Adobe Photoshop CS5 Extended is also available as a component of:

- Adobe Creative Suite® 5 Design Premium
- Adobe Creative Suite 5 Web Premium
- Adobe Creative Suite 5 Production Premium
- Adobe Creative Suite 5 Master Collection

Adobe Photoshop CS5 is also available as a component of Adobe Creative Suite 5 Design Standard

Adobe® Photoshop® CS5

Create powerful images with the professional standard

Adobe Photoshop CS5 Extended

Discover new dimensions in digital imaging

Employ state-of-the-art editing, enhancement, and output tools as you turn your unique vision into compelling reality. Adobe Photoshop CS5 and Adobe Photoshop CS5 Extended software provide precise control with tools and features to help you produce high-quality work and brilliant results quickly, creatively, and efficiently.

Photoshop CS5 delivers the utmost power and creative control with the next generation of advanced tools for outstanding image manipulation and superior compositing. It redefines image editing with a strong focus on photography, including breakthrough selection capabilities, content-aware fill options, state-of-the-art processing of raw images, advanced creative control of High Dynamic Range (HDR) imagery, automated lens corrections, powerful free-form transformations, new painting technology, and a sweeping range of workflow and performance enhancements that boost productivity at every step.

Photoshop CS5 Extended is a super-set of tools and features made for professionals who want to push the boundaries of digital imaging. It delivers all the editing, compositing, and painting capabilities of Photoshop CS5 plus powerful new features for creating stunning 3D artwork from selections, graphics, and type with direct control over lighting, materials, and meshes.
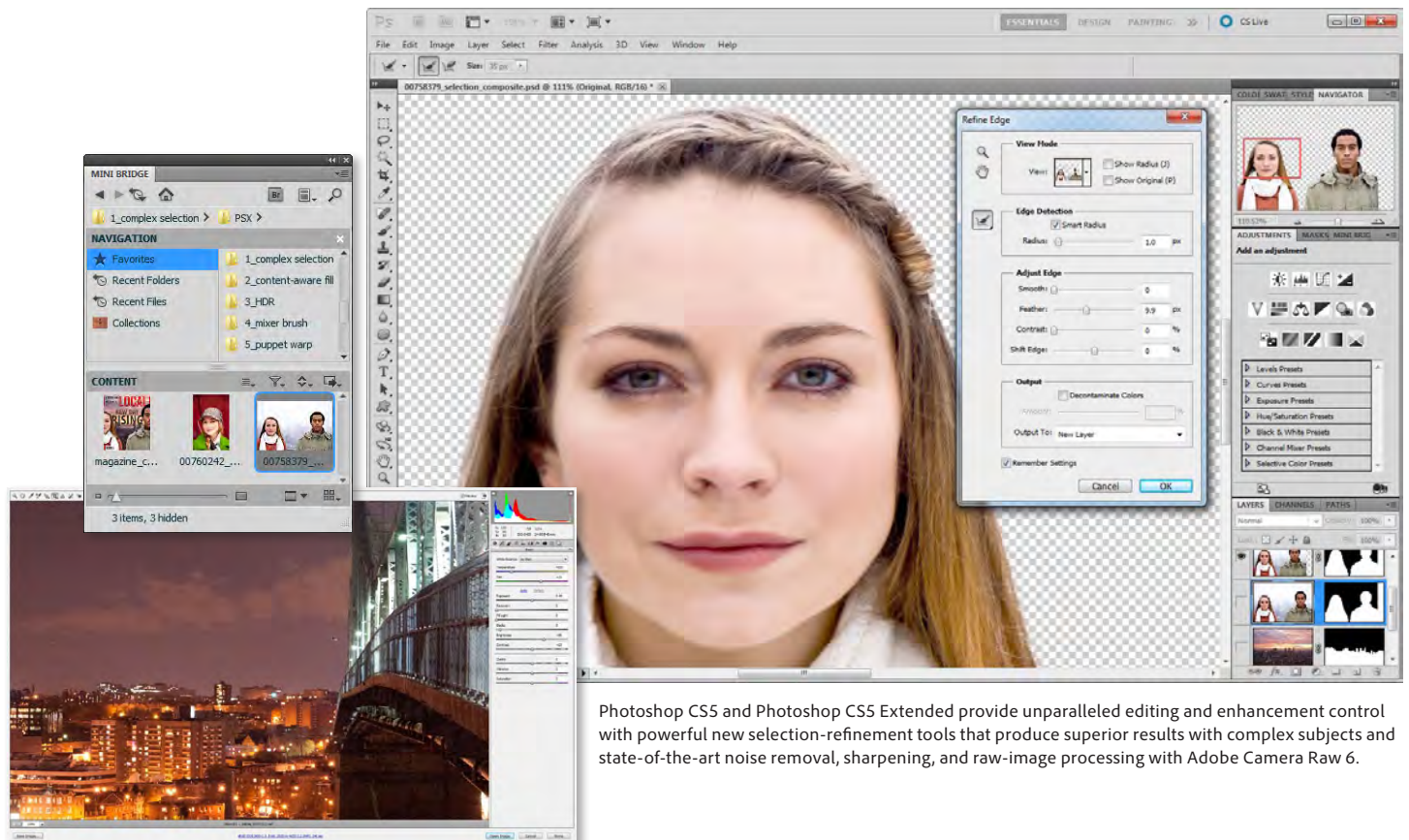
Photoshop CS5 and Photoshop CS5 Extended provide unparalleled editing and enhancement control with powerful new selection-refinement tools that produce superior results with complex subjects and state-of-the-art noise removal, sharpening, and raw-image processing with Adobe Camera Raw 6.

With Photoshop CS5 and Photoshop CS5 Extended, you can:

Perfect your photography with breakthrough tools. Photoshop CS5 offers state-of-the-art tools to help you refine your images and get superior results faster than ever before. The integrated Adobe Camera Raw 6 plug-in makes it easy to preserve color, detail, and a natural feel when removing noise and adding film-like grain effects, and gives you more control over post-crop vignetting and better results when sharpening images. With HDR Pro, you can easily merge exposures to create gorgeous HDR images. And lens correction is more powerful, lens-specific, and automated to save you time.

Achieve the exceptional. Take your imagery and designs in new artistic directions with the new Mixer Brush and Bristle Tips, which enable you to realistically blend colors and paint with naturalistic strokes. Brush directly onto photographic originals to create eye-catching paintings. Use the powerful new Puppet Warp feature to easily reposition an image element—like an arm that's bent at an awkward angle—and magically remove unwanted subjects in your photos with Content-Aware Fill.

Be productive everywhere. From helping you make the most of today's powerful hardware systems to including user-inspired enhancements that make a big impact on your day-to-day workflow, Photoshop CS5 boosts your productivity at every level. Cross-platform native 64-bit support and higher levels of addressable RAM yield better performance, especially when working with large image files. New selection technology helps you easily make complex selections of difficult subjects with superior results, and Adobe Mini Bridge keeps your photos and media close to hand—right inside Photoshop. Dozens of timesaving features suggested by users like you, more control over settings, enhanced tool functionality, and new options in existing features make Photoshop CS5 easier and more precise to use.

Explore creatively in 3D (Photoshop CS5 Extended only). Take your work to the next level by adding 3D elements to 2D designs and easily creating 3D extrusions from selections, photos, text, and shapes with new Adobe Repoussé technology. And you can enhance the realism of your 3D artwork with one-click shadow creation and a rich library of easy-to-apply 3D materials.

