

## Copy a layer from one image to another

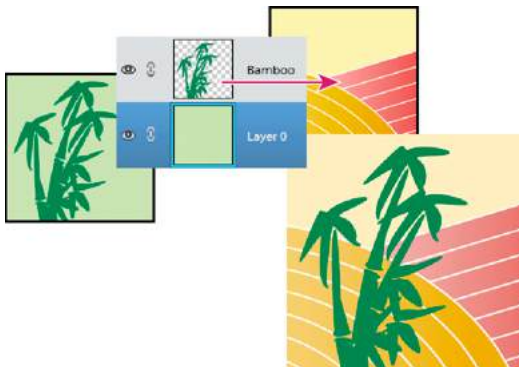
You can copy any layer, including the Background layer, from one image to another. Keep in mind that the resolution of the destination image determines how large the printed copy of the layer can be. Also, if the pixel dimensions of the two images are not the same, the copied layer may appear smaller or larger than you'd expect.

- 1 Open the two images you want to use.
- 2 In the Layers panel of the source image, select the layer that you want to copy.
- 3 Do one of the following:
  - Choose Select > All to select all of the pixels in the layer, and choose Edit > Copy. Then make the destination image active, and choose Edit > Paste.
  - Drag the layer's name from the Layers panel of the source image into the destination image.
  - Use the Move tool (Select section of the toolbox), to drag the layer from the source image to the destination image.

The copied layer appears in the destination image, above the active layer in the Layers panel. If the layer you're dragging is larger than the destination image, only part of the layer is visible. You can use the Move tool to drag other sections of the layer into view.



*Hold down Shift as you drag a layer to copy it to the same position it occupied in the source image (if the source and destination images have the same pixel dimensions) or to the center of the destination image (if the source and destination images have different pixel dimensions).*



*Dragging the bamboo layer to another image*

## Move the content in a layer

Layers are like stacked images on panes of glass. You can “slide” a layer in a stack to change what portion of its content is visible in relation to the layers above and below.

- 1 To move multiple layers at the same time, link the layers together in the Layers panel by selecting the layers and then clicking the Link Layer icon of any one layer.
- 2 From the Select section of the Tools panel, select the Move tool.
- 3 Do one of the following:
  - Drag within the image to slide the selected layer or layers to the desired position.

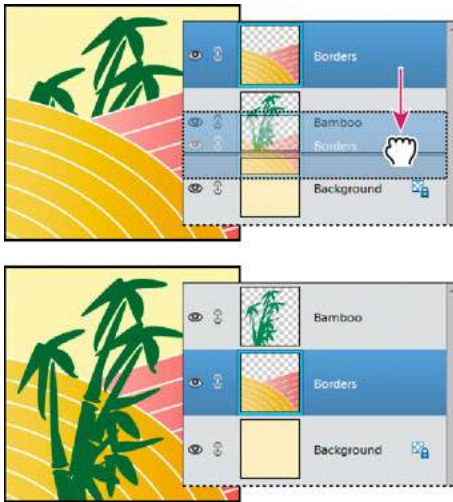
## Working with layers

- Press the arrow keys on your keyboard to move the layer or layers in 1-pixel increments, or press Shift and an arrow key to move the layer in 10-pixel increments.
- Hold down Shift as you drag to move the layer or layers directly up or down, directly to either side, or on a 45° diagonal.

## Change the stacking order of layers

The stacking order determines whether a layer appears in front of or behind other layers.

By default, the Background layer must remain at the bottom of the stack. To move the Background layer, you need to convert it into a regular layer first.



*Dragging a layer below another layer changes the stacking order*

- 1 In the Layers panel, select one or more layers. To select more than one layer, hold down the Ctrl key and click each layer.
- 2 To change the stacking order, do one of the following:
  - Drag the layer or layers up or down the Layers panel to the new position.
  - Choose Layer > Arrange, and then choose Bring To Front, Bring Forward, Send Backward, or Send To Back.

## Link and unlink layers

When layers are linked, you can move their contents together. You can also copy, paste, merge, and apply transformations to all linked layers simultaneously. At some point, you may want to edit or move one linked layer. You can simply unlink the layers to work on one layer at a time

- 1 To link layers, do one of the following:
  - With one layer selected, click the link icon of another layer.
  - Select the layers you would like to link. To select more than one layer, hold down Ctrl (Command in Mac OS) and click the layers you want to select. Click the link icon of any one layer.
  - With multiple layers selected, right-click and select the Link Layers option.



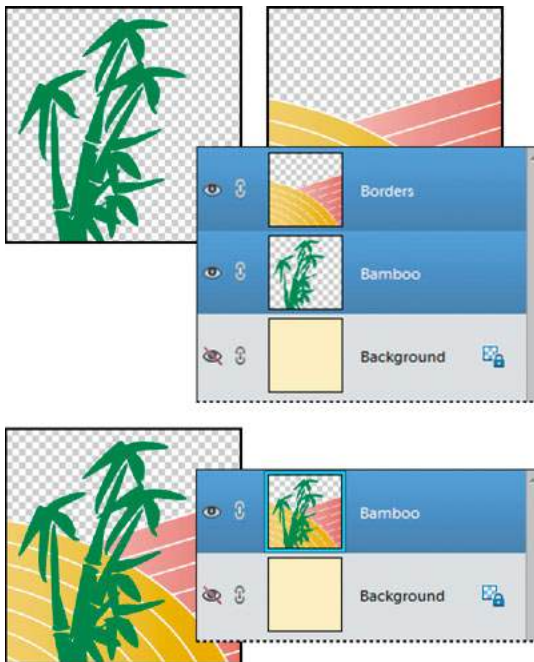
## Working with layers

2 To unlink layers, do one of the following:

- To unlink one layer, click the link icon of a layer.
- To unlink multiple layers, select more than one layer, right-click and select the Unlink Layers option.

## Merge layers

Layers can greatly increase the file size of an image. Merging layers in an image reduces file size. You should merge layers only after you have finished manipulating them to create the image you want.



*Example of merging*

You can choose to merge only the linked layers, only the visible layers, only a layer with the layer below it, or only selected layers. You can also merge the contents of all visible layers into a selected layer, yet not delete the other visible layers (in this case, there is no reduction in file size).

When you complete work on an image, you can flatten it. Flattening merges all visible layers, discards all hidden layers, and fills transparent areas with white.

- 1 Go to the Layers panel and make sure that an eye icon appears (not crossed) next to each of the layers you want to merge.
- 2 Do one of the following:
  - To merge selected layers, select more than one layer by holding down the Ctrl key (Command key in Mac OS) and clicking each layer. Right-click and choose Merge Layers.
  - To merge a layer with the one below, select the top layer of the pair and choose Merge Down from either the Layer menu or the Layers panel flyout menu.

**Note:**

## Working with layers

*If the bottom layer in the pair is a shape, type, or fill layer, you must simplify the layer. If the bottom layer in the pair is an adjustment layer, you can't choose Merge Down.*

- To merge all visible layers, hide any layers you don't want to merge and choose Merge Visible from the Layer menu or Layers panel flyout menu.
- To merge all visible linked layers, select one of the linked layers and choose Merge Linked from the Layer menu or Layers panel flyout menu.

### **Note:**

*If the bottom-most merged layer is a type, shape, solid color fill, gradient fill, or pattern fill layer, you must first simplify the layer.*

## Merge layers into another layer

Use this procedure when you want to keep the layers you are merging intact. The result is a new merged layer plus all the original layers.

- 1 Click the eye icon next to layers you don't want to merge (the icon appears with a line across it), and make sure that the eye icon is visible (not crossed) for the layers you do want to merge..
- 2 Specify a layer in which to merge all visible layers. You can either create a new layer in which to merge or select an existing layer in the Layers panel.
- 3 Hold down Alt (Option in Mac OS), and choose Merge Visible from either the Layers menu or the Layers panel More menu. Photoshop Elements merges a copy of all visible layers into the selected layer.

## Flatten an image

When you flatten an image, Photoshop Elements merges all visible layers into the background, greatly reducing the file size. Flattening an image discards all hidden layers, and fills any transparent areas with white. In most cases, you won't want to flatten a file until you've finished editing individual layers.

- 1 Make sure that the layers you want to keep in your image are visible.
- 2 Choose Flatten Image from either the Layer menu or the Layers panel More menu.



*You can see the difference between your image's layered file size and its flattened file size by choosing Document Sizes from the status bar pop-up menu at the bottom of the image window.*

# Adjustment and fill layers

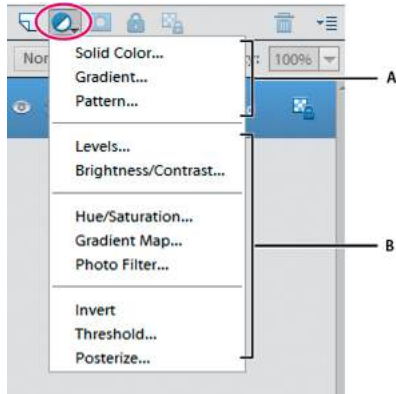
## About adjustment and fill layers

Adjustment layers let you experiment with color and make tonal adjustments without permanently modifying the pixels in an image. You can think of an adjustment layer as a veil coloring the underlying layers. By default, an adjustment layer affects all layers below it, although you can change this behavior. When you create an adjustment layer, the Layers panel displays a white box representing the adjustment for that layer.

## Working with layers

Fill layers let you fill a layer with a solid color, gradient, or pattern. Unlike adjustment layers, fill layers do not affect the layers below them. To paint on a fill layer, you must first convert it (simplify it) into a regular layer.

Adjustment and fill layers have the same opacity and blending mode options as image layers, and you can move and reposition them just as you do image layers. By default, adjustment and fill layers are named for their type (for example, Solid Color fill layer and Invert adjustment layer).



Create Adjustment Layer menu  
A Fill layers B Adjustment layers

## Create adjustment layers

- 1 In the Layers panel, select the topmost layer you want to affect.
- 2 To confine the effects of the adjustment layer to a selected area in that layer, make a selection.
- 3 Do one of the following:
  - To affect all the layers below the adjustment layer, click the Create New Fill or Adjustment Layer button in the Layers panel. Then, choose one of the following adjustment types. (The first three options in the menu are fill layers, not adjustment layers.)

## Working with layers



Original image, and image with Hue/Saturation adjustment applied. Only the layers under the adjustment layer are affected.

- To affect only one layer or several successive layers below the adjustment layer, choose Layer > New Adjustment Layer > [adjustment type]. In the New Layer dialog box, select Use Previous Layer to Create Clipping Mask, and then click OK.

**Levels** Corrects tonal values in the image.

**Brightness/Contrast** Lightens or darkens the image.

**Hue/Saturation** Adjusts colors in the image.

**Gradient Map** Maps pixels to the color in the selected gradient.

**Photo Filter** Adjusts the color balance and color temperature of the image.

**Invert** Produces a photo negative effect by creating a negative based on the brightness values of the image.

**Threshold** Renders the image in monochrome with no gray, so that you can locate the lightest and darkest areas.

**Posterize** Gives a flat, poster-like appearance to a photo by reducing the number of brightness values (levels) in the image, thus reducing the number of colors.

- 4 In the dialog box, specify options and click OK.

Selecting Use Previous Layer to Create Clipping Mask in step 3, groups the adjustment layer with the layer immediately below it and the effect is confined to the group.

- 5 To add more layers to the group, press Alt (Option in Mac OS) and position the pointer over the line dividing the bottom most layer in the group from the layer below it. Click when the pointer changes to two overlapping circles.



*Applying a correction using the Smart Brush tool or the Detail Smart Brush tool automatically creates an adjustment layer.*

## Create fill layers

- 1 In the Layers panel, select the layer above which the fill layer should be.

## Working with layers

- 2 To confine the effects of the fill layer to a selected area, make a selection.
- 3 Do one of the following:
  - Click the Create New Fill or Adjustment Layer button in the Layers panel, and choose the fill type you want to create. (The first three options listed in the panel are fill layers, the others are adjustment layers.)
  - Choose Layer > New Fill Layer > [fill type]. In the New Layer dialog box, click OK.

**Solid Color** Creates a layer filled with a solid color chosen from the Color Picker.

**Gradient** Creates a layer filled with a gradient. You can choose a predefined gradient from the Gradient menu. To edit the gradient in the Gradient Editor, click the color gradient. You can drag within the image window to move the center of the gradient.

You can also specify the shape of the gradient (Style) and the angle at which it is applied (Angle). Select Reverse to flip its orientation, Dither to reduce banding, and Align With Layer to use the layer's bounding box to calculate the gradient fill.

**Pattern** Creates a layer filled with a pattern. Click the pattern, and choose a pattern from the pop-up panel. You can scale the pattern and choose Snap To Origin to position the origin of the pattern with that of the document window. To specify that the pattern moves with the Fill layer as it is relocated, select Link With Layer. When this option is selected, you can drag within the image to position the pattern while the Pattern Fill dialog box is open. To create a new preset pattern after editing pattern settings, click the New Preset button.

## Edit an adjustment or fill layer

- 1 Open the adjustment or fill options dialog box by doing one of the following:
  - Double-click the adjustment or fill layer's leftmost thumbnail in the Layers panel.
  - Select the layer in the panel and choose Layer > Layer Content Options.
- 2 Make your changes, and click OK.

## Merging adjustment layers

You can merge an adjustment or fill layer in several ways: with the layer below it, with other selected layers, with the layers in its own group, with the layers it's linked to, and with all other visible layers. You cannot, however, use an adjustment layer or fill layer as the base or target layer for a merge.

When you merge an adjustment layer or fill layer with the layer below it, the adjustments are simplified and permanently applied to the merged layer. The adjustment no longer affects other layers below the merged adjustment layer. You can also convert (simplify) a fill layer into an image layer without merging it.

Adjustment layers and fill layers with masks (the layer's rightmost thumbnail in the Layers panel) that contain only white values do not add significantly to the file size, so you don't need to merge these adjustment layers to conserve file space.

## Edit the layer masks

A layer mask prevents sections of a layer, or an entire layer, from being visible. You use the mask to show or hide sections of an image or an effect. When the layer mask (right thumbnail) attached to an adjustment layer is completely white, the adjustment effect is applied to all underlying layers. If you don't want to apply the effect to certain portions of the underlying layers, paint the corresponding area of the mask with black. When attached to a fill layer, the mask defines the filled-in area in the fill layer.

## Working with layers



*Painting a mask with black increases the area protected.*

- 1 Select the adjustment or fill layer in the Layers panel.
- 2 Select the Brush tool, or any painting or editing tool.
- 3 Use the following methods to view the layer mask:
  - To view only the mask, Alt-click (Option-click in Mac OS) the layer mask's thumbnail (the rightmost thumbnail). Alt-click (Option-click in Mac OS) the thumbnail again to redisplay the other layers.
  - To view the mask in a red masking color, hold down Alt+Shift (Option+Shift in Mac OS) and click the layer mask's thumbnail (the rightmost thumbnail). Hold down Alt+Shift (Option+Shift in Mac OS) and click the thumbnail again to turn off the red display.
  - To constrain editing to part of the mask, select the corresponding pixels.
- 4 Edit the layer mask:
  - To remove areas of the adjustment effect or fill, paint the layer mask with black.
  - To add areas to the adjustment effect or fill, paint the layer mask with white.
  - To partially remove the adjustment effect or fill so that it shows in various levels of transparency, paint the layer mask with gray. (Single-click the foreground color swatch in the toolbox to choose a gray shade from the Swatches panel.) The extent to which the effect or fill is removed depends on the tones of gray you use to paint. Darker shades result in more transparency; lighter shades in more opacity.



*Shift-click the mask thumbnail (the layer's rightmost thumbnail) in the Layers panel to turn off the mask; click the thumbnail again to turn on the mask.*

## Clipping masks

## About layer clipping masks

A clipping mask is a group of layers to which a mask is applied. The bottommost layer, or base layer, defines the visible boundaries of the entire group. For example, suppose you have a shape in the base layer, a photograph in the layer above it, and text in the topmost layer. If the photograph and text appear only through the shape outline in the base layer, they also take on the opacity of the base layer.

You can group only successive layers. The name of the base layer in the group is underlined, and the thumbnails for the overlying layers are indented. Additionally, the overlying layers display the clipping mask icon.