Who uses Photoshop?

Photographers have long relied on Photoshop for the ultimate in creative control and production of high-quality images. With its unrivaled editing and enhancing power, Photoshop helps photographers achieve superior results with its industry-leading features, extensive toolset, and state-of-the-art editing, compositing, and painting capabilities. Photoshop contains everything image makers need to perfect their photos, including tools for retouching, adjusting tones, correcting color, noise removal, and sharpening. Photographers also take advantage of cutting-edge, nondestructive editing workflows with the precise controls in Adobe Camera Raw, non-modal adjustments, and Smart Objects in Photoshop, and tight integration with Adobe Photoshop Lightroom® software. They use selection tools, layers, and masking technologies to perform advanced compositing, and employ filters and painting features for artistic enhancements. Photoshop Extended provides them with the added ability to work with 3D imagery and motion-based content, and they use Adobe Bridge software to efficiently manage their photos.

Web, print, and interactive designers use Photoshop to bring their creative visions to life in print, on mobile devices, and on the web. Working in unison with other Creative Suite tools like Adobe InDesign®, Illustrator®, and Dreamweaver®, Photoshop plays a key role in the designer's workflow, providing the necessary tools to retouch or enhance photos, create superior composites, produce complex illustrations, and produce imaging content that is optimized for multiple design outcomes. Designers can port their interface and website creations from Photoshop to Adobe Flash® Catalyst™ software to produce interactive content without having to write any code. Adobe Bridge acts as a cross-program pivot point for managing the wide variety of mixed assets involved in design projects. Photoshop Extended provides designers with the added feature set needed for the creation of 3D logos, buttons, and artwork.

*CS Live online services are complimentary for a limited time. See the last page for details and limitations related to all Adobe online service.

Video professionals, motion graphics designers, and VFX artists use Photoshop to help them create and enhance visual effects and motion graphics or to prepare still images and text for inclusion in video projects. With Photoshop Extended, they also leverage the powerful Photoshop 3D engine that enables the creation and enhancement of 3D and motion-based content. Video professionals using Photoshop also enjoy tight integration with other Adobe software such as Adobe After Effects® and Adobe Premiere® Pro (sold separately), providing more efficient workflows.

Top new features of Photoshop CS5 and Photoshop CS5 Extended

Intelligent selection technology
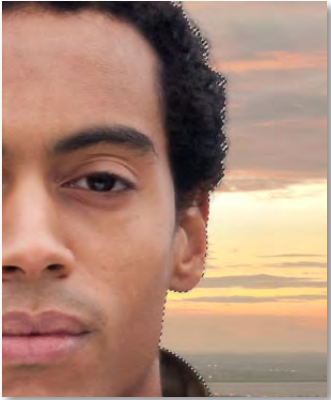
Edge Detection uses adaptive selection technology to create selections of different edge types - such as along a simple solid line like this man's jacket, or a more complex selection, such as his hair.

Photoshop CS5 takes the time and frustration out of making precise image selections and masks, providing you a faster way to extract subjects from their backgrounds and create realistic composites. New intelligent selection technology offers better edge detection and faster, more accurate masking results of complex subjects, like hair. Automatic color decontamination helps you eliminate background color around the edges of a selection, resulting in more seamless compositions when placing extracted subjects on new backgrounds.

Experienced Photoshop users know that the best selections are created by constantly adapting the selection technique for differences in the subject's edges—one method for hair and another for the edge of a building. With Photoshop CS5, you can produce highly accurate masks and selections faster and more simply than before with a set of new adaptive selection-edge modification controls. Smart Radius automatically matches the best selection approach with the subject's changing edge characteristics, and the extra view modes assist you in previewing the quality of your selections. The Refine Radius and Erase Refinements tools customize your masks and selections as you make them. These tools, in combination with the color decontamination settings, help eliminate any residual background color from around the edges of your selections.
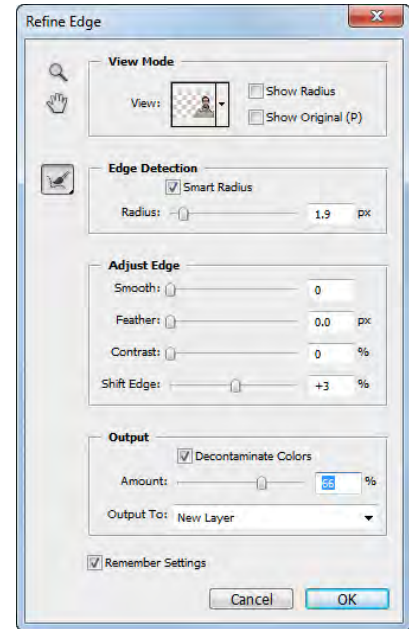
The ability to create accurate selections is made easier with the Edge Detection controls in the updated Refine Edge dialog box.

The Edge Detection and Decontaminate Colors features help you make highly precise selections of complex subjects quickly and easily, enabling faster, more accurate compositing of multiple images. Left: Original. Middle: After refining the selection edge in Photoshop CS5. Right: Extracted subject combined with new background.
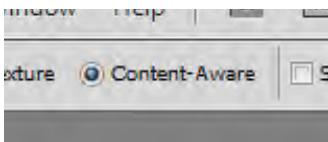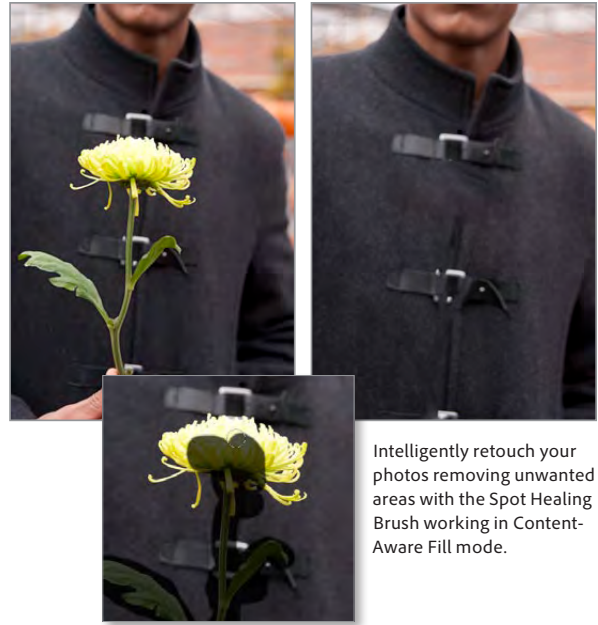
Content-Aware Fill

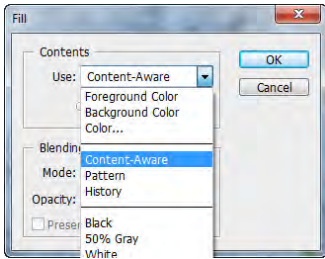The Content-Aware feature can also be selected as an option when using the Spot Healing brush.

One of the most exciting new features in Photoshop CS5 is the remarkable ability to remove an image element and magically replace it with details that match the lighting, tone, and noise of the surrounding area so that it looks like the content never existed. Now, you can make substantial changes to photo composition quickly and easily, as even large complex subjects can be seamlessly erased.