*You can link the layers in a clipping mask so that they move together.*



*The shape in the bottom layer of the clipping mask determines what area of the photo layer above shows through.*

## Create a clipping mask

- 1 Do one of the following:
  - Hold down Alt (Option in Mac OS), position the pointer over the line dividing two layers in the Layers panel (the pointer changes to two overlapping circles), and then click.
  - In the Layers panel, select the top layer of a pair of layers you want to group, and choose Layer > Create Clipping Mask.
- 2 When making a clipping mask from an existing layer and one you are about to create, first select the existing layer in the Layers panel. Then choose New Layer from the Layer menu or the Layers panel More menu. In the New Layer dialog box, select Use Previous Layer To Create Clipping Mask, and click OK.

The layers in the clipping mask have the opacity and mode attributes of the bottommost base layer in the group.



*To change the stacking order of the clipping mask relative to other layers in the image, select all layers in the group. Then drag the group's base layer up or down in the Layers panel. (Dragging a layer without selecting all the layers in the group removes that layer from the group.)*

## Remove a layer from a clipping mask

Ungrouping the base layer from the layer above it ungroups all layers in the clipping mask.

- 1 Do one of the following:
  - Hold down Alt (Option in Mac OS), position the pointer over the line separating two grouped layers in the Layers panel (the pointer changes to two overlapping circles), and click.

## Working with layers

- In the Layers panel, select a layer in the clipping mask, and choose Layer > Release Clipping Mask. This command removes the selected layer and any layers above it from the clipping mask.
- In the Layers panel, select any layer in the group except the base layer. Either drag the layer below the base layer, or drag it between two ungrouped layers in the image.

## Release clipping mask

- 1 In the Layers panel, select any layer other than the base layer in the clipping mask.
- 2 Choose Layer > Release Clipping Mask.

# Layer masks

## About layer masks

Layer masks are resolution-dependent bitmap images that are edited with the painting or selection tools. A layer mask controls the visibility of the layer to which it is added. You can edit a layer mask to add or subtract from the masked region without losing the layer pixels.

A layer mask is a grayscale image, so areas you paint in black are hidden, areas you paint in white are visible, and areas you paint in shades of gray appear in various levels of transparency. You can use the paint brush or the eraser to paint over the mask.

## Add a layer mask to an image

- ? To add a layer mask, select the part of the image that you want to show and click the Add Layer Mask button in the Layers panel.

**Note:**

*A mask thumbnail linked with the layer thumbnail is added. This thumbnail represents the grayscale channel that is created when you add the layer mask.*

# Layer styles

## About layer styles

Layer styles let you quickly apply effects to an entire layer. In the Effects panel, you can view a variety of predefined layer styles and apply a style with just a click of the mouse.





Three different layer styles applied to text

The boundaries of the effect are automatically updated when you edit that layer. For example, if you apply a drop shadow style to a text layer, the shadow changes automatically when you edit the text.

Layer styles are cumulative, which means that you can create a complex effect by applying multiple styles to a layer. You can apply one style from each style library per layer. You can also change a layer's style settings to adjust the final result.

When you apply a style to a layer, a style icon appears to the right of the layer's name in the Layers panel. Layer styles are linked to the layer contents. When you move or edit the contents of the layer, the effects are modified correspondingly.

Once you choose Layer > Layer Style > Style Settings, you can edit the settings of a layer's style or apply other style settings or attributes available in the dialog box.

**Lighting Angle** Specifies the lighting angle at which the effect is applied to the layer.

**Drop Shadow** Specifies the distance of a drop shadow from the layer's content. You can also set the size and opacity with the sliders.

**Glow (Outer)** Specifies the size of a glow that emanates from the outside edges of the layer's content. You can also set the opacity with the slider.

**Glow (Inner)** Specifies the size of a glow that emanates from the inside edges of the layer's content. You can also set the opacity with the slider.

**Bevel Size** Specifies the size of beveling along the inside edges of the layer's content.

**Bevel Direction** Specifies the direction of the bevel, either up or down.

**Stroke Size** Specifies the size of the stroke.

**Stroke Opacity** Specifies the opacity of the stroke.

## Work with layer styles

You can apply special effects to a layer, hide or show the styles in a layer, and even change the scale of a layer style (for example, decrease or increase the size of a glow effect). It's easy to copy a style from one layer to another.

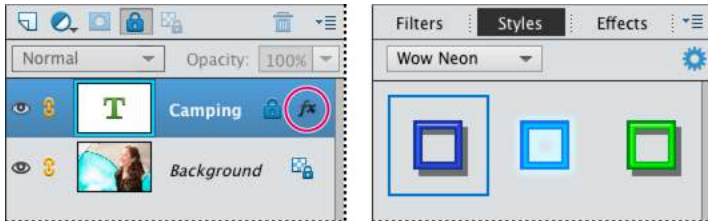
### Apply a layer style

- 1 Select a layer in the Layers panel.
- 2 In the Effects panel, choose Layer Styles from the category menu.

## Working with layers

3 Do any of the following:

- Select a style, and click Apply.
- Double-click a style.
- Drag a style onto a layer.



A style icon indicates a layer style is applied to the layer.

If you don't like the result, press Ctrl+Z (Command + Z in Mac OS) to remove the style, or choose Edit > Undo.



You can also drag the style to the image, where it is applied to the selected layer.

## Hide or show all layer styles in an image

? Choose one of the following:

- Layer > Layer Style > Hide All Effects.
- Layer > Layer Style > Show All Effects.

## Edit a layer's style settings

You can edit a layer's style settings to adjust the effect. You can also copy style settings between layers and remove a style from a layer.

- 1 Choose Layer > Layer Style > Style Settings.
- 2 To preview the changes in your image, select Preview.
- 3 Adjust one or more of the layer style settings or add new ones, and click OK.

## Change the scale of a layer style

- 1 In the Layers panel, select the layer containing style effects you want to scale.
- 2 Choose Layer > Layer Style > Scale Effect.
- 3 To preview the changes in your image, select Preview.
- 4 Specify how much you want to scale the effects. For example, if you are increasing the size of an outer glow, 100% is the current scale; 200% doubles the glow size. Then click OK.

## Copy style settings between layers

- 1 In the Layers panel, select the layer containing the style settings you want to copy.
- 2 Choose Layer > Layer Style > Copy Layer Style.
- 3 Select the destination layer in the Layers panel, and choose Layer > Layer Style > Paste Layer Style.

## Remove a layer style

- 1 In the Layers panel, select the layer containing the style you want to remove.
- 2 Choose Layer > Layer Style > Clear Layer Style.

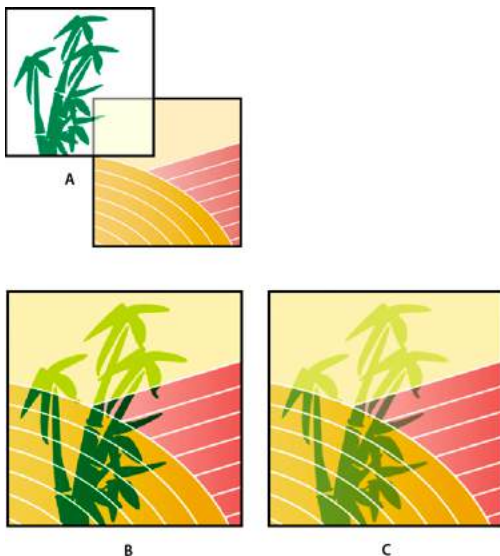
# Opacity and blending modes

## About opacity and blending options in layers

A layer's opacity determines the degree to which it obscures or reveals the layer beneath it. A layer with 1% opacity is nearly transparent, while a layer with 100% opacity is opaque. Transparent areas remain transparent regardless of the opacity setting.

You use layer blending modes to determine how a layer blends with the pixels in layers beneath it. Using blending modes, you can create various special effects.

A layer's opacity and blending mode interact with the opacity and blending mode of painting tools. For example, a layer uses Dissolve mode at 50% opacity. You paint on this layer with the Paintbrush tool set to Normal mode at 100% opacity. The paint appears in Dissolve mode at 50% opacity. Similarly, if a layer uses Normal mode at 100% opacity, and you use the Eraser tool at 50% opacity, only 50% of the paint disappears from the layer as you erase.



### Blending layers

*A Bamboo layer and Borders layer B Bamboo layer with 100% opacity and Color Burn mode C Bamboo layer with 50% opacity and Color Burn mode*

## Specify the opacity of a layer

- 1 Select the layer in the Layers panel.
- 2 In the Layers panel, enter a value between 0 and 100 for Opacity, or click the arrow at the right of the Opacity box and drag the Opacity slider that appears.

## Specify a blending mode for a layer

- 1 Select a layer that you have added, in the Layers panel.
- 2 Choose an option from the Blending Mode menu.



*(Windows) Immediately after you choose a blending mode, you can press the up or down arrows on your keyboard to try other blending mode options in the menu.*

## Select all opaque areas in a layer

You can quickly select all the opaque areas in a layer. This procedure is useful when you want to exclude transparent areas from a selection.

- 1 In the Layers panel, Ctrl-click (Command-click in Mac OS) the layer thumbnail:
- 2 To add the pixels to an existing selection, press Ctrl+Shift (Command+Shift in Mac OS) and click the layer thumbnail in the Layers panel.
- 3 To remove the pixels from an existing selection, press Ctrl+Alt (Command+Option in Mac OS) and click the layer thumbnail in the Layers panel.
- 4 To load the intersection of the pixels and an existing selection, press Ctrl+Alt+Shift (Command+Option+Shift in Mac OS) and click the layer thumbnail in the Layers panel.

## Customize the transparency grid

The checkerboard grid identifies transparency in a layer. You can change the appearance of this grid; however, do not change it to solid white because you'll eliminate the visual distinction between opaque (white) and transparent (checkerboard).

- 1 In Windows, choose Edit > Preferences > Transparency. In Mac, choose Photoshop Elements > Preferences > Transparency.
- 2 Choose a pattern size from the Grid Size menu.
- 3 Choose a pattern color from the Grid Colors menu. To choose a custom color instead, click one of the two boxes below the Grid Colors menu and select a color from the Color Picker.

# Chapter 9: Creating photo projects

## Project basics

Elements Organizer and Photoshop Elements provide quick and easy ways to be creative with your photos. You can use your photos to create photo books, greeting cards, calendars, collages, and CD/DVD jackets among other projects. You can complete some projects in Elements Organizer. For other projects, you select the photos you want to use in Elements Organizer, and then complete the project in Photoshop Elements.

Click **Create** to view a list of projects that guide you through the process of using professionally designed templates to create your own unique project. When you complete a project, you can either share it online, or print it on your home computer.

Your projects are displayed in Elements Organizer. The project file and related subfolders that contain the document or web page files for each project are created on your local hard drive. To maintain the link between these project files, subfolders, and page files, avoid moving them using Explorer (Windows) or Finder (Mac). Instead, use the Move command in Elements Organizer.

You can share projects in various ways. For example, you can burn a slideshow onto a CD.

**Note:**

*Projects from previous versions of Photoshop Elements might not open in the current version. You may have to use a previous version to open some projects.*

## Making photo projects

Photo projects help you create professional-looking photo books, greeting cards, photo calendars, photo collages, CD/DVD jackets, and CD/DVD labels in a jiffy. The **Create** button, available in the upper-right corner of the Photoshop Elements window, lists the available photo projects in Photoshop Elements.

Photo projects are saved in the Photo Projects Format (.pse) format. You can print the photo projects on your home printer, save to your hard drive, or share via email.

## Creating photo projects



*Create button and list of available options*

### **Note:**

*If you are creating large photo projects with many pages, you will need at least 1 GB of RAM for optimum performance.*

## Create photo collages

Create great photo collages easily to make memories last.



*Sample photo collages*

### **Create photo collages in PSE 2019 release**

Perform the following steps in **Elements 2019** release to create a photo collage:

- 1 Open two or more photos in Photoshop Elements.

### **Note:**

*You can also select photos in Elements Organizer. A maximum of 8 photos can be selected to create a photo collage.*

- 2 Click **Create > Photo Collage**.

## Creating photo projects

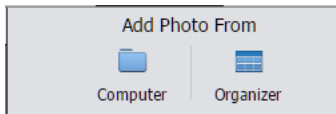
Based on the number of open photos, an attractive collage is automatically created. Using intelligent auto-crop, the most prominent part of the photo (face) is focused and placed in the collage frames.

### 3 (Optional) Select a layout for your photo collage.

The layout suggestions are displayed based on the number of photos in your collage. You can choose a layout across four categories: Landscape, Portrait, Facebook Cover, and Instagram.

### 4 (Optional) Add, remove, replace, and swap photos from your collage.

- **Add a photo:** Click **Computer** to add a photos stored on your computer. Or, click **Organizer** to select photos from your catalog or albums.



Add photos from computer or Organizer

- **Replace a photo:** Right-click on the photo you want to replace. From the context menu, choose **Replace Photo** to open the Choose Photo dialog and select the desired photo from your computer to replace.



Remove or replace a photo

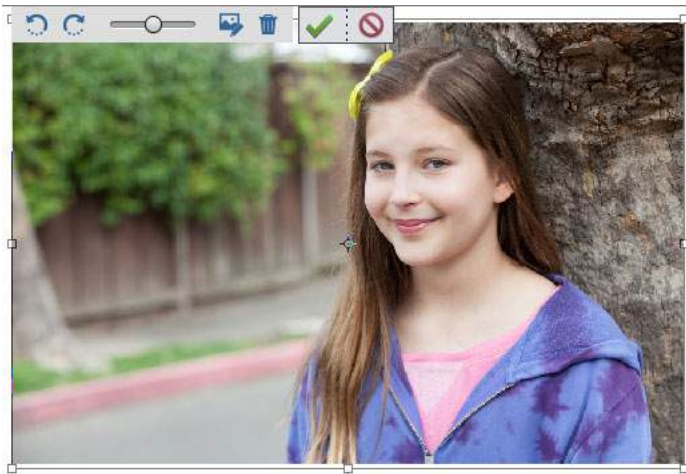
- **Remove a photo:** Right-click on the photo you want to remove. From the context menu, choose **Remove Photo**.
- **Swap photos:** You can swap photos in between frames of your photo collage. Right-click on a photo that you want to swap, select the **Drag to Swap Photo** option, drag the photo onto the photo frame with which you want to swap the photo. When you see a double-arrow cursor, drop the photo. Photos between the source and target frames are swapped.



*Easily swap photos in your collage*

When you add or remove a photo from your collage, a new layout is automatically applied on the collage.

- 5 (Optional) Double-click on a photo to display the heads-up-display (HUD). Use the HUD to rotate your photo left or right, zoom in or out, replace the photo, or you can also delete the photo. Once you have made the desired changes, click the green check mark to commit your changes.



*Use the HUD to rotate, zoom, replace, or remove a photo*

- 6 (Optional) Click **Graphics** in the lower-right corner to choose a background or a frame. Double-click on the desired background or frame to apply it on your collage.





*Apply a background or frame of your choice*

- 7** (Optional) Click **Advanced Mode** or **Basic Mode** to set the mode in which you want to view and modify the photos you want to work with.

In the Basic mode, you can add text and move text or graphics.

In the Advanced mode, you get the complete toolbox and layer option. You can use the options to retouch the images and edit layers.

- 8** Do one of the following to save the photo collage:

- In the Taskbar, click **Save**. You can save your photo collage in various formats such as, Photoshop, BMP, JPEG, PNG, and more.
- Click **File > Save**. By default, the collage/project is saved in your Pictures folder, although you can save collage/projects to another location.
- Press Ctrl+S (Windows) or Command+S (Mac OS).

- 9** Do one of the following to print the photo collage:

- In the Taskbar, click **Print**.
- Click **File > Print**.
- Press Ctrl+P (Windows) or Command+P (Mac OS).

### **Create photo collages in PSE 2018 and earlier releases**

Perform the following steps in **Elements 2018 and earlier** releases to create a photo collage:

- 1** Select **Create > Photo Collage**.

## Creating photo projects



- 2 Do the following in the Photo Collage dialog box and click **OK**:
  - Select a size for the photo collage.
  - Select a theme.
  - Select **Autofill with selected images** if you want to use images selected in the Photo Bin.