You can use Content-Aware Fill with the Spot Healing Brush or as an option of the Fill feature to replace content in an active selection. Selecting the Content-Aware setting with the Spot Healing brush changes the way the tool fills in the areas you paint. This retouching approach is designed to account more fully for the structure and detail of the image elements that surround the painted area, providing a near-invisible result when removing unwanted objects. Alternatively, you can select the object to be removed, and then replace the area with synthesized details from the area surrounding the selection, simply by using the Content-Aware option in the Fill dialog box.

Use Content-Aware Fill in conjunction with the Fill command by making a selection first, and then choosing the Content-Aware option from the Use menu in the Fill dialog box.

Intelligently retouch your photos removing unwanted areas with the Spot Healing Brush working in Content-Aware Fill mode.


Magically remove unwanted detail in your photographs with Content-Aware Fill. In this example, the boat has been removed from the photo by making a rough selection around the subject (left) and then filling the area with the Content Aware option selected in the Fill dialog box. The result is a seamless removal of the subject.

HDR Pro for creativity and precision with the next generation of high dynamic range imaging

With just a few clicks, you can go beyond the capture capabilities of your camera by combining multiple exposures into a single high dynamic range (HDR) photo that preserves the full tonal range of a scene with high contrast. Photoshop CS5 introduces HDR Pro for more control over the HDR merging process and greater adjustment power over the mapping of tones and the styling of HDR output, resulting in images that range from photorealistic to highly surreal.

HDR Pro offers extended controls, an enhanced dialog box, and improved image processing. New algorithms enable more accurate alignment of source files and automatically deghost any problem areas that occur when trying to merge source photos where subjects have moved during capture. You can even select a source file to be used as the sole reference for any ghosted areas or allow the feature to do this automatically for you.

New tone-mapping tools and adjustment controls give you the power to implement your own HDR vision, producing photos that range in style from fully textured images of high-contrast scenes to wildly hyper-realistic creations. Save your favorite styles as presets and apply them to multiple groups of source files to provide a common look and feel to your HDR photos. And for times when you don't have multiple source files, create the look of an HDR-processed image from a single photo with the new HDR Toning feature that allows you to mimic the tone-mapping results traditionally achieved in high dynamic range photos.
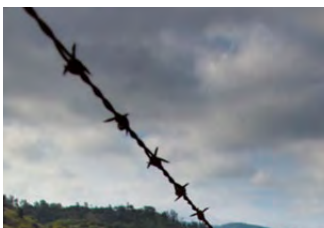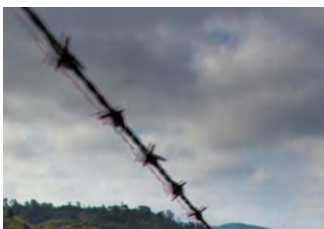
The new deghosting system automatically gives priority to the content of one source image over the others in problem areas. Or, you can override the auto feature and manually select the base image to use.
Top: Without deghosting.
Bottom: With deghosting.

Deliver innovative images across multiple media

Create compelling images and extend their reach in print, web, interactive, and mobile content with Adobe Creative Suite 5 Design Premium software.

Get more creative power at an appealing price. In addition to Photoshop Extended, CS5 Design Premium offers the latest versions of Adobe Illustrator, InDesign, Flash Catalyst, Flash Professional, Dreamweaver, Fireworks®, and Acrobat® Pro, so that you can:

Showcase your images in outstanding layouts for print or web. Use InDesign and Dreamweaver to integrate your images into high-quality print or web designs.

Leverage the impact of interactive media without writing code. Place images and graphics created with Photoshop and Illustrator into Flash Catalyst CS5 to create dynamic image galleries, portfolios, product guides, microsites, and much more.

**Easily move beyond static mockups of web pages and mobile content.** Open Photoshop assets in Fireworks to begin building website and mobile design prototypes that you can export and deliver to your developer as CSS (Cascading Style Sheets).

For more information, see *Adobe Creative Suite 5 Design Premium What's New.*

With new tone-mapping and alignment technologies, sophisticated controls, and an updated dialog box, HDR Pro helps you to produce a variety of creative outcomes from a single set of source files.

Together with the existing Photomerge feature (which allows for image stitching), the exposure-merging capabilities of HDR Pro can add up to high-bit-depth, 360-degree panoramas ideal for composite photography, video, and beyond.
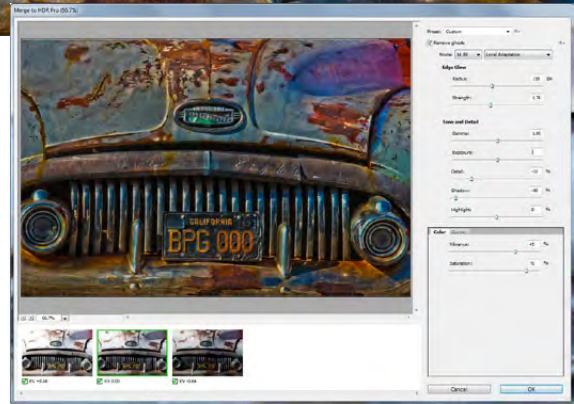
The Auto Stack Panorama/HDR files option in Adobe Bridge CS5 and the new panelized Mini Bridge groups source files together into stacks for quicker creation of HDR images in Photoshop CS5. You can even start the creation of an HDR file by choosing Tools > Merge To HDR from the Mini Bridge panel inside Photoshop.

## State-of-the-art raw-image processing

The Adobe Camera Raw 6 plug-in, which ships with Photoshop CS5, now supports more than 275 camera models as it continues to provide you with the industry-leading conversion of raw files. In addition, the utility provides advanced, nondestructive image editing and enhancement for raw files, as well as for other standard formats, including JPEG and TIFF. Now you can remove noise, achieve better quality sharpening, and creatively apply new styles of vignettes and film-like grain.

Recreate the look of your favorite film with the new Grain feature. Left: Original photo. Right: After grain has been applied.

The updated noise removal controls in the Adobe Camera Raw 6 plug-in use new algorithms to eliminate the appearance of noise in your photos. Top: Original photo. Bottom: After noise removal.
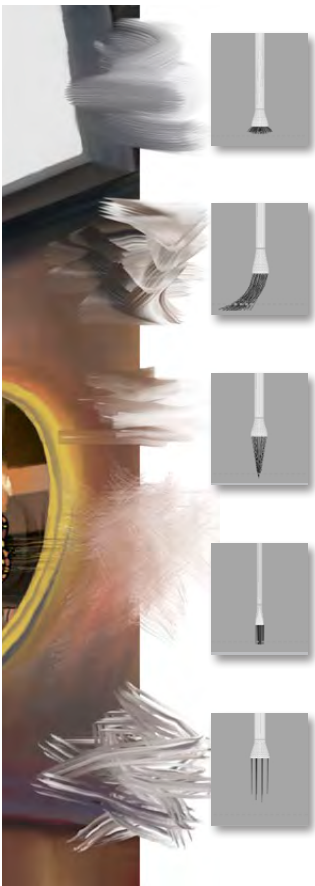
The blending abilities of the Mixer Brush, combined with variations in texture provided by Bristle Tips, provide better creative painting control. The Bristle Tip Preview (see insets above) displays a live view of the brush tip as you paint.

You can now shoot at higher ISO settings with confidence, because the updated controls in the Adobe Camera Raw 6 plug-in remove the noise common in such high-ISO images (as well as in photos captured with long exposures and pictures from consumer cameras) while still preserving excellent color and detail.