- 3 The project opens with following options in the lower-right corner:
  - **Pages**: Shows you the pages of the photo collage
  - **Layout**: Shows the layout of the photo collage
  - **Graphics**: Lets you change the background, frames, and graphics in the photo collage

Do the following:

- Add photos to your photo collage.
  - Add the background.
  - Add frames if you want to add more photos on one page.
  - Add graphics if necessary.
- 4 (Optional) Click **Advanced Mode** or **Basic Mode** to set the mode in which you want to view and modify the photos you want to work with.

In the Basic mode, you can add text and move text or graphics.

In the Advanced mode, you get the complete toolbox and layer option. You can use the options to retouch the images and edit layers.

- 5 Do one of the following to save the photo collage:
  - In the Taskbar, click **Save**.
  - Choose **File > Save**. By default, projects are saved in your My Pictures folder, although you can save projects to another location.
  - Press Ctrl+S (Windows) or Command+S (Mac OS).
- 6 Do one of the following to print the photo collage:
  - Select **File > Print**.

## Creating photo projects

- Press Ctrl+P (Windows) or Command+P (Mac OS).

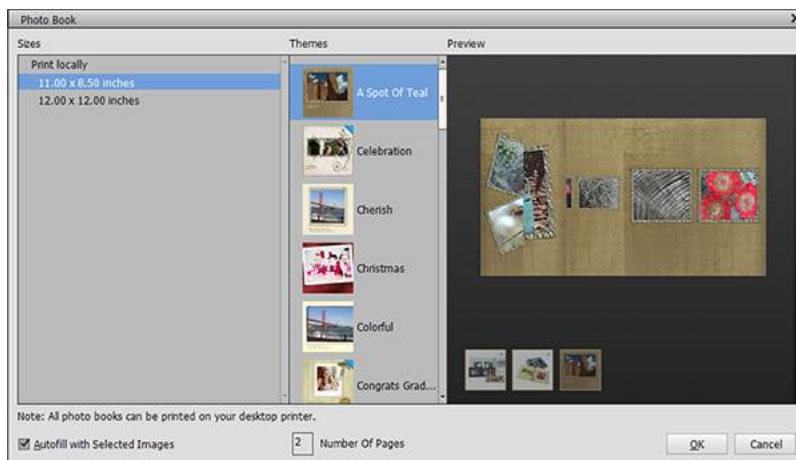
### Note:

*If a photo used in the photo collage is moved from its original location in your computer, you cannot print the photo collage. However, you can still save the project.*

## Create photo books

Photo books are great keepsakes for your memories. With various size and theme options, Photoshop Elements makes it easy to create photo books.

### 1 Select **Create > Photo Book**.



Do the following in the Photo Book dialog box and click **OK**:

- Select a size for the photo book.
  - Select a theme.
  - Select **Autofill with selected images** if you want to use images selected in the Photo Bin.
  - Specify the number of pages (2 to 78) for the photo book.
- 2** The project opens with following options in the lower-right corner:

- **Pages:** Shows you the pages of the photo book
- **Layout:** Shows the layout of the photo book
- **Graphics:** Lets you change the background, frames, and graphics in the photo book

Do the following:

- Add photos to your photo book.
  - Add the background.
  - Add frames if you want to add more photos on one page.
  - Add graphics if necessary.
- 3** (Optional) Click **Advanced Mode** or **Basic Mode** to set the mode in which you want to view and modify the photos you want to work with.

## Creating photo projects

In the Basic mode, you can add text and move text or graphics.

In the Advanced mode, you get the complete toolbox and layer option. You can use the options to retouch the images and edit layers.

**4** Do one of the following to save the photo book:

- In the Taskbar, click **Save**.
- Choose **File > Save**. By default, projects are saved in your My Pictures folder, although you can save projects to another location.
- Press Ctrl+S (Windows) or Command+S (Mac OS).

**5** Do one of the following to print the photo book:

- Select **File > Print**.
- Press Ctrl+P (Windows) or Command+P (Mac OS).

**Note:**

*If a photo used in the photo book is moved from its original location in your computer, you cannot print the book. However, you can still save the project.*

## Create greeting cards

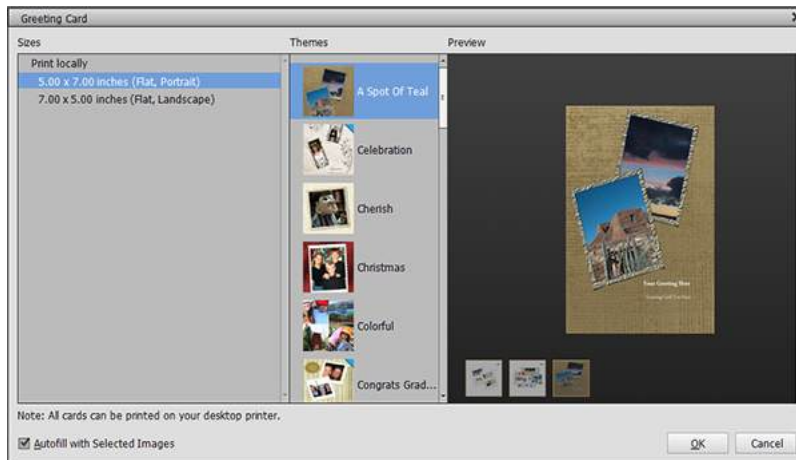
Create your own greeting cards in a few easy steps.



*Sample photo greeting cards*

**1** Select **Create > Greeting Card**.

## Creating photo projects



Do the following in the Greeting Card dialog box and click **OK**:

- Select a size for the greeting card.
- Select a theme.
- Select **Autofill with selected images** if you want to use images selected in the Photo Bin.

**2** The project opens with following options in the lower-right corner:

- **Pages:** Shows you the pages of the greeting card
- **Layout:** Shows the layout of the greeting card
- **Graphics:** Lets you change the background, frames, and graphics in the greeting card

Do the following:

- Add photos to your greeting card.
- Add the background.
- Add frames if you want to add more photos on one page.
- Add graphics if necessary.

**3** (Optional) Click **Advanced Mode** or **Basic Mode** to set the mode in which you want to view and modify the photos you want to work with.

In the Basic mode, you can add text and move text or graphics.

In the Advanced mode, you get the complete toolbox and layer option. You can use the options to retouch the images and edit layers.

**4** Do one of the following to save the greeting card:

- In the Taskbar, click **Save**.
- Choose **File > Save**. By default, projects are saved in your My Pictures folder, although you can save projects to another location.
- Press Ctrl+S (Windows) or Command+S (Mac OS).

**5** Do one of the following to print the greeting card:

- Select **File > Print** and click **OK**.

## Creating photo projects

- Press Ctrl+P (Windows) or Command+P (Mac OS) and click **OK**.

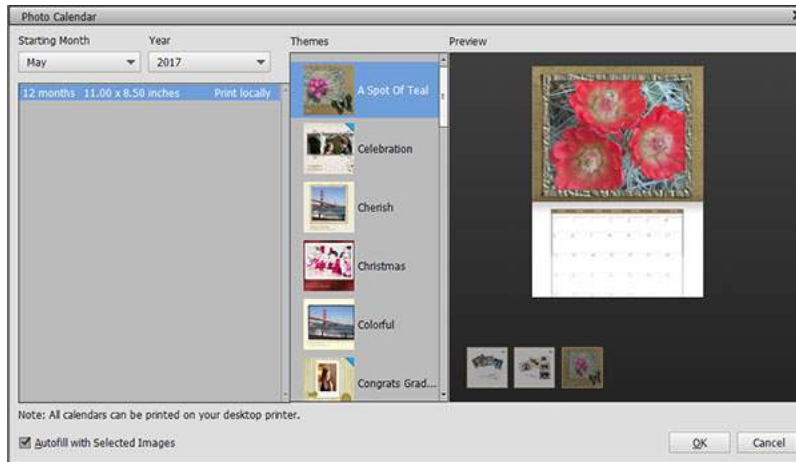
### **Note:**

*If a photo used in the greeting card is moved from its original location in your computer, you cannot print the greeting card. However, you can still save the project.*

## Create photo calendars

Showcase your photos by creating photo calendars with Photoshop Elements.

### 1 Select **Create > Photo Calendar**.



### 2 Do the following in the Photo Calendar dialog box and click **OK**:

- Select starting month and year.
- Select a size for the calendar.
- Select a theme.
- Select **Autofill with selected images** if you want to use images selected in the Photo Bin.

### 3 The project opens with following options in the lower-right corner:

- **Pages:** Shows you the pages of the photo book
- **Layout:** Shows the layout of the photo book
- **Graphics:** Lets you change the background, frames, and graphics in the photo book

Do the following:

- Add photos to your calendar.
- Add the background.
- Add frames if you want to add more photos on one page.
- Add graphics if necessary.

### 4 (Optional) Click **Advanced Mode** or **Basic Mode** to set the mode in which you want to view and modify the photos you want to work with.

In the Basic mode, you can add text and move text or graphics.

## Creating photo projects

In the Advanced mode, you get the complete toolbox and layer option. You can use the options to retouch the images and edit layers.

**5** Do one of the following to save the calendar:

- In the Taskbar, click **Save**.
- Choose **File > Save**. By default, projects are saved in your My Pictures folder, although you can save projects to another location.
- Press Ctrl+S (Windows) or Command+S (Mac OS).

**6** Do one of the following to print the calendar:

- Select **File > Print**.
- Press Ctrl+P (Windows) or Command+P (Mac OS).

**Note:**

*If a photo used in the calendar is moved from its original location in your computer, you cannot print the calendar. However, you can still save the project.*

## Create CD and DVD jackets

Photoshop Elements lets you create disc jackets (covers) for a CD and DVD case.



Sample CD and DVD jackets

**1** Do the following:

- To create a CD jacket, select **Create > CD Jacket**.
- To create a DVD jacket, select **Create > DVD Jacket**.

**2** Do the following in the dialog box and click **OK**:

- Select a size for the jacket.
- Select a theme.
- Select **Autofill with selected images** if you want to use images selected in the Photo Bin.

**3** The project opens with following options in the lower-right corner:

- **Pages:** Shows you the pages of the CD/DVD jacket
- **Layout:** Shows the layout of the photo book

## Creating photo projects

- **Graphics:** Lets you change the background, frames, and graphics in the photo book

Do the following:

- Add photos to your CD/DVD jacket
- Add the background.
- Add frames if you want to add more photos on one page.
- Add graphics if necessary.

- 4 (Optional) Click **Advanced Mode** or **Basic Mode** to set the mode in which you want to view and modify the photos you want to work with.

In the Basic mode, you can add text and move text or graphics.

In the Advanced mode, you get the complete toolbox and layer option. You can use the options to retouch the images and edit layers.

- 5 Do one of the following to save the CD/DVD jacket:

- In the Taskbar, click **Save**.
- Choose **File > Save**. By default, projects are saved in your My Pictures folder, although you can save projects to another location.
- Press Ctrl+S (Windows) or Command+S (Mac OS).

- 6 Do one of the following to print the CD/DVD jacket:

- Select **File > Print**.
- Press Ctrl+P (Windows) or Command+P (Mac OS).

**Note:**

*If a photo used in the CD/DVD jacket is moved from its original location in your computer, you cannot print the CD/DVD jacket. However, you can still save the project.*

## Create CD and DVD labels

Photoshop Elements lets you create adhesive disc labels for CDs and DVDs, or labels for printable CDs and DVDs, using an inkjet printer.



*Sample CD and DVD labels*

- 1 Select **Create > CD/DVD Label**.



## Creating photo projects

- 2 Do the following in the CD/DVD Label dialog box and click **OK**:
  - Select a size for the CD/DVD label.
  - Select a theme.
  - Select **Autofill with selected images** if you want to use images selected in the Photo Bin.

- 3 The project opens with following options in the lower-right corner:

- **Pages**: Shows you the pages of the photo book
- **Layout**: Shows the layout of the photo book
- **Graphics**: Lets you change the background, frames, and graphics in the CD/DVD label

Do the following:

- Add photos to your CD/DVD label.
  - Add the background.
  - Add frames if you want to add more photos on one page.
  - Add graphics if necessary.
- 4 (Optional) Click **Advanced Mode** or **Basic Mode** to set the mode in which you want to view and modify the photos you want to work with.

In the Basic mode, you can add text and move text or graphics.

In the Advanced mode, you get the complete toolbox and layer option. You can use the options to retouch the images and edit layers.

- 5 Do one of the following to save the CD/DVD jacket:
  - In the Taskbar, click **Save**.
  - Choose **File > Save**. By default, projects are saved in your My Pictures folder, although you can save projects to another location.
  - Press Ctrl+S (Windows) or Command+S (Mac OS).

- 6 Do one of the following to print the CD/DVD label:
  - Select **File > Print**.
  - Press Ctrl+P (Windows) or Command+P (Mac OS).

**Note:**

*If a photo used in the CD/DVD label is moved from its original location in your computer, you cannot print the CD/DVD label. However, you can still save the project.*

## Create slideshows

Slideshows are a fun way to share media files. With Photoshop Elements, you can customize slideshows with music clips, clip art, text, and even voice narration.

When you create a slideshow, Photoshop Elements opens the Elements Organizer for further processing. See [Creating slideshow](#) for details.

**Note:**

For a video about slideshows, see [www.adobe.com/go/lrvid913\\_pse\\_en](http://www.adobe.com/go/lrvid913_pse_en)

# Editing photo projects

## About photo project edits

In Photoshop Elements, you can modify photo collages, greeting cards, and CD/DVD disc jackets and labels. The Create panel lets you add various frames, textures, backgrounds, and graphics to your projects, as well as apply text effects. You can also resize, rotate, and move images.

## Add images to a photo project

You can add images to a photo project, and then rearrange, modify, or replace them.

Photoshop Elements adds all the images in a project to your default catalog.

Photo projects (Creations) are saved as .pse files. When you save a photo project, Photoshop Elements saves any unsaved images added to the project. Photoshop Elements saves the image as a copy of the original image in the same location.

**Note:** If the location is not writable, Photoshop Elements saves the image in %My Documents%\Adobe\Photo Creations.

If you relocate the images used in a photo book, missing file icons appear in the photo book instead of the images. Reimport the images by clicking the ? sign, or reconnect all the missing files in the Organize workspace. After reconnecting the files, close the project and reopen it.

To add photos to project, do one of the following:

- Click an empty photo placeholder and then select a photo, or right-click an existing photo and click Replace Photo.
- Drag a photo to an empty photo placeholder.
- Choose File > Open. Choose the photos you want to add. If you do not see the images, navigate to where they are located, and then click Open, which places them in the Photo Bin. Drag photos into your photo project from your photo bin.

## Edit photos in the Quick mode

- 1 Right-click the photo and select Edit Quick.
- 2 Use the controls on the right side to modify the images.
- 3 Click Back To Creations to return to the Create panel.

## Add new pages to a photo project [Photo Books only]


- 1 In the Pages panel, select the page that will precede the new page.
- 2 At the top of the Pages panel, click the Add Page panel to add a new page after the current page.

## Reposition or resize photos in a photo project

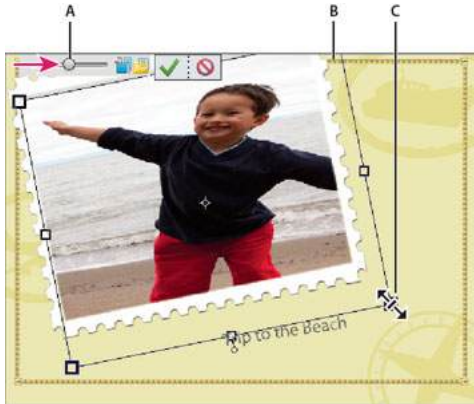
- 1 To adjust a photo and frame together, click the photo once. To adjust a photo within a frame, double-click the photo. A bounding box appears showing the edges of the photo, even if the edges are masked by the frame.

## Creating photo projects

### 2 Do any of the following:

- To reposition the photo, click anywhere within the bounding box and drag the photo.
- To resize the photo, drag the slider that appears above the selected image. Or, position the Move tool over a corner, top, bottom, or side; when the diagonal double-headed arrow  appears, drag it.

### 3 After repositioning or resizing the photo within the frame, click the Commit button or the Cancel button when you're finished.




Resizing a photo

A Drag a corner of the photo to resize it B Move the resize slider C Areas outside the photo frame are hidden

## Replace or remove photos in a photo project



### ? Do any of the following:

- Double-click the photo, then click .
- Drag a new photo from the Photo Bin onto a photo placeholder.
- To replace a photo on a page, right-click and select Replace Photo.
- To remove (clear) a photo from a page, right-click and select Clear Photo.

## Rotate photos in a photo project

### 1 To rotate a photo and frame together, click the photo once. To rotate a photo within a frame, double-click the photo.

### 2 Do any of the following:

- Click anywhere within the bounding box and a circle appears below the selection. Position the cursor over the circle. When the curved four-headed arrow  appears, drag the track ball handle to rotate the image.
- Position the Move tool over a corner. When the curved double-headed arrow  appears, drag it to rotate the photo. The further away the cursor is from the corner, the more control you have to make more accurate changes.
- Double-click the photo, and then click the rotate button next to the slider (only rotates in 90° increments).

### 3 When you are finished, click the Commit button or the Cancel button .

## Edit photo project pages in Photoshop

If you have Adobe® Photoshop® and Photoshop Elements installed on the same computer, you can send JPEG, GIF, and other single-page photo files to Photoshop. In Elements Organizer, choose Edit > Edit with Photoshop. Photoshop does not support the multipage PSE file format, so it cannot edit entire photo projects. However, Photoshop can edit individual pages of a photo project, which are in the single-page PSD format.

Photoshop offers direct control over many aspects of photo project pages, including direct editing of photo layers (called Smart Objects in Photoshop) and frames. These features are limited in Photoshop Elements to preserve its easy, automatic image-editing workflow.

- 1 In Elements Organizer, right-click the photo project.
- 2 Select Show File Info.
- 3 In the General section, click the Location link next to the path of the project.
- 4 Locate and open the folder with the same name as the PSE file.
- 5 Right-click the PSD file for the page you want to edit, and choose Open With > Adobe Photoshop.
- 6 In Photoshop, make your changes, and then choose File > Save. When Photoshop asks if you want to replace the existing file, click Yes.

**Note:**

*Do not reorder or rename layers in the PSD file. Doing so could prevent the automatic editing features in Photoshop Elements from working as expected.*

# Chapter 10: Saving, printing, and sharing photos

## Save images

### Save changes

Do one of the following:

- Click **File**>**Save**.
- Press *Ctrl+S* (Windows) or *Command+S* (Mac OS).

### Save changes with a different file format, name, or location

You can use the **Save as** option in the **File** menu to set options for saving image files, such as the format, and whether to include the saved file in the Elements Organizer catalog or to preserve layers in an image. Depending on the format you select, other options may be available to set.

1 Do one of the following:

- Click **File** > **Save As**.
- Press *Ctrl+Shift+S* (Windows) or *Command+Shift+S* (Mac OS).

2 Set the following file-saving options, and then click **Save**:

**Note:**

*Some file formats open another dialog box with more options.*

**File Name** Specifies the file name for the saved image.

**File format** Specifies the file format for the saved image.

**Include In the Elements Organizer** Includes the saved file in your catalog so that it displays in the Photo Browser. Some file formats supported in the Edit workspace are not supported in the Elements Organizer. If you save a file in one of these formats, like EPS, this option is unavailable.

**Save In Version Set with Original** Saves the file, then adds it to a version set in the Photo Browser to keep the different versions of the image organized. This option is unavailable unless Include In The Organizer is selected.

**Layers** Preserves all layers in the image. If this option is disabled or unavailable, there are no layers in the image. A warning icon at the Layers check box indicates that the layers in your image will be flattened or merged for the selected format. In some formats, all layers are merged. To preserve layers, select another format.

**As a Copy** Saves a copy of the file while keeping the current file open. The copy is saved to the folder containing the currently open file.

**ICC Profile** Embed a color profile in the image for certain formats.

**Thumbnail** Saves thumbnail data for the file. This option is available when the **Ask When Saving option for Image Previews** is set in the Preferences dialog box.

**Use Lower Case Extension** Makes the file extension uppercase or lowercase.

**Note:**

*UNIX file servers are often used to help send information over networks and the Internet. Some of these servers do not recognize uppercase extensions. To make sure your images arrive at their destinations, use lowercase extensions.*

### Save a file in GIF format

1 Do one of the following:

- Click **File > Save As**.
- Press *Ctrl+Shift+S* (Windows) or *Command+Shift+S* (Mac OS).

2 Specify a file name and location, and choose **CompuServe GIF** format from the format list.

Your image is saved as a copy in the specified directory (unless it's already in indexed-color mode).

3 Click **Save**. If your original image is RGB, the Indexed Color dialog box appears.

4 If necessary, specify indexed color options in the Indexed Color dialog box and click **OK**.

5 In the GIF Options dialog box, select a row order for the GIF file and click **OK**:

**Normal** Displays the image in a browser only when the image is fully downloaded.

**Interlaced** Displays a series of low-resolution versions of the image while the full image file is downloaded to the browser. Interlacing can make downloading time seem shorter and assures viewers that downloading is in progress. However, interlacing also increases file size.

**Note:**

*If your file has layers, the **Save for Web** dialog appears. To know more about saving options, see using [Using the Save For Web dialog box](#).*

### Save a file in JPEG format

1 Do one of the following:

- Click **File > Save As**.
- Press *Ctrl+Shift+S* (Windows) or *Command+Shift+S* (Mac OS).

2 Choose JPEG from the format list.

**Note:**

*You cannot save indexed-color and bitmap mode images in JPEG format.*

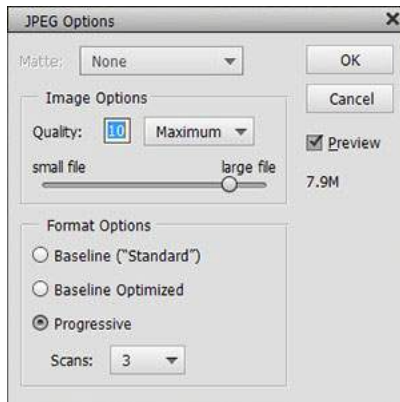
3 Specify a file name and location, select file-saving options, and click **Save**.

The JPEG Options dialog box opens.

4 If the image contains transparency, select a Matte color to simulate the appearance of background transparency.

5 Specify image compression and quality by choosing an option from the Quality menu, dragging the Quality slider, or entering a value between 1 and 12.

## Saving, printing, and sharing photos



### 6 Select a format option:

**Baseline (“Standard”)** Uses a format that is recognizable to most web browsers.

**Baseline Optimized** Optimizes the color quality of the image and produces a slightly smaller file size. All web browsers do not support this option.

**Progressive** Creates an image that is gradually displayed as it is downloaded to a web browser. Progressive JPEG files are slightly larger in size, require more RAM for viewing, and are not supported by all applications and web browsers.

### 7 Click **OK**.

## Save a file in Photoshop PDF format

### 1 Do one of the following:

- Click **File > Save As**.
- Press **Ctrl+Shift+S** (Windows) or **Command+Shift+S** (Mac OS).

### 2 Choose Photoshop PDF from the format list.

### 3 Specify a file name and location, select file-saving options, and click **Save**.

### 4 In the **Save Adobe PDF** dialog box, select a compression method. (See [File compression](#).)

### 5 Choose an option from the Image Quality menu.

### 6 To view the PDF file, select View PDF After Saving to launch Adobe Acrobat or Adobe® Reader (depending on which application is installed on your computer).

### 7 Click **Save PDF**.



*If you've made changes to an Acrobat Touchup file, but the changes are not reflected when you open the file, check the Saving File preferences dialog box. Choose **Edit > Preferences > Saving Files**, and then choose **Save Over Current File** from the **On First Save** menu.*

## Save a file in PNG format

### 1 Do one of the following:

- Click **File > Save As**.

## Saving, printing, and sharing photos

- Press *Ctrl+Shift+S* (Windows) or *Command+Shift+S* (Mac OS).
- 2 Choose PNG from the format list.
  - 3 Specify a file name and location, select file-saving options, and click **Save**.
  - 4 In the **PNG Options** dialog box, select an Interlace option and click **OK**.  
**None** Displays the image in a web browser only after it is completely downloaded.

**Interlaced** Displays low-resolution versions of the image while the full image file is downloading to the browser. Interlacing can make downloading time seem shorter and assures viewers that downloading is in progress. However, interlacing also increases file size.

## Save a file in TIFF format

- 1 Do one of the following:
  - Click **File > Save As**.
  - Press *Ctrl+Shift+S* (Windows) or *Command+Shift+S* (Mac OS).
- 2 Choose TIFF from the format list.
- 3 Specify a file name and location, select file-saving options, and click **Save**.
- 4 In the TIFF Options dialog box, select options:
 

**Image Compression** Specifies a method for compressing the composite image data.

**Pixel Order** Choose Interleaved to be able to add the photo to the Elements Organizer.

**Byte Order** Most recent applications can read files using Mac or Windows byte order. However, if you don't know what kind of program the file may be opened in, select the platform on which the file will be read.

**Save Image Pyramid** Preserves multiresolution information. Photoshop Elements does not provide options for opening multiresolution files; the image opens at the highest resolution within the file. However, Adobe InDesign® and some image servers provide support for opening multiresolution formats.

**Save Transparency** Preserves transparency as an additional alpha channel when the file is opened in another application. (Transparency is always preserved when the file is reopened in Photoshop Elements.)

**Layer Compression** Specifies a method for compressing data for pixels in layers (as opposed to composite data). Many applications cannot read layer data and skip it when opening a TIFF file. Photoshop Elements can read layer data in TIFF files. Although files that include layer data are larger than those that don't, saving layer data eliminates the need to save and manage a separate PSD file to hold the layer data.
- 5 Click **OK**.

## Set preferences for saving files

- 1 Do one of the following:
  - (Windows) Click **Edit > Preference > Saving Files**.
  - (Mac OS) Click **Adobe Photoshop Elements Editor > Preference > Saving Files**.
- 2 Set the following preferences:
 

**On First Save** Gives you the ability to control how files are saved:

  - Ask If Original (default) opens the Save As dialog box the first time you edit and save the original file. All subsequent saves overwrite the previous version. If you open the edited copy in the Edit workspace (from Elements Organizer), the first save, as well as all subsequent saves, overwrites the previous version.



- Always Ask opens the Save As dialog box the first time you edit and save the original file. All subsequent saves overwrite the previous version. If you open the edited copy in the Edit workspace (from Elements Organizer), the first save opens the Save As dialog box.
- Save Over Current File does not open the Save As dialog box. The first save overwrites the original.

**Image Previews** Saves a preview image with the file. Select Never Save to save files without previews, Always Save to save files with specified previews, or Ask When Saving to assign previews on a file-by-file basis.

**File Extension** Specifies an option for the three-character file extensions that indicate a file's format: Select Use Upper Case to append file extensions using uppercase characters, or Use Lower Case to append file extensions using lowercase characters. Generally, it's a good idea to keep this option set to Use Lower Case.

**Save As to Original Folder** Specifies the folder location that is opened by default in the Save As dialog. When this option is cleared, the Save As dialog always opens the folder where you last saved a file. When selected, the Save As dialog always opens the folder from where you last opened a file. Available at **Preferences > Saving Files**.

**Ignore Camera Data (EXIF) profiles** Select this option to automatically discard any color profiles used by your digital camera. The color profile you use in Photoshop Elements is saved with the image.

**Maximize PSD File Compatibility** Saves a composite image in a layered Photoshop file so that it can be imported or opened by a wider range of applications. Do one of the following:

- Select Never to skip this step
- Select Always to automatically save the composite
- Select Ask if you'd like to be prompted each time you save a file.

**Note:**

*When set to Ask, a dialog prompts for confirmation to maximize PSD compatibility. The dialog has a Don't Show Again check box. If selected, this confirmation dialog is never displayed again, and the Maximize PSD File Compatibility preference is set to Always.*

**Recent file list contains** Specifies how many files are available in the **File > Open Recently Edited File** submenu. Enter a value from 0 to 100. The default value is 20.

**3** Click **OK**.

## Supported file formats for saving

Photoshop Elements can save images in the following file formats:

**BMP** A standard Windows image format. You can specify either Windows or OS/2 format and a bit depth for the image. For 4-bit and 8-bit images using Windows format, you can also specify RLE compression.

**CompuServe GIF (Graphics Interchange Format)** Commonly used to display graphics and small animations in web pages. GIF is a compressed format designed to minimize file size and transfer time. GIF supports only 8-bit color images (256 or fewer colors). You can also save an image as a GIF file using the Save For Web command.

**JPEG (Joint Photographic Experts Group)** Used to save photographs, JPEG format retains all color information in an image but compresses file size by selectively discarding data. You can choose the level of compression. Higher compression results in lower image quality and a smaller file size; lower compression results in better image quality and a larger file size. JPEG is a standard format for displaying images over the web.

**Photoshop (PSD)** The standard Photoshop Elements format for images. You should use this format for edited images to save your work and preserve all your image data and layers in a single page file.

**Photo Creations Format (PSE)** The standard Photoshop Elements format for multiple page creations. You should use this format for photo creations to save your work and preserve all your image data and layers in a multiple page file.

**Photoshop PDF (Portable Document Format)** A cross-platform and cross-application file format. PDF files accurately display and preserve fonts, page layouts, and both vector and bitmap graphics.

*Note:*

*PDF and PDP are the same except that PDPs are opened in Adobe Photoshop® and PDFs are opened in Acrobat.*

**Pixar** Used for exchanging files with Pixar image computers. Pixar workstations are designed for high-end graphics applications, such as those used for three-dimensional images and animation. Pixar format supports RGB and grayscale images.

**PNG (Portable Network Graphics)** Used for lossless compression and for displaying images on the web. Unlike GIF, PNG supports 24-bit images and produces background transparency without jagged edges; however, some web browsers do not support PNG images. PNG preserves transparency in grayscale and RGB images.

**TIFF (Tagged-Image File Format)** Used to exchange files between applications and computer platforms. TIFF is a flexible bitmap image format supported by most paint, image-editing, and page-layout applications. Most desktop scanners can produce TIFF files.

In addition, Photoshop Elements can open files in several other older formats: Pixel Paint, Portable Bit Map, SGI RGB, Soft Image, Wavefront RLA, and Electric Image.

## File compression

Many image file formats compress image data to reduce file size. *Lossless* compression preserves all image data without removing detail; *lossy* compression removes image data and loses some detail.

The following are commonly used compression techniques:

**RLE (Run Length Encoding)** Lossless compression technique that compresses the transparent portions of each layer in images with multiple layers containing transparency.

**LZW (Lemple-Zif-Welch)** Lossless compression that provides the best results in compressing images that contain large areas of a single color.

**JPEG** Lossy compression that provides the best results with photographs.

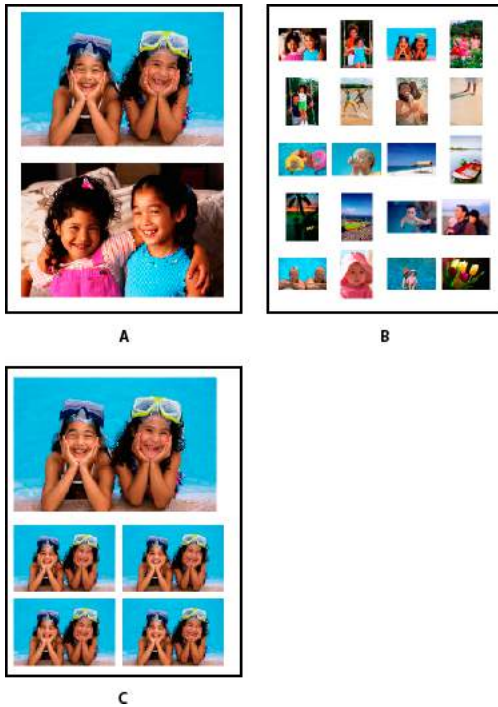
**CCITT** A family of lossless compression techniques for black-and-white images.

**ZIP** Lossless compression technique that is most effective for images that contain large areas of a single color.

## Printing photos

Photoshop Elements lets you control how you print your photos. You can print photos, contact sheets, and picture packages.

## Saving, printing, and sharing photos



A Individual prints B Contact sheet C Picture package

## Print photos

- Do one of the following in Photoshop Elements:
  - To print an already open photo, choose **File > Print**.
  - Open a photo in Photoshop Elements and choose **File > Print**.
  - Select photos in the Photo Bin (📁). Use Ctrl-click (Command-click in Mac OS) to select multiple photos from the Photo Bin and choose **File > Print**.
- In the Print dialog box, specify the desired options. For details, see [Print dialog box options](#).
- Click **Print**.