New controls for adding grain and additional post-crop vignetting settings join many creative options already available in this utility, such as the Adjustment Brush and the Graduated Filter. For the first time, you can add grain-like texture to photos as part of your nondestructive editing workflow. Adjust amount, size, and roughness of grain to easily give composites a more natural, seamless appearance by matching levels of grain across all source images—or simply use the feature to make a digital photo look more organic or film-like.
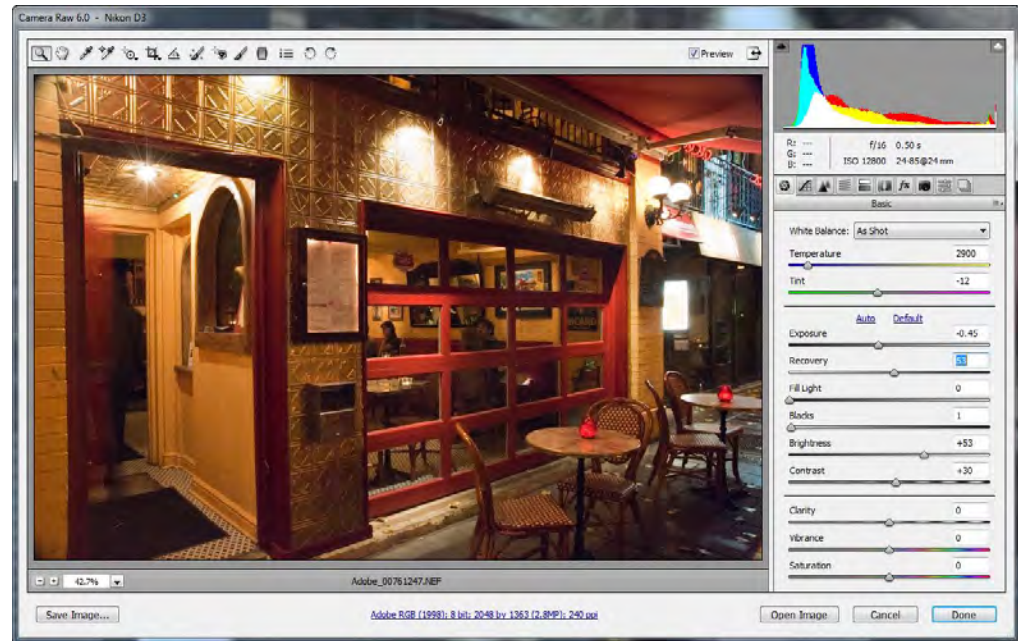
The Adobe Camera Raw 6 plug-in includes new features for better sharpening, adding grain, removing noise, and producing creative vignette effects.

Updated post-crop vignetting options offer more creative control over the corner darkening and lightening process, and your favorite vignette effects can be saved as presets for quick application across multiple files.

Upgraded sharpening options produce clearer photos with fewer artifacts while providing better control over key details, especially when working with high-resolution pictures produced by multi-megapixel cameras.

Extraordinary painting effects

With a new Mixer Brush, a Bristle Tips feature, and a new mechanism for blending colors, Photoshop CS5 redefines the way you paint. You can take advantage of more natural and realistic painting effects, making it easy to take your imagery and designs in new artistic directions.

The Mixer Brush lets you define multiple colors on a single tip, and then mix and blend them with the underlying hues on your canvas, achieving creative results that rival traditional painting media. When starting with a photo original, you can use a dry, empty brush to blend the existing colors while at the same time adding a painterly effect to the image. Mixer Brush settings provide extensive control over the wetness of the canvas colors, the load rate that determines amount of paint loaded on the brush, the mixing rate between brush and canvas colors, and whether the brush is refilled, cleaned, or both after each painting stroke.
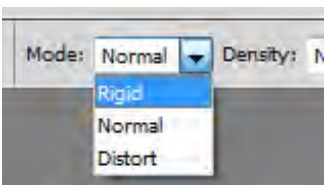
The new Mixer Brush helps make it easy to take a sketch and turn it into a painting.

In conjunction with these new mixing features, Photoshop CS5 incorporates unprecedented control over stroke characteristics of its painting tools with Bristle Tips. Bristle Qualities define key bristle properties such as shape, length, stiffness, thickness, angle, and spacing, which affect how the color is laid on the image as you paint.

The Bristle Brush Preview feature provides a visual representation of these changes, and you can save your tip configurations for future use, allowing you to build a customized collection of Bristle Tips to experiment with when using Photoshop brush tools.
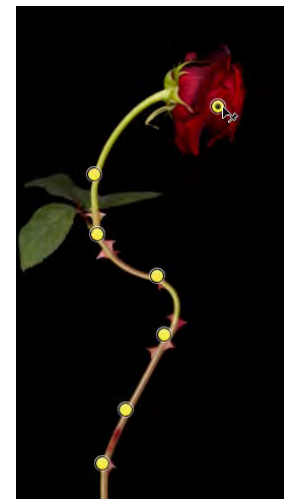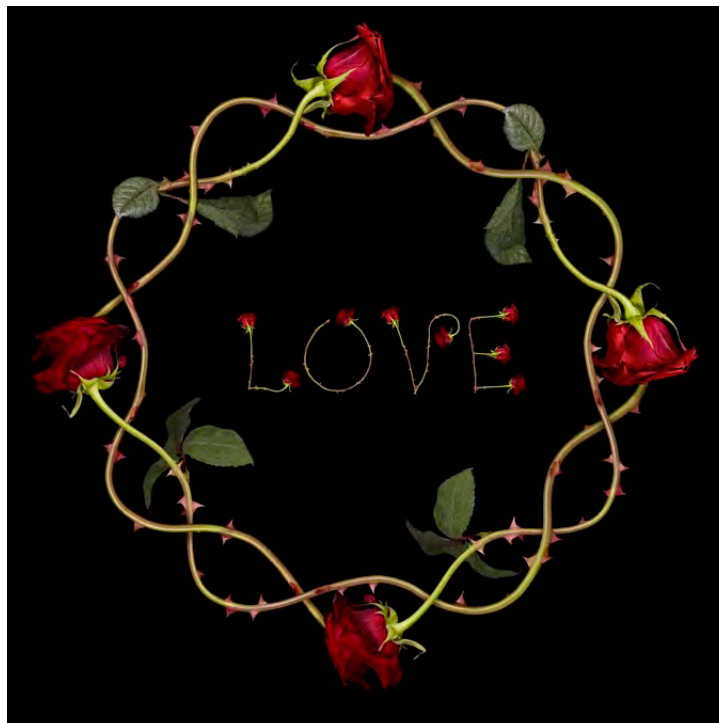
Puppet Warp

Puppet Warp gives you more freedom when pushing and pulling elements within an image. The feature lets you recompose an image to make it more appealing, or to fit a specific layout, by allowing the precise repositioning of any element within a Photoshop document, or selection, by simply clicking and dragging. After you reposition an object, Photoshop adjusts the rest of the image to account for the shifted pixels.

Puppet Warpl's Mode setting adjusts the way that the image is transformed. Choose Distort for creative distortions, and Rigid when you want to maintain pixel fidelity of the targeted pin.