## Print a contact sheet

A contact sheet enables you to preview a group of images by displaying thumbnail images on a single page.

### On Windows

- Do one of the following:
  - Choose **Create > Photo Print > Contact Sheet**. It opens Elements Organizer workspace.
  - Choose **File > Print** and select **Contact Sheet** as type of print in the Print dialog box.
- In the Print dialog box, specify the desired options. For details, see [Print dialog box options](#).
- Click **Print**.

### On Mac

- Choose **File > Contact Sheet II**.

## Saving, printing, and sharing photos

- 2 In the Contact Sheet dialog box, specify the desired options and click **OK**.  
The contact sheet is created and it opens in Photo editor workspace.
- 3 Choose **File > Print**.
- 4 In the Print dialog box, specify the desired options. For details, see [Print dialog box options](#).
- 5 Click **Print**.

## Print a picture package

A picture package enables you to place multiple copies of one or more photos on a single page.

### On Windows

- 1 Do one of the following:
  - Choose **Create > Photo Print > Contact Sheet**. It opens Elements Organizer workspace.
  - Choose **File > Print** and select **Picture Package** as type of print in the Print dialog box.
- 2 In the Print dialog box, specify the desired options. For details, see [Print dialog box options](#).
- 3 Click **Print**.

### On Mac

- 1 Choose **File > Picture Package**.
- 2 In the Picture Package dialog box, specify the desired options and click **OK**.  
The contact sheet is created and it opens in Photo editor workspace.
- 3 Choose **File > Print**.
- 4 In the Print dialog box, specify the desired options. For details, see [Print dialog box options](#).
- 5 Click **Print**.

## Print dialog box options

In the Print dialog box, you preview the print and set the following options:

**Select Printer** Select a printer from the drop-down list.

### *Note:*

*You can print photos to PDF as well. To do that, you must install Adobe Acrobat on your system.*

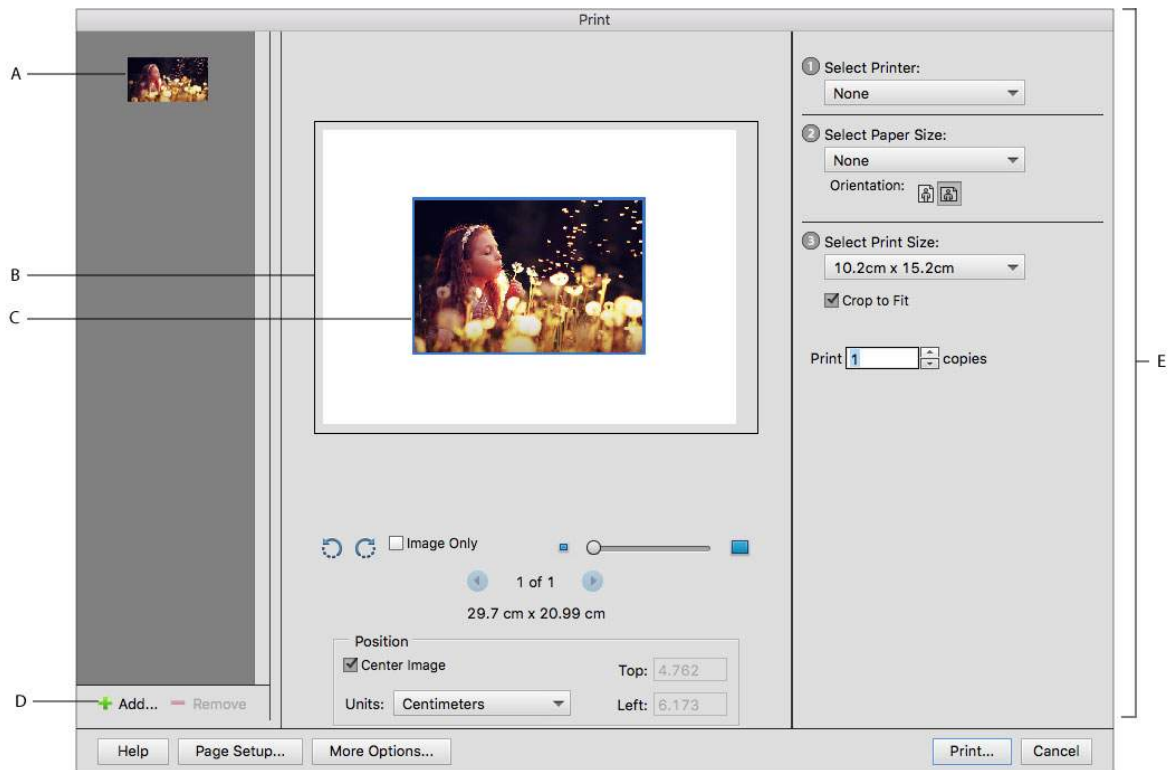
**Select Paper Size** Select the desired size of the paper for printing photos from the drop-down list.

**Orientation** Specify the orientation of the page as portrait or landscape.

**Select Print Size** Select a print size for the photo. Select Custom to specify the dimensions of the photo. For more details, see [Scale photos](#).

**Crop To Fit** Select this option to fit the individual image to the specified print layout. The image is scaled and, if necessary, cropped to match the aspect ratio of the print layout. Deselect this option if you don't want your photos cropped.

**Print Copies** Select or enter a number in the text box to specify the number of copies of each page that you want to print.



A Photos selected for printing B Page preview C Photoholder D Add photos for printing E Print options

### Note:

In Windows, you can modify the following print settings:

- Click **Change Settings** under Printer Settings to specify the printer, paper type, paper tray, paper size, print quality. Click **Advanced Settings** to open the printer driver options.
- Choose one of the following options from the **Select Type Of Print** drop-down list:
  - **Individual Prints:** Print individual photos
  - **Picture Package:** Arrange photos in various layouts and frames (borders for individual photos). Selecting this option opens Element Organizer for further process. For details, see [Printing photos](#).
  - **Contact Sheet:** Automatically arrange selected photos in a single-column or multicolumn layout. Selecting this option opens Element Organizer for further process. For details, see [Printing photos](#).

### Add photos using the Print dialog box

In the Print dialog box, you can add multiple photos to a print job.

Do the following:

- 1 In the Print dialog box, click the Add button (+).
- 2 In the Add Photos dialog box, select one of the following:
  - Photos Currently In Browser** Displays photos currently visible in the Media Browser.
  - Entire Catalog** Displays all photos in your catalog.
  - Album** Displays photos from a specific album. Use the menu to select an album.

## Saving, printing, and sharing photos

**Keyword Tag** Displays photos with a specific tag. Use the menu to select a tag.

**Only Show Photos with Ratings** Displays only photos marked with the Favorites tag.

**Also Show Hidden Photos** Displays photos marked as hidden.

**3** Click one or more thumbnails, or click Select All, and then click Add Selected Photos.

**4** Click Done.

## More options for printing

When you click **More Options** in the Print dialog box, the following options are displayed:

### Printing Choices

Enables you to specify the following settings:

**Photo Details** You can print the date, caption, and filename by selecting the following options:

- Show Date
- Show Caption
- Show File Name

**Border** You can specify the following details for the border:

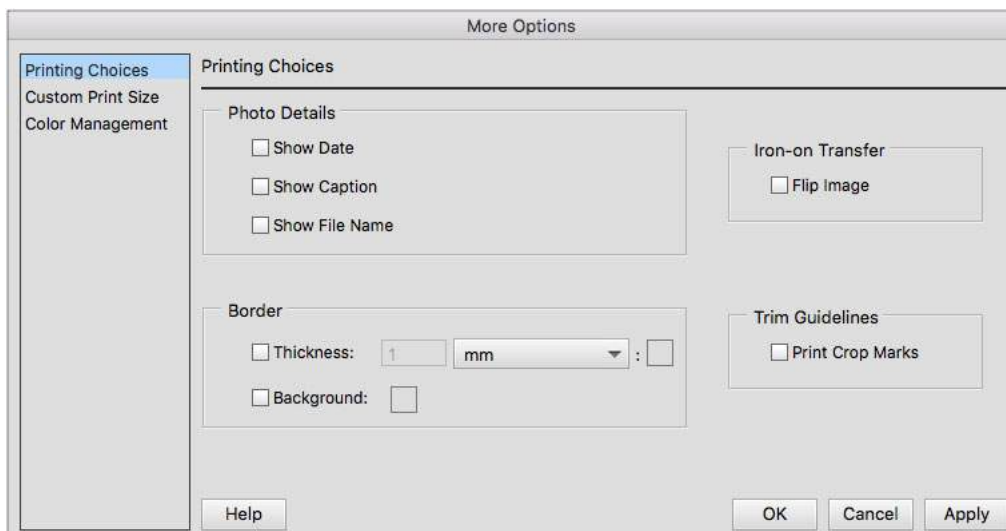
- Thickness in inches, mm, or points.
- Color of the border
- Background color

**Iron-on Transfer** Select Flip Image to use the image for T-shirt transfers.

#### Note:

*Some printers have the inverting images option. If so, ensure that you use either your printer driver settings or the Invert image option to invert images. Selecting both the options horizontally flips the image twice.*

**Trim Guidelines** Select Print Crop Marks (guidelines on all four edges of the photo) to make it easier to trim a photo.

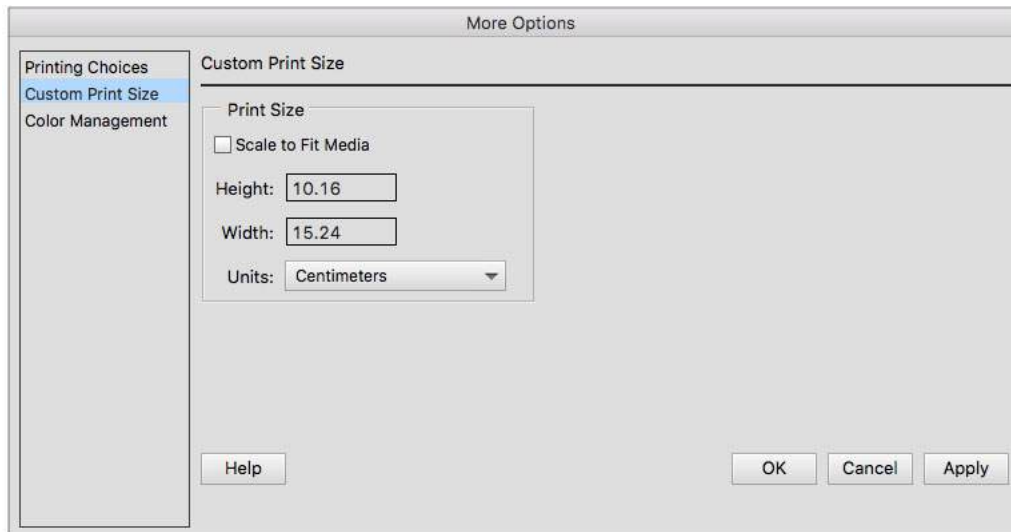


Printing choices

## Custom Print Size

Enables you to specify the following settings:

**Print Size** You can specify the width and height in inches, centimeters, and millimeters. Select Scale To Fit Media to scale the image to fit on the page.



*Specify the dimensions of the photo for printing*

## Color Management

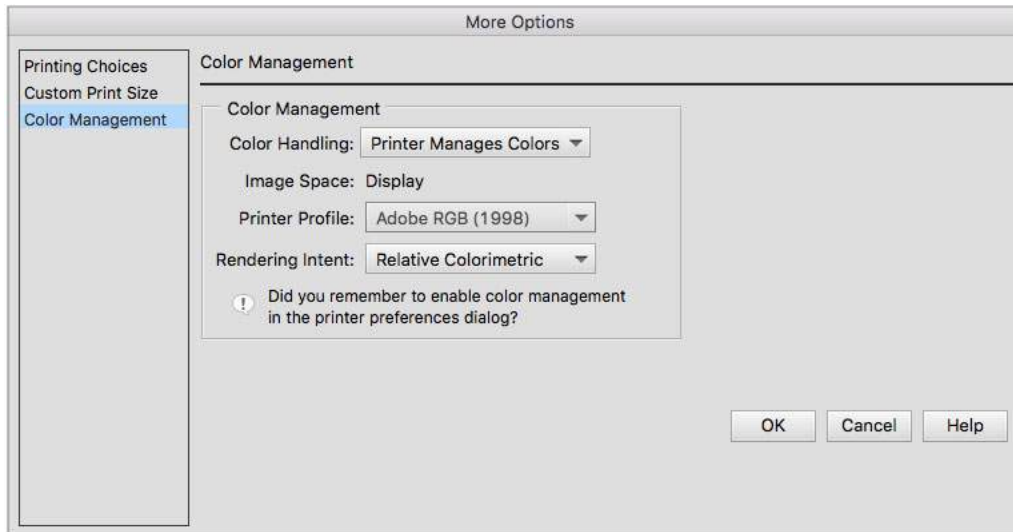
Displays the color profile of the image. Image Space shows the color space embedded in your photo file. (The print preview in the Print dialog box is not color managed and doesn't update as you choose a profile.) You can change the profile for printing from the following options:

**Color Handling** You can choose to have either your printer or Photoshop Elements manage colors.

**Printer Profile** Sets a custom printer profile to convert image colors to the printer's color space, or turns off color conversion. If you have an ICC profile for your printer and paper combination, choose it from the menu. Make sure that you turn off the printer driver's color management.

**Rendering Intent** Specifies how colors are translated from the image's source color space when certain colors are not available in the print space.

## Saving, printing, and sharing photos

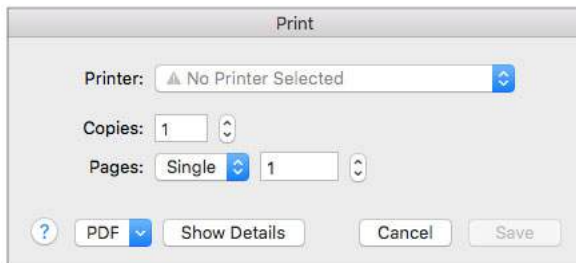


Color management options available for printing photos

## Page setup options for printing

When you click **Page Setup** in the Print dialog box, the following options are displayed:

- **Printer** Add a printer or specify the preferences for your printer.
- **Copies** Specify the number of copies you want to print.
- **Pages** Choose one of the following options: Single, Range, and All. Specify the page number or the page range.



## Click Show Details to specify additional options

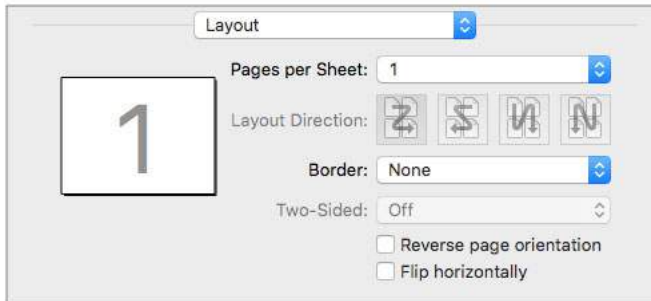
**Presets** Choose default settings, last used settings, or saved presets.

### Layout

- **Pages Per Sheet** Specify the number of pages you want to print on one sheet of paper.
- **Layout Direction** Select the layout of the pages that you want to print on one sheet of paper.
- **Border** Select a border from the drop-down list.
- **Two-Sided** Choose On to print on both sides of the sheet.
- **Reverse Page Orientation** Select this option to change the orientation of the page for printing.
- **Flip Horizontally** Select this option to flip the page being printed horizontally.

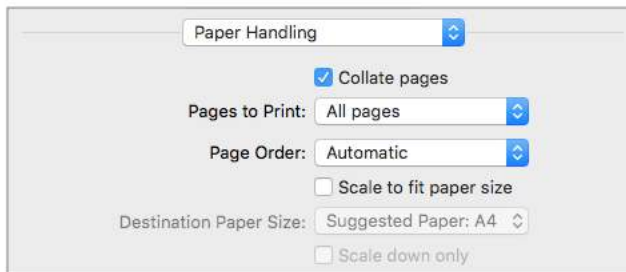


## Saving, printing, and sharing photos



### Paper Handling

- **Collate Pages** Select this option to print pages together.
- **Pages To Print** Choose the desired option to print all pages, even pages, or odd pages.
- **Page Order** Choose the page order for printing: Automatic, Normal, or Reverse.
- **Scale To Fit Paper Size** Select the option to fit the page to the paper size being used for printing photos.
- **Destination Paper Size** Select the paper size for printing photos.
- **Scale Down Only** Select this option to scale down the page to fit the paper size.



### Note:

To save your settings, do one of the following:

- Click **Save** in the Page Setup dialog box.
- Choose **Save Current Settings As Preset** in the Presets drop-down list.

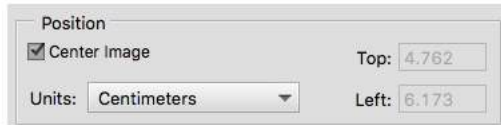
### Position and scale photos

You can adjust the position and scale of an image using options in the Print dialog box. The shaded border at the edge of the paper represents the margins of the selected paper; the printable area is white. The blue border at the edge of the photo is the Photoholder; it is not printed with the image.

Scaling an image in the Print dialog box changes the size and resolution of the printed image only. For example, if you scale a 72-ppi image to 50% in the Print dialog box, the image will print at 144 ppi; however, the document size settings in the Image Size dialog box will not change.

## Position a photo on the paper

- 1 Choose **File > Print**.
- 2 Under the Position settings in the Print dialog, do one of the following:
  - To center the image in the printable area, select **Center Image**.
  - To position the image numerically, deselect **Center Image**, and then enter values for **Top** and **Left**.
  - Deselect **Center Image**, and drag the placeholder or the image in the preview area.



*Position settings*

## Rotate an image

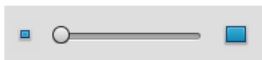
- 1 Choose **File > Print**.
- 2 In the Print dialog box, do one of the following to rotate the Placeholder or the image:
  - Click the Rotate Image buttons to rotate the Placeholder.
  - Check **Image Only** to rotate just the image.

## Scale the print size of an image

- 1 Choose **File > Print**.
- 2 Click **More Options** in the Print dialog.
- 3 Select **Custom Print Size**. Then, do one of the following:
  - Select Scale To Fit Media to scale the image to fit on the page.
  - Specify the units of measurement from the **Units** menu and enter values for **Height** and **Width** to rescale the image numerically. The dimensions are constrained, meaning that changing one dimension proportionately changes the other dimension.

### **Note:**


*You can Zoom In or Out of the image using the slider in the Print dialog box.*



*Adjust the slider to zoom the image within the placeholder*

## Print multilayer images

If your image (PSD or TIFF) is multi-layered, use the Layers panel to temporarily hide the layers from view and prevent them from printing.

- 1 In Expert mode, open a multilayer image.
- 2 In the Layers panel, click the Eye icon  to make a layer invisible.

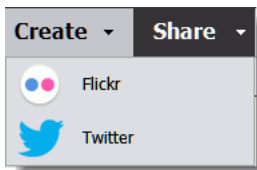
### Saving, printing, and sharing photos

- 3 When only the layers you want to print are visible, choose **File > Print**. The Print dialog box opens with only the visible layers showing in the thumbnail preview.
- 4 Set your printing options and click **Print**.

## Share photos online

### Share photos online

You can share images using websites like Flickr and Twitter, directly from Photoshop Elements Editor. You can view the photo sharing services available to you using the **Sharing** dropdown in Photoshop Elements.



*Share drop-down menu in Photoshop Elements*

### Photo sharing service providers

The following table lists the online service providers according to the geographical location:

Location	Service providers
<b>USA &amp; Canada</b>	<ul style="list-style-type: none"> <li>• Flickr</li> <li>• Twitter</li> </ul>
<b>China</b>	<ul style="list-style-type: none"> <li>• Flickr</li> </ul>
<b>Rest of the World</b>	<ul style="list-style-type: none"> <li>• Flickr</li> <li>• Twitter</li> </ul>

### Flickr

- 1 In Editor, click the **Share** dropdown, and choose Flickr. If the photos currently open have not been saved, you will be prompted to automatically save files. Click OK to proceed.
- 2 (First Use) If you have not shared with Flickr before, you must authorize Photoshop Elements to work with Flickr. Follow the on-screen instructions to authorize Photoshop Elements to post photos to your Flickr account.
- 3 On the Flickr dialog, specify the options for the photo or set of photos you are uploading:
  - **Add / Remove** photos. Click the plus (+) or minus (-) symbol above the Items preview area, and add or remove photos to be uploaded to Flickr.
  - **Sets**. You can upload a batch of photos as a **Set**. This is better for slideshows in Flickr. Click the **Upload as a Set** checkbox, and then modify **Set** options. You can choose an existing **Set**, or create a new one. Provide a name and description for the **Set**.
  - **Audience**. Use the Who can see these photos? section to control or limit the visibility of the **Set** to external users.

### Saving, printing, and sharing photos

- **Tags.** Provide a set of keywords to tag the album with.
- 4 When the photos have been uploaded, the Flickr dialog displays two buttons:
    - **Visit Flickr.** Click this button to open the view the uploaded photos in your web browser. You can copy the URL to your Flickr photos from the web browser.
    - **Done.** Click Done to close the dialog.

### Twitter



*Only one image must be selected when you choose to share a photo with Twitter. Also, ensure that the image is less than 3 MB (megabytes) in size.*

- 1 In Editor, click the **Share** dropdown, and choose Twitter. If the photos currently open have not been saved, you will be prompted to automatically save files. Click OK to proceed.
- 2 (First Use) If you have not shared with Twitter before, you must authorize Photoshop Elements to post to Twitter on your behalf. Follow the on-screen instruction to sign in to your Twitter account, and authorize Photoshop Elements to post photos online.
- 3 In Editor, type your message in the Twitter dialog, and then click Tweet.
- 4 When your message has been successfully tweeted, the Twitter dialog displays two buttons:
  - **Visit Twitter.** Click this button to view your tweet in a web browser.
  - **Done.** Click Done to close the dialog.

## Optimizing images

### About optimizing

Optimization for the web is the process of compressing images and setting display options for optimal use on the Internet. When you put images on the Internet, file size becomes important; you want to achieve a file size that is small enough to allow a reasonable download time, but large enough to preserve colors and details to your satisfaction. There are three major graphic file formats that are used on the web: GIF, JPEG, and PNG.

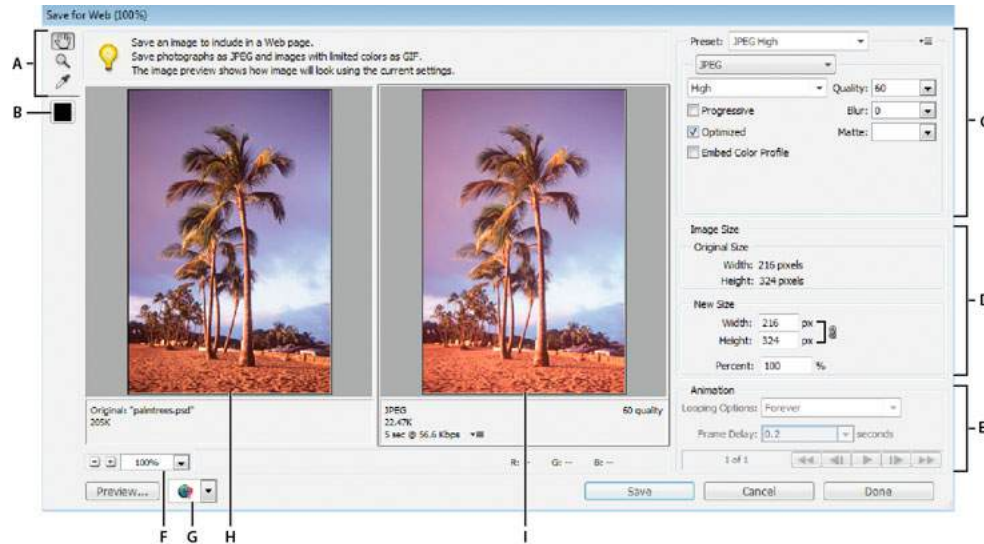
When you put images on the web, you need to think about file size. The goal is a file size that is small enough to allow reasonable download times but that preserves colors and details to your satisfaction.

Three major graphic file formats are used on the web: GIF, JPEG, and PNG. You can optimize images in these formats using one of the following methods:

- To precisely optimize an image for use in web authoring applications, such as *Adobe® Dreamweaver®*, you can use the Save For Web command. The Save For Web dialog box lets you preview your image in different file formats and with different optimization settings. You can also set transparency and animation settings.
- For basic optimization, you can use the Save As command. Depending on the file format, you can specify image quality, background transparency or matting, color display, and downloading method.

## Using the Save For Web dialog box

Use the Save For Web dialog box to preview the effects of different optimization options on a photo you want to share on the web. The process is simple. Open a photo, and choose File > Save For Web. Then choose a format from the file format menu (GIF, JPEG, PNG-8, or PNG-24) and set options as desired. (The file format menu is directly beneath the Preset menu.) This saves a copy of your file, without overwriting the original image.



Save For Web dialog box

A Toolbox B Eyedropper color C Optimization settings and flyout menu for more options D Image Size E Animation options F Zoom level menu G Browser preview menu H Original Image I Optimized image

Optimization options appear on the right side of the Save For Web dialog box. In addition to selecting a web file format, you can choose compression and color options, preserve background transparency or set background matting, and change the size of the image. You can use predefined settings (by choosing a format from the Preset menu), or select format-specific options to fine-tune the optimization.

The image windows show your original image (on the left) and a preview of the optimized image (on the right). Under each window is optimization information—the current settings, the size of the optimized file, and the estimated download time. As you make adjustments, the information under the optimized image changes to reflect your new settings.

A small toolbox is located in the upper-left corner of the dialog box. To view different areas of an image, select the Hand tool and drag to bring those areas into view. To zoom in on an image, select the Zoom tool and click in a view; then hold down Alt, and click again to zoom out. (Alternatively, you can use the Zoom box at the bottom of the dialog box.) To create matte colors, use the Eyedropper Color tool.

## Optimized file formats for the web

You can choose between four formats for the web. Use the following guidelines when choosing the format for your web image:

**JPEG** In most cases, this is the best format in which to save photographs.

**PNG-24** Like JPEG, this is a good format for photographs. Choose PNG-24 rather than JPEG only when your image contains transparency. (JPEG does not support transparency; you must fill it with a matte color.) PNG-24 files are often much larger than JPEG files of the same image.

**GIF** GIF is the format to use for line art, illustrations with large areas of solid color and crisp detail, and text. Also, if you want to export an animated image, you must use GIF.

**PNG-8** PNG-8 is a lesser-known alternative to GIF. Use it for the same purposes (except animation).

Images in GIF and PNG-8 formats, sometimes called *indexed-color images*, can display up to 256 colors. To convert an image to indexed-color format, Photoshop Elements builds a color lookup table. If a color in the original image does not appear in the color lookup table, the application either chooses the closest color in the table or simulates the color using a combination of available colors.

JPEG and PNG-24 files support 24-bit color, so they can display up to 16 million colors. Depending on the format, you can specify image quality, background transparency or matting, color display, and the method a browser should use to display the image while downloading.

The appearance of an image on the web also depends on the colors displayed by the computer platform, operating system, monitor, and browser. You may want to preview images in different browsers and on different platforms to see how they will appear on the web.

## Apply a preset optimization setting

You can quickly and easily optimize an image for the web by choosing a predefined optimization setting, called a *preset*, from the Preset menu near the upper-right corner of the Save For Web dialog box. Presets are tailored to meet the optimization needs of different types of images.

The name of each preset reflects its file format and quality level. For example, choose JPEG High to optimize an image in JPEG format with high image quality and low compression. Choose GIF 32 Dithered to optimize an image in GIF format, reduce the number of colors to 32, and apply dithering.

- 1 In the Save For Web dialog box, choose a setting name from the Preset menu, and then click OK.
- 2 In the Save Optimized As dialog box, type a filename and click Save.

**Note:**

*If you change the options in a preset, the Preset menu displays the word “[Unnamed]”. You cannot save a custom setting; however, the current settings appear in the Save For Web dialog box the next time you display it.*

## Optimizing images for the JPEG format

### About the JPEG format

The JPEG format supports 24-bit color, so it preserves the subtle variations in brightness and hue found in photographs. A progressive JPEG file displays a low-resolution version of the image in the web browser while the full image is downloading.

JPEG image compression is called *lossy* because it selectively discards image data. A higher quality setting results in less data being discarded, but the JPEG compression method may still degrade sharp detail in an image, particularly in images containing type or vector art.

**Note:**

*Artifacts, such as wavelike patterns or blocky areas of banding, are created each time you save an image in JPEG format. Therefore, you should always save JPEG files from the original image, not from a previously saved JPEG.*



Original image (left), and optimized JPEG with Low quality setting (right)

The JPEG format does not support transparency. When you save an image as a JPEG file, transparent pixels are filled with the matte color specified in the Save For Web dialog box. To simulate the effect of background transparency, you can match the matte color to the web page background color. If your image contains transparency and you do not know the web page background color, or if the background is a pattern, you should use a format that supports transparency (GIF, PNG-8, or PNG-24).

## Optimize as JPEG

JPEG is the standard format for compressing photographs.

- 1 Open an image and choose File > Save For Web.
- 2 Choose JPEG from the optimization format menu.
- 3 To optimize to a specific file size, click the arrow to the right of the Preset menu, and then click Optimize To File Size. Enter a number in the Desired File Size text box, and select either Current Settings, which optimizes for the current settings, or Auto Select GIF/JPEG, which automatically determines whether JPEG or GIF is the better format.
- 4 Do one of the following to specify the compression level:
  - Choose a quality option (Low, Medium, High, and so on) from the pop-up menu under the optimization format menu.
  - Click the arrow in the Quality menu and drag the Quality pop-up slider.
  - Enter a value between 0 and 100 in the Quality box.

The higher the Quality setting, the more detail is preserved in the optimized image, but the larger the file size. View the optimized image at several quality settings to determine the best balance between quality and file size.
- 5 Select Progressive to display the image progressively in a web browser; that is, to display it first at a low resolution, and then at progressively higher resolutions as downloading proceeds.

**Note:**

*Some browsers do not support progressive JPEGs.*

- 6 To preserve the ICC profile of the original image in the optimized file, select ICC Profile.
 

Some browsers use ICC profiles for color correction. The ICC profile of the image depends on your current color setting.
- 7 If the original image contains transparency, select a Matte color that matches the background of your web page. Transparent areas in your original image are filled with the Matte color.
- 8 To save your optimized image, click OK. In the Save Optimized As dialog box, type a filename, and click Save.

## Dithering in web images

### About dithering

Most web images are created by designers using 24-bit color displays (which display over 16 million colors), although some users view web pages on computers with 8-bit color displays (which display only 256 colors). As a result, web images often contain colors not available on some computers. Computers use a technique called dithering to simulate colors they can't display. Dithering uses adjacent pixels of different colors to give the appearance of a third color. For example, a red color and a yellow color may dither in a mosaic pattern to produce the illusion of an orange color that the 8-bit color panel doesn't contain.



*Dithering simulates continuous tones*



*Use colors in the Web panel to ensure that colors won't dither when displayed in Windows or Mac OS systems capable of displaying 256 colors. When creating an original image, you can use the Color Picker to choose web-safe colors.*

When optimizing images, keep in mind that two kinds of dithering can occur:

**Application dither** Occurs in GIF and PNG-8 images when Photoshop Elements attempts to simulate colors that aren't in the current color table. You can control application dither by choosing a dithering pattern, or you can try to avoid application dither by adding more colors to the table.

**Browser dither** Occurs when a web browser using an 8-bit color display (256-color mode) attempts to simulate colors that aren't in the 8-bit color panel. Browser dither can occur with GIF, PNG, or JPEG images. In Photoshop Elements, you can control the amount of browser dither by shifting selected colors in the image to web-safe colors. You can also specify web-safe colors when choosing a color in the Color Picker.

You can preview application dither in GIF and PNG-8 images. Images with primarily solid colors may work well without dithering. Conversely, images with continuous-tone color (especially color gradients) may require dithering to prevent color banding.