After choosing Edit > Puppet Warp, click on your image to drop pins establishing anchor points where you want image parts not to move, and handles that you can use for warping. Then drag any of the pins to reposition the picture elements. Use Puppet Warp to swing a raised arm to a person's side, warp and stretch text to create new effects, or reposition intrusive objects in a photo to create a more pleasing composition.
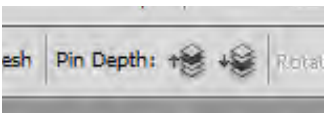

The Pin Depth settings in Puppet Warp's options bar give you the ability to define a stacking order of pins that overlap (Z-depth). The Pin Depth settings were used in the Rose composition (right) to layer the stems of the flowers.

You can use Puppet Warp to interactively reposition, reshape, and transform key objects in your photos. In this example, rose photos, like the one above, were twisted and layered to form a wreath and the letters in the center of the composition (left).

Automated lens correction

The Lens Correction features in Photoshop CS5 create better quality captures by removing or correcting the three most common lens-based errors: geometric distortion, chromatic aberration, and vignetting. This means you can use a wider range of lenses with the confidence of producing images of the highest quality. With the aid of the Adobe Lens Profile Creator (available separately as a free download from *labs.adobe.com*) you can produce custom profiles characterizing the optical aberrations of your camera lenses. When installed and selected in the Lens Correction filter in Photoshop CS5, the profile automatically removes or corrects the three types of distortion.

The updated Lens Correction filter also contains both automatic and custom correction features.
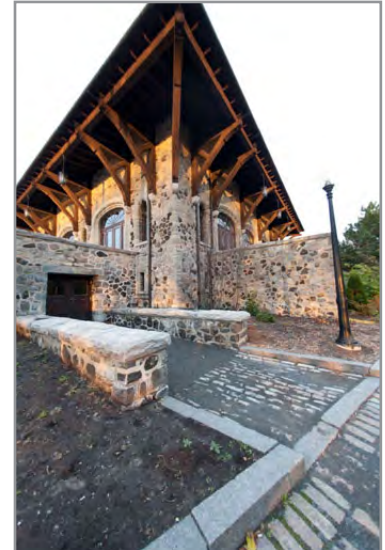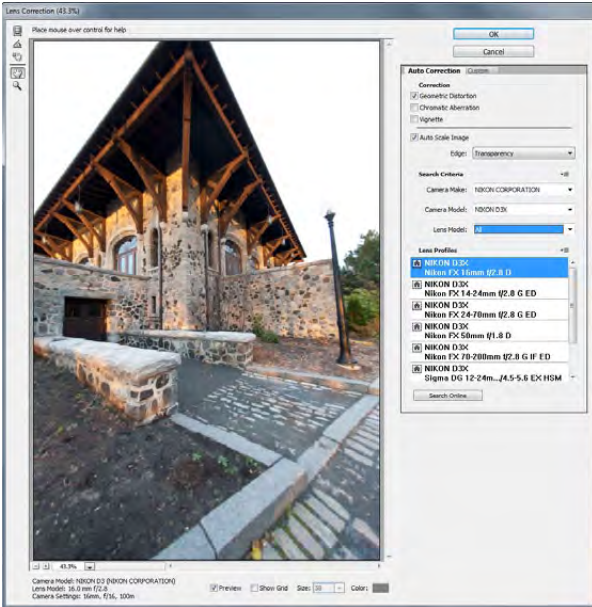
The Lens Correction feature located in the Photoshop CS5 Lens Correction filter provides camera- and lens-specific correction for three of the most common lens-related aberrations. The Lens Correction filter lets you compare before (left) and after (right) images to evaluate the filter's effect before you apply it.

The Lens Correction filter in Photoshop CS5 is redesigned to include manual adjustment controls under the Custom tab, and settings for locating and applying custom Lens Correction Profiles (LCP files) under a new Auto Correction tab. Installed profiles that match your camera and lens combination are used to apply precise distortion corrections to your photos. Suitable profiles can be located easily based on the EXIF data automatically recorded with the image, and if a suitable profile is not present in the Lens Correction filter, then with a single click within the dialog box, you can search online for the correct profile to meet your needs.

Individual error types can be selected in the filter's settings, as can options for handling any transparent areas that surround the corrected image.

Adobe Lens Profile Creator

To coincide with these new lens-correction options in Photoshop CS5, Adobe offers the Adobe Lens Profile Creator, a utility you can use to characterize the optical aberrations of your camera lenses and produce custom Lens Correction Profiles or LCP files. This utility is available as a free download from *labs.adobe.com*.

To create a new profile, simply take one or more sets of photographs of the Adobe Camera Calibration Chart, using the camera and lens you wish to characterize. Load the source files into Adobe Lens Profile Creator, which then creates a lens profile automatically. After you add some basic information about the camera, the lens, and the calibration chart, the profile is saved, ready for use with the Lens Correction filter. Any profiles you create, or download from the web, are available for use in Photoshop CS5.
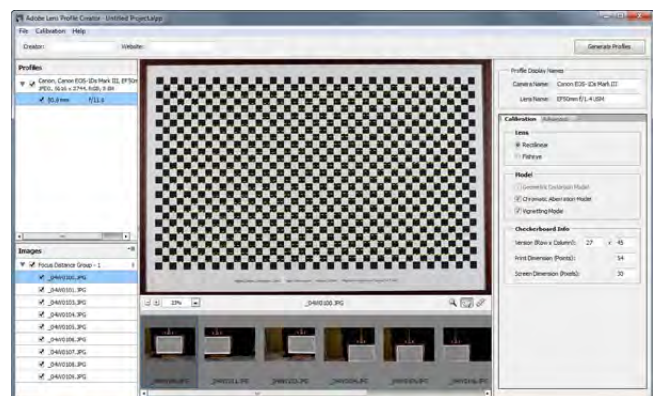
Create custom Lens Correction Profiles of your own lens and camera equipment by using the Adobe Lens Profile Creator (available separately as a free download from *labs.adobe.com*).

Easily create unique new 3D objects with the settings in the Create New 3D Object section of the 3D panel.
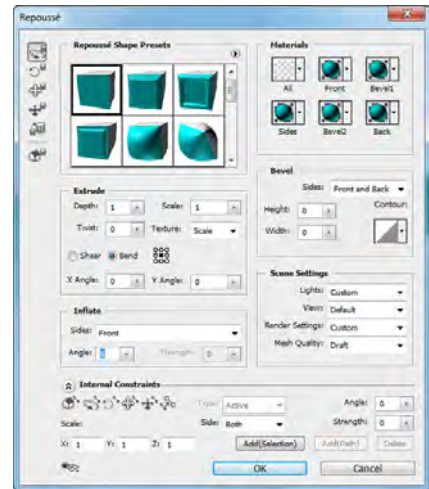
Easy 3D extrusions with Adobe Repoussé (Photoshop CS5 Extended only)

Repoussé is an ancient metalworking technique for embossing artwork on the surface of metals such as gold, silver, copper, tin, and bronze. Photoshop Extended offers a powerful new feature, inspired by this traditional technique, for creating eye-catching 3D artwork.

Use Adobe Repoussé to easily convert 2D artwork into 3D objects and then create depth by altering the extrusion properties of the 3D model. Easily extrude text to create logos and 3D artwork for use in websites, video frames, or layouts.