### Control dither in web images

- 1 Open an image and choose File > Save For Web.
- 2 Choose your optimization settings.
- 3 Enter a value in the Dither text box, or click the Dither menu arrow and drag the slider that appears.



- 4 The Dither percentage controls the amount of dithering that is applied to the image. A higher dithering percentage creates the appearance of more colors and more detail in an image but can also increase the file size. For optimal compression and display quality, use the lowest percentage of application dither that provides the color detail you require.

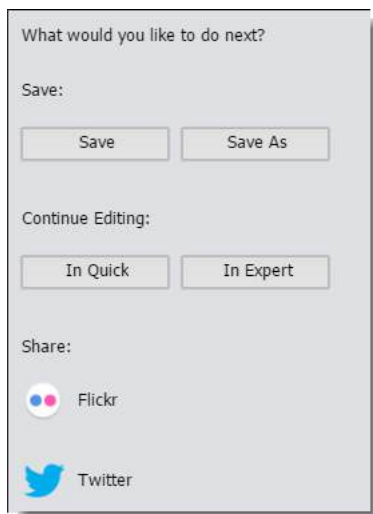
## Preview dither

You can preview browser dither directly in Photoshop Elements or in a browser that uses an 8-bit color display (256-color mode).

- 1 Open an image and choose File > Save For Web.
- 2 Choose your optimization settings.
- 3 To preview dither in Photoshop Elements, choose Browser Dither from the document panel menu in the Save For Web dialog box. (To view the menu, click the triangle in the upper-right corner of the optimized image.)
- 4 To preview dither in a browser, follow these steps:
  - Set your computer's color display to 8-bit color (256 colors). See your operating system's documentation for information on changing the color display.
  - Select a browser from the Preview In menu in the Save For Web dialog box.

## Guided Edits - Share panel

The Share panel is displayed to the right of your image. In this panel, you can save the image at the same location or save it as another image. You can take the image to the Quick Edit or Expert Edit rooms. You can also share the image on Flickr or Twitter.



### Save (Save / Save As)

- Save your edited image to a folder on your computer. If you have not saved the edits before, you will be asked to pick a folder on your computer where you want to save your image.
- Use the Save As option to save the edited image to another folder or by another name.

## Saving, printing, and sharing photos

- The JPEG Options dialog allows you to select some advanced image formatting options. If you do not want to make any special changes, click OK to accept the default settings.

### Continue Editing (In Quick / In Expert)

- Take your image to the Quick Edit or Expert Edit rooms. This means that you have make edits in the Guided Edit room and then make some more adjustments in the Quick and Expert rooms.

### Share (Flickr / Twitter)

- Share your freshly edited image with your family and friends on Twitter. Or upload you images to Flickr where you can create photo albums that you can share.

**Note:** For **Flickr** and **Twitter**, Photoshop Elements will ask for one-time authentication for each sharing app or site that will have sharing access to your images.

## Previewing web images

### Preview an optimized image in a web browser

You can preview an optimized image in any web browser installed on your system. The browser preview displays the image with a caption listing the image's file type, pixel dimensions, file size, compression specifications, and other HTML information.

- 1 Open the image you want to preview.
- 2 Select File > Save For Web, and apply your optimization settings.
- 3 Choose a browser from the Preview In menu in the lower-right corner of the optimized image, or click the browser icon to launch your default web browser.

### Add a browser to the Preview In menu

- 1 Choose File > Save For Web.
- 2 Click the down arrow in the Preview In menu, and choose Edit List.
- 3 In the Browsers dialog box, click Find All. The dialog box displays all installed browsers.
- 4 Select a browser, click Add, and then click OK.

### View estimated download time

- 1 Open an image and choose File > Save For Web.
- 2 Choose your optimization settings.
- 3 Click the triangle to the upper right of the optimized image to view the document panel menu.
- 4 Choose an Internet access speed, including modem, ISDN, cable, or DSL Internet access.
- 5 When you change the Internet access speed, the estimated download time displayed under the optimized image is updated. If the download time seems too long, try different optimization settings, or change the image size in the Save For Web dialog box.

## Preview variations in color display

When optimizing an image for the web, consider how the image will appear on different monitors. In general, an image appears darker in Windows systems than on Mac OS systems. You can simulate cross-platform display differences in the Save For Web dialog box.

- 1 Open an image and choose File > Save For Web.
- 2 Choose your optimization settings.
- 3 Click the triangle to the right of the optimized image to view the document panel menu.
- 4 Choose a display option:

**Uncompensated Color** Shows the image with no color adjustment (the default option).

**Standard Windows Color** Adjusts the color to simulate a standard Windows monitor.

**Standard Macintosh Color** Adjusts the color to simulate a standard Macintosh® monitor.

**Use Document Color Profile** Shows image with its color profile, if one exists.

*Note:*

*These preview options adjust color only in the Save For Web dialog box; they don't change colors in the original or optimized image.*

## Preview an animation

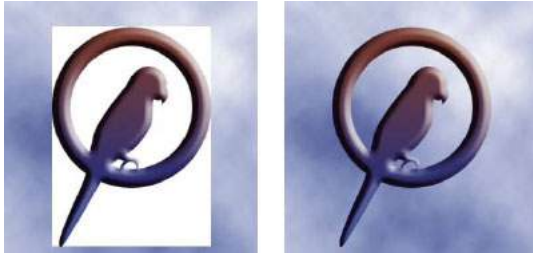
You can preview an animation in the Save For Web dialog box or in a web browser. The Save For Web dialog box shows the animation as still frames. You must preview the animation in a browser to view the frames in timed sequence.

- 1 Set up an animated image and choose File > Save For Web.
- 2 To preview an animation from the Save For Web dialog box, do one of the following:
  - To view the next frame in the animation, click the Next Frame button.
  - To view the previous frame in the animation, click the Previous Frame button.
  - To view the last frame in the animation, click the Last Frame button.
  - To view the first frame in the animation, click the First Frame button.
- 3 To preview an animation in a web browser, do the following:
  - Choose a browser from the Preview In menu below the lower-right corner of the optimized image, or click the browser icon to launch your default web browser.
  - Use your browser's Stop, Refresh, or Reload commands to stop or replay the animation.

## Use transparency and mattes

## About transparent and matted web images

Transparency makes it possible to create nonrectangular images for the web. Background transparency, supported by the GIF and PNG formats, preserves transparent pixels in the image and allows the background of the web page to show through the transparent areas of your image. (Although the JPEG format does not support transparency, you can specify a matte color to simulate the appearance of transparency in the original image.)

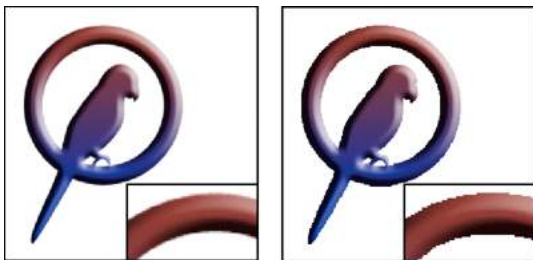


*Web button without transparency (left), and with transparency (right)*

Background matting, supported by the GIF, PNG, and JPEG formats, simulates transparency by filling or blending transparent pixels with a matte color that matches the web page background. Background matting works best if the web page background is a solid color and if you know what that color is.

To create background transparency or background matting in the optimized image, you must start with an image that contains transparency. You can create transparency when you create a new layer or use the Background Eraser or Magic Eraser.

When working with GIF or PNG-8 files, you can create hard-edged transparency: all pixels that are more than 50% transparent in the original image are fully transparent in the optimized image, and all pixels that are more than 50% opaque in the original image are fully opaque in the optimized image. Use hard-edged transparency when you don't know the background color of a web page, or when the web page background contains a texture or pattern. However, keep in mind that hard-edged transparency can cause jagged edges in the image.



*GIF without hard-edged transparency (left), and with hard-edged transparency (right)*

## Preserve background transparency in a GIF or PNG image

GIF and PNG-8 formats support one level of transparency—pixels can be fully transparent or fully opaque, but not partially transparent. (By contrast, PNG-24 format supports multilevel transparency; that is, you can have up to 256 degrees of transparency in an image, ranging from opaque to completely transparent.)

- 1 Open or create an image that contains transparency, and choose File > Save For Web.
- 2 In the Save For Web dialog box, select GIF, PNG-8, or PNG-24 as the optimization format.
- 3 Select Transparency.

- 4 For the GIF and PNG-8 formats, specify how to treat partially transparent pixels in the original image. You can blend these pixels with a matte color, or you can create hard-edged transparency.

## Create a matted GIF or PNG image

When you know the background color of the web page on which an image will be displayed, you can use the matting feature to fill or blend transparent pixels with a matte color that matches the web page background.

- 1 Open or create an image that contains transparency, and choose File > Save For Web.
- 2 In the Save For Web dialog box, select GIF, PNG-8, or PNG-24 as the optimization format.
- 3 For GIF and PNG-8 format, do one of the following:
  - To keep fully transparent pixels transparent, and blend partially transparent pixels with the matte color, select Transparency. This option prevents the halo effect you see when you place an anti-aliased image on a web page background that differs from the image background. This option also prevents the jagged edges of hard-edged transparency.
  - To fill transparent pixels with the matte color and blend partially transparent pixels with the matte color, deselect Transparency.
- 4 Select a color from the Matte menu:
  - Eyedropper Color (to use the color in the eyedropper sample box)
  - White, Black, or Other (to select a color using the Color Picker)

## Create hard-edged transparency in a GIF or PNG-8 file

Use hard-edged transparency when you don't know the background color of a web page, or when the web page background contains a texture or pattern. However, keep in mind that hard-edged transparency can cause jagged edges in the image.

- 1 Open or create an image that contains transparency, and choose File > Save For Web.
- 2 In the Save For Web dialog box, select GIF or PNG-8 as the optimization format.
- 3 Select Transparency.
- 4 Select None from the Matte menu.

## Create a matted JPEG image

Although the JPEG format does not support transparency, you can specify a matte color to simulate the appearance of transparency in the original image. The matte color fills fully transparent pixels and blends with partially transparent pixels. When you place the JPEG on a web page with a background that matches the matte color, the image appears to blend with the background.

- 1 Open or create an image that contains transparency, and choose File > Save For Web.
- 2 In the Save For Web dialog box, select JPEG as the optimization format.
- 3 Select a color from the Matte menu: None, Eyedropper Color (to use the color in the eyedropper sample box), White, Black, or Other (to select a color using the Color Picker).

When you select None, white is used as the matte color.

## Optimizing images for the GIF or PNG-8 format

### About the GIF format

The GIF format uses 8-bit color and efficiently compresses solid areas of color while preserving sharp details like those in line art, logos, or type. You also use the GIF format to create an animated image and preserve transparency in an image. GIF is supported by most browsers.

The GIF format uses LZW compression, which is a lossless compression method. However, because GIF files are limited to 256 colors, optimizing an original 24-bit image as an 8-bit GIF can subtract colors from an image.



*GIF image with selective color (left), and GIF image with web color (right)*

You can choose the number of colors in a GIF image and control how colors dither in a browser. GIF supports background transparency or background matting, by which you blend the edges of the image with a web page background color.

### About the PNG-8 format

The PNG-8 format uses 8-bit color. Like the GIF format, PNG-8 efficiently compresses areas of solid color while preserving sharp detail like those in line art, logos, or type.

Because PNG-8 is not supported by all browsers, you may want to avoid this format when you are distributing the image to a wide audience.

The PNG-8 format uses more advanced compression schemes than GIF does, and a PNG-8 file can be 10% to 30% smaller than a GIF file of the same image, depending on the image's color patterns. Although PNG-8 compression is lossless, optimizing an original 24-bit image as an 8-bit PNG file can subtract colors from the image.

**Note:**

*With certain images, especially those with simple patterns and few colors, GIF compression can create a smaller file than PNG-8 compression. View optimized images in GIF and PNG-8 format to compare file size.*

As with the GIF format, you can choose the number of colors in an image and control how colors dither in a browser. The PNG-8 format supports background transparency and background matting, by which you blend the edges of the image with a web page background color.



*PNG-8 with 256 colors and no dither (left), and PNG-8 with 16 colors and dithering (right)*

## Optimize as GIF or PNG-8 format

GIF is the standard format for compressing images with large areas of solid colors and crisp details like those in line art, logos, or type. Like the GIF format, PNG-8 supports transparency and efficiently compresses areas of solid color while preserving sharp detail; however, not all web browsers can display PNG-8 files.

- 1 Open an image and choose File > Save For Web.
- 2 Choose GIF or PNG-8 from the optimization format menu.
- 3 To display an image at low resolution while the full-resolution image is downloading, select Interlaced. Interlacing can make downloading time seem shorter and gives viewers feedback that downloading is in progress.
- 4 Under the optimization format menu, choose a color-reduction algorithm for generating the color lookup table:
  - Perceptual** Creates a custom color table by giving priority to colors for which the human eye has greater sensitivity.
  - Selective** Creates a color table similar to the Perceptual color table, but favoring broad areas of color and the preservation of web colors. This color table usually produces images with the greatest color integrity. (Selective is the default choice.)
  - Adaptive** Creates a custom color table by sampling colors from the spectrum appearing most commonly in the image. For example, an image with only shades of green and blue produces a color table made primarily of greens and blues. Most images concentrate colors in particular areas of the spectrum.
  - Restrictive (Web)** Uses the standard, 216-color, web-safe color table common to the 8-bit (256-color) panels of Windows and Mac OS. This option ensures that no browser dither is applied to colors when the image is displayed using 8-bit color. If your image has fewer than 216 colors, unused colors are removed from the table.
- 5 To specify the maximum number of colors in the color panel, select a number from the Colors menu, enter a value in the text box, or click the arrows to change the number of colors. If the image contains fewer colors than the panel, the color table reflects the smaller number of colors in the image.
- 6 If you chose Restrictive (Web) for the color-reduction algorithm, you can choose Auto from the Colors menu. Choose Auto if you want Photoshop Elements to determine the optimal number of colors in the color table based on the frequency of colors in the image.
- 7 Choose a dithering percentage, either by entering a percentage in the Dither text box or by clicking the Dither menu arrow and dragging the slider that appears.
- 8 If the image contains transparency, select Transparency to preserve transparent pixels; deselect Transparency to fill fully and partially transparent pixels with the matte color.
- 9 To create an animated GIF, select Animate.

10 To save your optimized image, click OK. In the Save Optimized As dialog box, type a filename, and click Save.

## Create an animated GIF

- 1 Place the images you want to appear in each frame of the animation on separate layers of the Layers panel. For example, to create an animation of an eye blinking, you would place an image of the open eye on one layer, and an image of the closed eye on another layer.
- 2 Choose File > Save for Web.

**Note:**

*If your image has multiple layers, you can also open the Save For Web dialog box from the Save As dialog box by choosing CompuServe GIF Format and selecting Layers As Frames.*

- 3 Optimize the image in GIF format.
- 4 Select Animate.
- 5 Set additional options in the Animation section of the dialog box:

**Looping Options** Continuously repeat the animation in a web browser, or animate only once. You can also choose Other to specify the number of times the animation must loop.

**Frame Delay** Specifies the number of seconds that each frame is displayed in a web browser. Use a decimal value to specify fractions of a second. For example, use .5 to specify half a second.

## Optimizing images for the PNG-24 format

### About the PNG-24 format

The PNG-24 format supports 24-bit color. Like the JPEG format, PNG-24 preserves the subtle variations in brightness and hue found in photographs. Like the GIF and PNG-8 formats, PNG-24 preserves sharp details like those in line art, logos, or type.

The PNG-24 format uses the same lossless compression method as the PNG-8 format. For that reason, PNG-24 files are usually larger than JPEG files of the same image. You may want to avoid PNG-24 format when you are distributing your image to a wide audience.

In addition to supporting background transparency and background matting, the PNG-24 format supports multilevel transparency. You can have up to 256 degrees of transparency from opaque to completely transparent, so you can blend the edges of an image smoothly with any background color. However, not all browsers support multilevel transparency.

### Optimize as PNG-24

PNG-24 format is suitable for compressing photographs. However, PNG-24 files are often much larger than JPEG files of the same image. PNG-24 format is recommended only when you work with an image that includes multiple levels of partial transparency.

- 1 Open an image and choose File > Save For Web.



**Saving, printing, and sharing photos**

- 2 Choose PNG-24 for the optimization format.
- 3 Select Interlaced to create an image that is displayed at low-resolution in a browser while the full-resolution image is downloading. Interlacing can make downloading time seem shorter and gives viewers feedback that downloading is in progress.
- 4 If the image contains transparency, select Transparency to preserve transparent pixels; deselect Transparency to fill fully and partially transparent pixels with the Matte color.
- 5 To save your optimized image, click OK. In the Save Optimized As dialog box, type a filename, and click Save.

# Chapter 11: Keyboard shortcuts

## Keys for selecting tools

This list includes the keyboard shortcuts that you can use to work with the Photoshop Elements tools. For more information about the Photoshop Elements tools, see [Tools](#). You'll find additional shortcuts in menu commands and tool tips.

Result	Windows	Mac OS
Cycle through tools that have the same keyboard shortcut	Shift-press keyboard shortcut (preference setting, Use Shift Key for Tool Switch, must be enabled)	Shift-press keyboard shortcut (preference setting, Use Shift Key for Tool Switch, must be enabled)
Cycle through nested tools	Alt-click tool	Option-click tool
Move tool	V	V
Zoom tool	Z	Z
Hand tool	H	H
Eyedropper tool	I	I
Rectangular Marquee tool Elliptical Marquee tool	M	M
Lasso tool Magnetic Lasso tool Polygonal Lasso tool	L	L
Magic Wand tool Selection Brush tool Quick Selection tool Refined Selection tool Auto Selection tool	A	A
Horizontal Type tool Vertical Type tool Horizontal Type Mask tool Vertical Type Mask tool Text on Selection Text on Shape Text on Path	T	T

## Keyboard shortcuts

Result	Windows	Mac OS
Crop tool Perspective Crop Cookie Cutter tool	C	C
Recompose tool	W	W
Straighten tool	P	P
Eye tool	Y	Y
Spot Healing Brush tool Healing Brush tool	J	J
Clone Stamp tool Pattern Stamp tool	S	S
Eraser tool Background Eraser tool Magic Eraser tool	E	E
Pencil tool	N	N
Brush tool Impressionist Brush Color Replacement tool	B	B
Smart Brush tool Detail Smart Brush tool	F	F
Paint Bucket tool	K	K
Gradient tool	G	G
Custom Shape tool Rectangle tool Rounded Rectangle tool Ellipse tool Polygon tool Star tool Line tool Shape Selection tool	U	U
Blur tool Sharpen tool Smudge tool	R	R
Sponge tool Dodge tool Burn tool	O	O

## Keyboard shortcuts

Result	Windows	Mac OS
Show/Hide all panels	Tab	Tab
Default foreground and background colors	D	D
Switch foreground and background colors	X	X

## Keys for selecting and moving objects

This partial list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.

Result	Windows	Mac OS
Deselect a selection	Control + D	Command + D
Reposition marquee while selecting	Spacebar-drag	Spacebar-drag
Add to or subtract from a selection	Any selection tool + Shift or Alt-drag	Any selection tool + Shift or Option-drag
Intersect a selection	Any selection tool (except Quick Selection tool and Selection Brush tool) + Shift + Alt-drag	Any selection tool (except Quick Selection tool and Selection Brush tool) + Shift + Option-drag
Constrain marquee to square or circle (if no other selections are active)	Shift-drag	Shift-drag
Draw marquee from center (if no other selections are active)	Alt-drag	Option-drag
Constrain shape and draw marquee from center	Shift + Alt-drag	Shift + Option-drag
Switch to Move tool	Control (except when Hand or any shape tool is selected)	Command (except when Hand or any shape tool is selected)
Switch from Magnetic Lasso tool to Polygonal Lasso tool	Alt-click and drag	Option-click and drag
Delete last anchor point for Magnetic or Polygonal Lasso tool	Delete	Delete
Apply/cancel an operation of the Magnetic Lasso tool	Enter/Esc	Enter/Esc
Move copy of selection	Move tool + Alt-drag selection	Move tool + Option-drag selection
Move selection area 1 pixel	Any selection + Right Arrow, Left Arrow, Up Arrow, or Down Arrow	Any selection + Right Arrow, Left Arrow, Up Arrow, or Down Arrow
Move selection 1 pixel	Move tool + Right Arrow, Left Arrow, Up Arrow, or Down Arrow	Move tool + Right Arrow, Left Arrow, Up Arrow, or Down Arrow
Move layer 1 pixel when nothing selected on layer	Control + Right Arrow, Left Arrow, Up Arrow, or Down Arrow	Command + Right Arrow, Left Arrow, Up Arrow, or Down Arrow
Increase/decrease detection width	Magnetic Lasso tool + [ or ]	Magnetic Lasso tool + [ or ]
Accept cropping or exit cropping	Crop tool + Enter or Esc	Crop tool + Enter or Esc
Toggle crop shield off and on	/ (forward slash)	/ (forward slash)

## Keys for the Layers panel

This list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.

Result	Windows	Mac OS
Set layer options	Alt-click New button	Option-click New button
Delete without confirmation	Alt-click Trash button	Option-click Trash button
Apply value and keep text box active	Shift + Enter	Shift + Enter
Load layer transparency as a selection	Control-click layer thumbnail	Command-click layer thumbnail
Add to current selection	Control + Shift-click layer	Command + Shift-click layer thumbnail
Subtract from current selection	Control + Alt-click layer thumbnail	Command + Option-click layer thumbnail
Intersect with current selection	Control + Shift + Alt-click layer thumbnail	Command + Shift + Option-click layer thumbnail
Merge visible layers	Control + Shift + E	Command + Shift + E
Create new empty layer with dialog	Alt-click New Layer button	Option-click New Layer button
Create new layer below target layer	Control-click New Layer button	Command-click New Layer button
Activate bottom/top layer	Alt + .(period)/ ,(comma)	Option + .(period)/ ,(comma)
Select next layer down/up	Alt + [ or ]	Option + [ or ]
Move target layer down/up	Control + [ or ]	Command + [ or ]
Merge a copy of all visible layers into target layer	Control + Shift + Alt + E	Command + Shift + Option + E
Merge down	Control + E	Command + E
Copy current layer to layer below	Alt + Merge Down command from the panel pop-up menu	Option + Merge Down command from the panel pop-up menu
Copy all visible layers to active layer	Alt + Merge Visible command from the panel pop-up menu	Option + Merge Visible command from the panel pop-up menu
Show/hide all other currently visible layers	Alt-click the eye icon	Option-click the eye icon
Toggle lock transparency for target layer, or last applied lock	/ (forward slash)	/ (forward slash)
Select all text; temporarily select Type tool	Double-click text layer thumbnail	Double-click text layer thumbnail
Create a clipping mask	Alt-click the line dividing two layers	Option-click the line dividing two layers
Rename layer	Double-click the layer name	Double-click the layer name
Add to layer selection in Layers panel	Shift + Alt + [ or ]	Shift + Option + [ or ]
Copy the mask from one layer to another, and ask to replace if the mask is already present	Alt + drag layer mask	Alt + drag layer mask

## Keys for showing or hiding panels (expert mode)

This partial list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.

## Keyboard shortcuts

Result	Windows	Mac OS
Open Help	F1	F1
Show/Hide Tool Options	F4	F4
Show/Hide Photo Bin	F5	F5
Show/Hide Effects panel	F6	F6
Show/Hide Graphics panel	F7	F7
Show/Hide Info panel	F8	F8
Show/Hide Histogram panel	F9	Option + F9
Show/Hide History panel	F10	Option + F10
Show/Hide Layers panel	F11	Option + F11
Show/Hide Navigator panel	F12	Option + F12

## Keys for painting and brushes

This partial list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.

Result	Windows	Mac OS
Switch to Eyedropper tool	Any painting tool or shape tool + Alt (except Impressionist Brush)	Any painting tool or shape tool + Option (except Impressionist Brush)
Select background color	Eyedropper tool + Alt-click	Eyedropper tool + Option-click
Set opacity, tolerance, or exposure for painting	Any painting or editing tool + number keys (for example, 0 = 100%, 1 = 10%, 4 and 5 in quick succession = 45%). When airbrush option is enabled, use Shift + number keys.	Any painting or editing tool + number keys (for example, 0 = 100%, 1 = 10%, 4 and 5 in quick succession = 45%). When airbrush option is enabled, use Shift + number keys.
Cycle through blending modes	Shift + + (plus) or - (minus)	Shift + + (plus) or - (minus)
Fill selection/layer with foreground or background color	Alt + Backspace, or Control + Backspace	Option + Delete (Backspace), or Command + Delete (Backspace)
Display Fill dialog box	Shift + Backspace	Shift + Delete (Backspace)
Lock transparent pixels on/off	/ (forward slash)	/ (forward slash)
Connect points with a straight line (draw a straight line)	Any painting tool + Shift-click	Any painting tool + Shift-click
Delete brush	Alt-click brush	Option-click brush
Decrease/increase brush size	[ or ]	[ or ]
Decrease/increase brush softness/hardness in 25% increments	Shift + [ or ]	Shift + [ or ]
Select previous/next brush size	, (comma) or . (period)	, (comma) or . (period)
Select first/last brush	Shift + , (comma) or . (period)	Shift + , (comma) or . (period)
Display precise cross hair for brushes	Caps Lock	Caps Lock

## Keys for using text

This list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.

Result	Windows	Mac OS
Move type in image	Control-drag type when Type layer is selected	Command-drag type when Type layer is selected
Select 1 character left/right or 1 line down/up, or 1 word left/right	Shift + Left Arrow/Right Arrow or Down Arrow/Up Arrow, or Control + Shift + Left Arrow/Right Arrow	Shift + Left Arrow/Right Arrow or Down Arrow/Up Arrow, or Command + Shift + Left Arrow/Right Arrow
Select characters from insertion point to mouse click point	Shift-click	Shift-click
Move 1 character left/right, 1 line down/up, or 1 word left/right	Left Arrow/Right Arrow, Down Arrow/Up Arrow, or Control + Left Arrow/Right Arrow	Left Arrow/Right Arrow, Down Arrow/Up Arrow, or Command + Left Arrow/Right Arrow
Select word, line, or paragraph	Double-click, triple-click, or quadruple-click	Double-click, triple-click, or quadruple-click
Scale and skew text within a bounding box when resizing the bounding box	Control-drag a bounding box handle	Command-drag a bounding box handle
Align left, center, or right	Horizontal Type tool or Horizontal Type Mask tool + Control + Shift + L, C, or R	Horizontal Type tool or Horizontal Type Mask tool + Command + Shift + L, C, or R
Align top, center, or bottom	Vertical Type tool or Vertical Type Mask tool + Control + Shift + L, C, or R	Vertical Type tool or Vertical Type Mask tool + Command + Shift + L, C, or R
Return to default font style	Control + Shift + Y	Command + Shift + Y
Turn Underlining on/off	Control + Shift + U	Command + Shift + U
Turn Strikethrough on/off	Control + Shift + / (forward slash)	Command + Shift + / (forward slash)
Decrease or increase type size of selected text 1 pt/px	Control + Shift + < or >	Command + Shift + < or >

## Keys for the Liquify filter

This list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.

Result	Windows	Mac OS
Warp tool	W	W
Twirl Clockwise tool	C	C
Twirl Counter Clockwise tool	L	L
Pucker tool	P	P
Bloat tool	B	B
Shift Pixels tool	S	S
Reconstruct tool	E	E
Zoom tool	Z	Z
Hand tool	H	H



## Keys for transforming selections

This partial list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.

Result	Windows	Mac OS
Transform from center or reflect	Alt	Option
Constrain	Shift	Shift
Distort	Control	Command
Skew	Control + Shift	Command + Shift
Change perspective	Control + Shift + Alt	Command + Shift + Option
Apply	Enter	Enter
Cancel	Esc or Control + . (period)	Esc or Command + . (period)

## Keys for the Color Swatches panel

This list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.

Result	Windows	Mac OS
Create new swatch from foreground color	Click the  icon in the Color Swatches panel	Click the  icon in the Color Swatches panel
Select background color	Control-click swatch	Command-click swatch
Delete color	Alt-click swatch	Option-click swatch

## Keys for the Camera Raw dialog box

This partial list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.

Result	Windows	Mac OS
Display highlights that will be clipped in Preview	Alt-drag Exposure, Blacks sliders, or Recovery bar	Option-drag Exposure, or Blacks sliders, or Recovery Bar
Enable Open Copy button in the Camera Raw dialog box	Alt	Option

## Keys for the Filter Gallery

This partial list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.



## Keyboard shortcuts

Result	Windows	Mac OS
Apply a new filter on top of selected	Alt-click on a filter	Option-click on a filter
Open/close all disclosure triangles	Alt-click on a disclosure triangle	Option-click on a disclosure triangle
Change Cancel button to Default	Control	Command
Change Cancel button to Reset	Alt	Option
Undo/redo	Control + Z	Command + Z
Step forward	Control + Shift + Z	Command + Shift + Z
Step backward	Control + Alt + Z	Command + Option + Z

## Keys for using blending modes

This list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.

Result	Windows	Mac OS
Cycle through blending modes	Shift + + (plus) or - (minus)	Shift + + (plus) or - (minus)
Normal	Shift + Alt + N	Shift + Option + N
Dissolve	Shift + Alt + I	Shift + Option + I
Behind	Shift + Alt + Q	Shift + Option + Q
Clear	Shift + Alt + R	Shift + Option + R
Darken	Shift + Alt + K	Shift + Option + K
Multiply	Shift + Alt + M	Shift + Option + M
Color Burn	Shift + Alt + B	Shift + Option + B
Linear Burn	Shift + Alt + A	Shift + Option + A
Lighten	Shift + Alt + G	Shift + Option + G
Screen	Shift + Alt + S	Shift + Option + S
Color Dodge	Shift + Alt + D	Shift + Option + D
Linear Dodge	Shift + Alt + W	Shift + Option + W
Overlay	Shift + Alt + O	Shift + Option + O
Soft Light	Shift + Alt + F	Shift + Option + F
Hard Light	Shift + Alt + H	Shift + Option + H
Vivid Light	Shift + Alt + V	Shift + Option + V
Linear Light	Shift + Alt + J	Shift + Option + J
Pin Light	Shift + Alt + Z	Shift + Option + Z
Hard Mix	Shift + Alt + L	Shift + Option + L
Difference	Shift + Alt + E	Shift + Option + E
Exclusion	Shift + Alt + X	Shift + Option + X

**Keyboard shortcuts**

Result	Windows	Mac OS
Hue	Shift + Alt + U	Shift + Option + U
Saturation	Shift + Alt + T	Shift + Option + T
Color	Shift + Alt + C	Shift + Option + C
Luminosity	Shift + Alt + Y	Shift + Option + Y

## Keys for viewing images (expertmode)

This partial list includes the most helpful shortcuts. You'll find additional shortcuts in menu commands and tool tips.

Result	Windows	Mac OS
Cycle forward through open documents	Control + Tab	Control + Tab
Cycle backward through open documents	Control + Shift + Tab	Control + Shift + Tab
Fit image in window	Ctrl + 0 (or double-click Hand tool)	Command + 0 (or double-click Hand tool)
Magnify 100%	Ctrl + Alt + 0 (or double-click Zoom tool)	Command + Option + 0 (or double-click Zoom tool)
Switch to Hand tool (when not in text-edit mode)	Spacebar	Spacebar
Switch to Zoom In tool	Control + Spacebar	Spacebar + Command
Switch to Zoom Out tool	Spacebar + Alt	Spacebar + Option
Reposition zoom marquee while dragging	Spacebar-drag	Spacebar-drag
Zoom in on specified area of an image	Control-drag over preview in Navigator panel	Command-drag over preview in Navigator panel
Scroll image with Hand tool	Drag, or drag view area box in Navigator panel	Drag, or drag view area box in Navigator panel
Scroll up or down 1 screen	Page Up or Page Down	Page Up or Page Down
Scroll up or down 10 units	Shift + Page Up or Page Down	Shift + Page Up or Page Down
Scroll left or right 1 screen	Ctrl + Page Up or Page Down	Command + Page Up or Page Down
Scroll left or right 10 units	Ctrl + Shift + Page Up or Page Down	Command + Shift + Page Up or Page Down
Move view to upper-left corner or lower-right corner	Home or End	Home or End