Starting with a text layer, a path, a selection, or a layer mask, you can convert the content to 3D with the Create New 3D Object section of the 3D panel. After the conversion is complete, you can alter the look of your 3D model by manipulating its key extrusion properties—depth, scale, bend, shear, inflate, or twist—in the Repoussé dialog box.
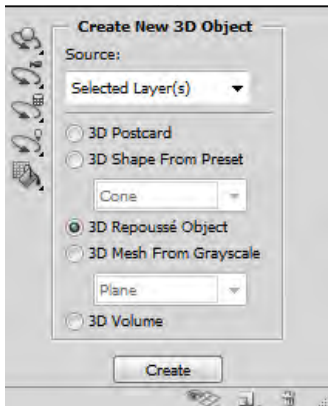
In addition to manipulating these properties, you can inflate the front or back of the extrusion and/or apply a custom bevel. Sections of objects (internal subpaths) can also be inflated by creating a selection first and then adjusting the Internal Constraints settings in the Repoussé dialog box. The 3D Axis widget allows on canvas rotation of the of the model.

Use the extrusion settings and controls in the Repoussé dialog box to quickly style your 3D model.


Once your extrusion is created, you can adjust a variety of its characteristics. In this example, the Scale (left), Inflate And Bevel (middle), and Bend And Depth (right) settings have been altered to change the design.

Enhanced 3D realism and rich materials (Photoshop CS5 Extended only)

Bring your 3D creations to life with the materials that ship with Photoshop CS5 Extended. You can select materials from the library of included presets, download additional materials by choosing 3D > Browse 3D Content, create your own, or even edit existing materials to customize them for your needs (in the materials section of the 3D panel). Test a variety of looks for your 3D models and extruded designs by adding different materials or textures to their surfaces. Materials that feature reflection or refraction properties can be rendered with the new Adobe Ray Tracer engine. The Repoussé dialog box, and the Materials section of the 3D panel, both contain options for applying a single material to all surfaces—as well as choosing different treatments—for individual sections and surfaces of your models.
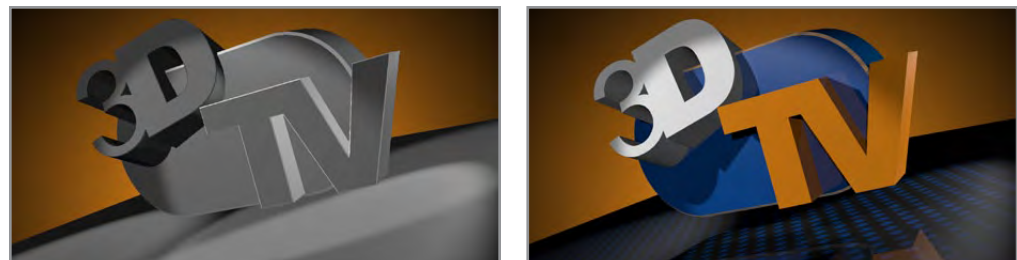

Changing the look of your 3D models can be achieved in just a few clicks, thanks to a vast library of materials to select from and an improved method of applying them. Left: Repoussé Model without materials. Right: Model with material applied.
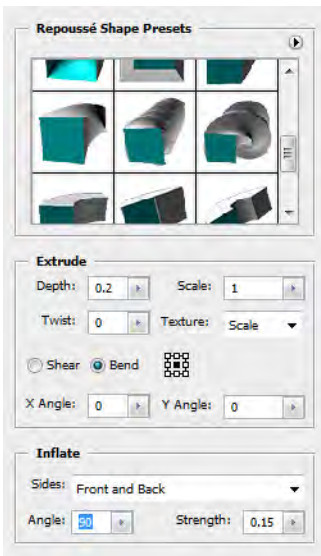
Quickly change the look of your Repoussé designs by applying one of the Shape Presets, or manually adjust each of the characteristics using the included controls and settings.

Use the 3D Material Drop tool and the Material Load tool to easily load a material and drop it into different meshes, allowing you to sample and apply materials interactively. New overlay controls provide instant feedback about where specific materials and meshes are located in your model, and the updated 3D axis widget now works with lights and cameras as well as 3D objects.

With the Shadow Catcher feature, you can now easily generate a shadow on the ground plane of a scene, and then adjust how the shadow interacts with image content of other layers by altering its opacity and its softness. To further enhance realism, you can use an HDR image to light your scene, or re-create traditional depth-of-field effects in your rendered scene by adjusting the zone of sharpness with the new Distance and Blur controls.
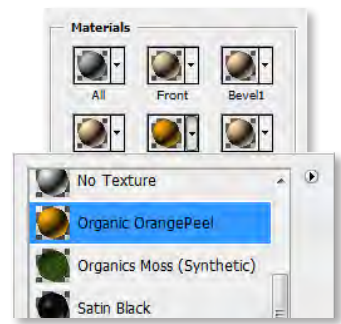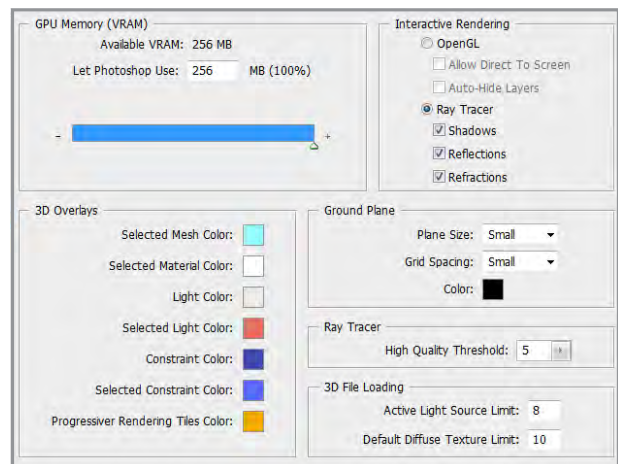

Control the selection of materials for each of the surfaces of your Repoussé design with settings in the feature's dedicated dialog box.
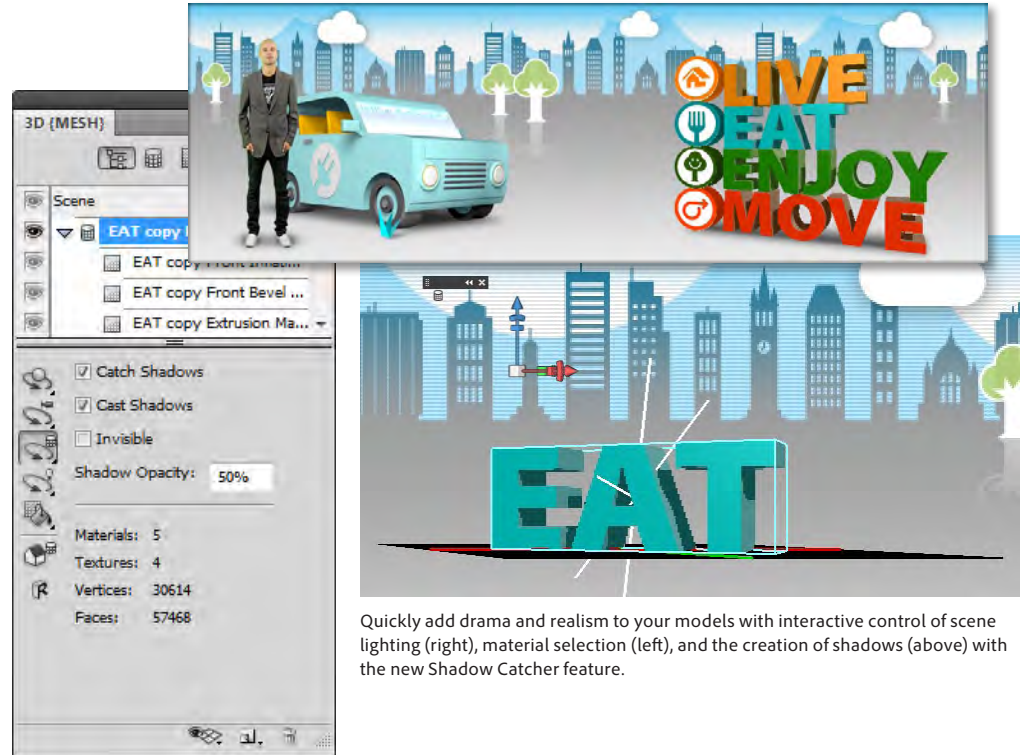
Quickly add drama and realism to your models with interactive control of scene lighting (right), material selection (left), and the creation of shadows (above) with the new Shadow Catcher feature.

Better 3D performance and workflow (Photoshop CS5 Extended only)

Take advantage of better performance and immediate rendering feedback thanks to the improved Adobe Ray Tracer (ART) engine in Photoshop CS5 Extended. ART 2.0 brings substantial improvements in performance when you interact with and edit 3D models. ART 2.0 progressively renders 3D scenes with an option to re-render after a pause, or even perform selective renderings, all
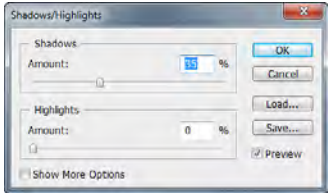

The controls in the 3D section of the Preferences dialog box (above) allows you to fine-tune the rendering system in Photoshop to achieve the best 3D design experience.
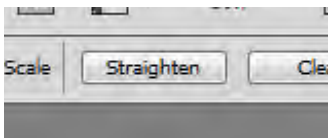
while providing more immediate feedback and dramatically reducing the time it takes to preview key areas in high quality.

You also get faster previews and more responsive interaction thanks to changes made in the OpenGL engine, which now fast-tracks the delivery of complex 3D geometry to the video card. Overall workflow performance has been optimized with improved import, interaction speeds, and better merging of 3D objects into a single scene. To aid with fine-tuning and adjustment of these performance features, there is a new 3D section in Preferences.

User-inspired productivity enhancements

Photoshop CS5 helps boost productivity and creativity throughout the editing workflow with dozens of enhancements inspired by Photoshop users. Some of these include:

· A neutral-density preset for the Gradient tool

· The ability to save 16-bit Photoshop documents in 8-bit JPEG format in a single step

· An option for reversing the clone source using the flip buttons in the Clone Source panel

· A Don't Show This Message Again option when saving files with maximum compatibility

· Default value for Shadows/Highlights changed from 50% to 35%

· The ability to move a selection while the active layer is hidden

A Neutral Density option is now available from the Gradient Picker presets menu.

· An on/off option for trackpad gesture support on Mac and in Microsoft® Windows® 7

· A new layer command for deleting all empty layers via scripts

· A Straighten button on the Ruler tool options bar

· A Close All Open Images Without Saving option

· A Save As option for always defaulting to the folder to which you last saved an image

· The ability to drag and drop a file onto an open Photoshop document to create a new layer

· Multiple improvements in Lens Correction filter options, including:
  – Grid Display is off by default
  – Show Grid, Grid Size, and Grid Color settings are now sticky
  – Default grid size is increased from 16 to 64 pixels
  – Decimal point adjustments are allowed as values for the Chromatic Aberration sliders
  – A third Chromatic Aberration slider enables the correction of green/magenta fringing
  – The Background Color Edge setting is replaced with the Black Color entry
  – A White Color option is available in the Edge menu
  – Reset options are changed so that only the calibration settings are reset, not the Grid options

· A new Cache Tile Size control in the Performance section of the Preferences dialog box

· Zoom in and out with the new scrubby zoom tool

· Presets for setting Cache Tile Size and Cache Levels simultaneously

· The ability to use keystrokes to set values in the Adjustments panel text fields

· Performance increases of up to 50% when importing OBJ files

· Sample colors faster using the new on screen color ring built into the eyedropper tool

· Customizable default values for Layer styles
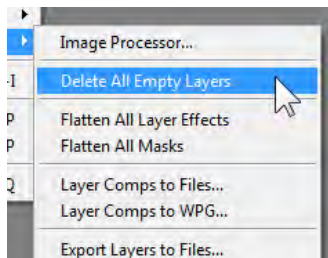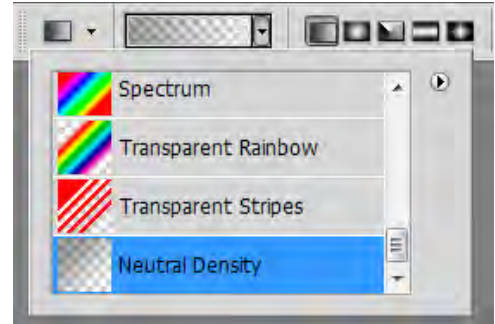
New GPU-accelerated features

Photoshop CS5 harnesses increasing hardware power and speed by introducing new features, like Repoussé, that take advantage of modern video card technology. You now have the option of displaying two different overlays—Rule Of Thirds, and Grid—when cropping (see above top). Other new features that take advantage of GPU acceleration include the ability to dynamically resize brushes, adjust bristle hardness, and display a color sampler ring when working with the Eyedropper and display an on screen color picker.

The default Amount value for the Shadows/Highlights feature has been reduced to 35%.

A new Straighten button has been added to the Ruler tool's options bar.

All empty layers in a document can now be deleted using a new entry in the Scripts menu.

The Green/Magenta slider found in the updated Lens Correction filter dialog box provides great control over the manual correction of Chromatic Aberration.
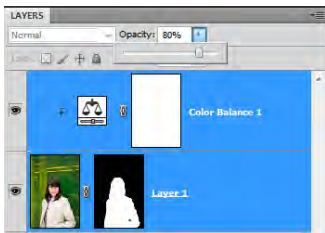

You can now simultaneously adjust the opacity of multiple layers.

- New creative resources, including actions, tools, presets, brushes, swatches, shapes, gradients, styles, and tool presets
- Window and Door shapes added to list of meshes that can be created from a layer
- An option for changing the opacity of multiple selected layers
- The ability to create a mask from the transparent areas of a layer
- Pick colors faster using the new on-screen color HUD
- Print settings saved with the image file, allowing one-button printing with user-selected values
- Selecting a printer automatically lists the profiles installed for that printer at the top of the profile list
- Printer-specific profiles are selected automatically when choosing a printer
- Customized print settings can be recorded as part of a Photoshop Action
- An overlay grid can be displayed when using the Crop tool
- Layer groups can be nested more than five levels deep
- New Paste Outside and Paste Inside commands, along with the previously existing Paste In Place option, are included in a new Edit > Paste Special menu

Streamlined creative reviews through integration with Adobe CS Review

Collaborate with colleagues and seek client comment quickly and easily with Adobe CS Review, a new CS Live online service* designed to simplify and accelerate the design review process.

With CS Review, you can avoid the hassles of large email attachments, logon problems with FTP servers, and time-consuming next-day air deliveries usually associated with client reviews by instead initiating a secure, shared review. Comments are displayed in near-real time and in context, providing convenient feedback on your images and designs. You can access the CS Review service from within Photoshop CS5.
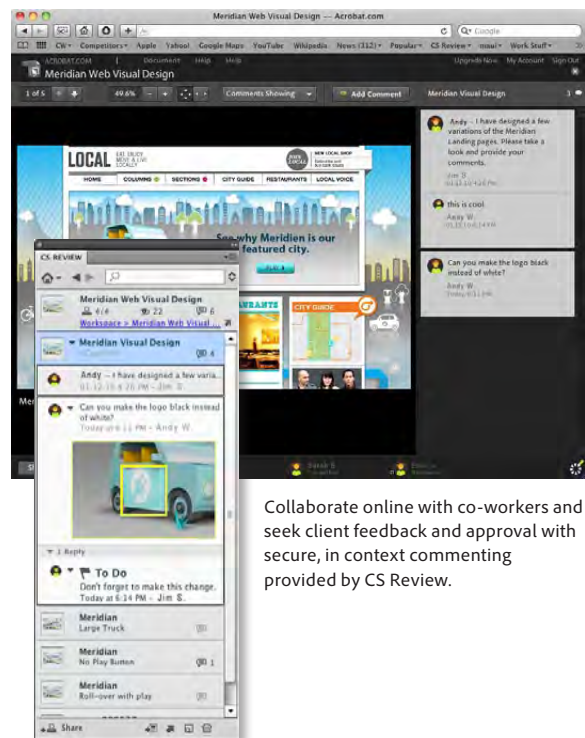
Collaborate online with co-workers and seek client feedback and approval with secure, in context commenting provided by CS Review.

Faster performance with cross-platform native 64-bit support

Tight deadlines and large file sizes make performance a high priority for many Photoshop users. Photoshop CS5 and Photoshop CS5 Extended deliver cross-platform 64-bit support, allowing you to perform day-to-day imaging tasks up to 10 times faster. Video and photo professionals, especially, benefit from the extra performance, as gains are even greater if you regularly work with very large files, where processing can be up to ten times faster when you take advantage of higher addressable RAM amounts†—limited only by what your hardware accommodates.

* CS Live online services are complimentary for a limited time. See the last page for details and limitations related to all Adobe online services.
† Requires a 64-bit-capable computer with a 64-bit version of Mac OS, Microsoft Windows 7, or Windows Vista˙. Actual performance increase will vary depending on the drivers you have installed, the feature you're using, and other factors.

To help you tweak the performance of your setup, Photoshop CS5 lets you adjust history, tile, and cache controls in combination.

Greater access to key resources via flexible custom panels

Photoshop CS5 offers easy ways to integrate and extend your workspace with customized panels. With the aid of the Configurator 2.0 panel utility (available separately as a download from *labs. adobe.com*) you can produce your own panels, bringing together your most used tools and menu selections and incorporating your favorite web feeds or video tutorials.


Stay connected to the greater Photoshop community and all facets of your digital life directly from within Photoshop CS5 by using panels you create or those produced and distributed by other users. You can access anything that lives on the web—favorite blogs, video content, even your email— with these integrated panels. You can even expand content beyond a panel's standard viewing area when you need a magnified view.

Configurator 2.0 can be used to build your own Custom panels containing Photoshop tools, menus, scripts and actions. You can also create panels that access websites.

## Easier interface management with Live Workspaces and Workspace Switcher

Creating dedicated, task-specific workspaces that mimic your individual workflow increases productivity and efficiency by hiding the features you don't use and exposing the ones you do. New Live Workspaces auto-save any changes you make to a task-specific workspace, so that if you switch to a different workspace and then back again during an editing session, your panels remain exactly where you left them. The number of entries displayed in the collapsible Workspace Switcher can be altered, and the position of each workspace can be rearranged. This provides quicker navigation between frequently used setups.
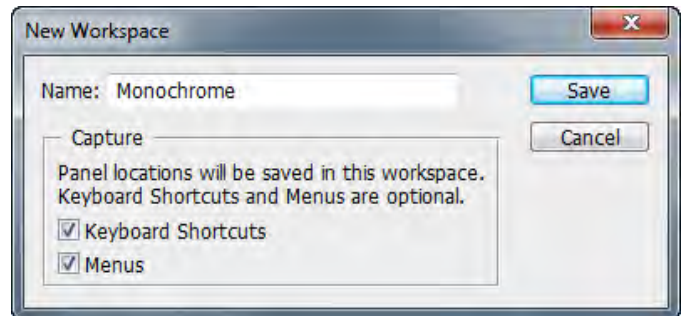
Panel locations, keyboard shortcuts, and custom menus can be saved with each new workspace entry.
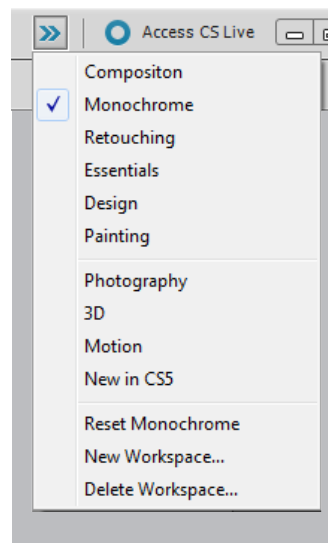
The Workspace Switcher enables you to quickly change between workspaces that have been customized for different tasks.
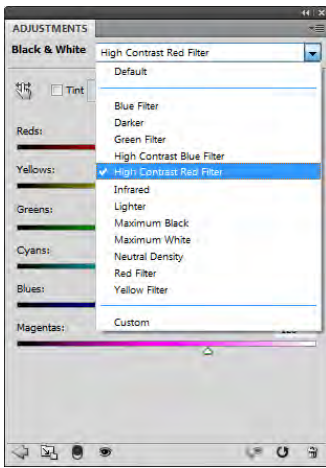
New presets in the Black & White panel quickly convert your photos to set monochrome styles.

Superior black-and-white conversion

Photoshop CS5 continues to support the tradition of producing finely crafted monochrome photos with the inclusion of new ways to explore an endless variety of black-and-white looks. You can use the integrated Lab Black & White Technique action, located in the Default Actions group of the Actions panel, for an easy and interactive way to convert color images. Create gorgeous HDR black-and-whites with greater ease and speed by taking advantage of the new and updated features in HDR Pro. Take your monochrome creations in new directions with conversion presets in the Black & White panel.
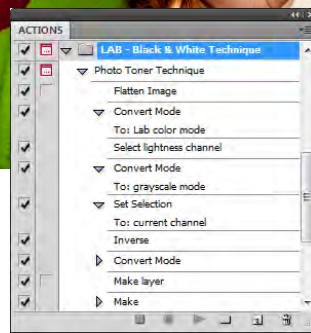
The Lab - Black & White Technique action both converts and tints color photos to produce sophisticated monochrome images.

Still using Photoshop CS3?

If you are still using Photoshop CS3, upgrading to Photoshop CS5 also gives you the chance to catch up on all the great features added in Photoshop CS4, including:

· Live, nondestructive corrections with the Adjustments panel speeds workflow performance by cutting the time it takes to make adjustments like Curves, Levels, Hue/Saturation and much more.
· Re-editable, feathered, density-controlled masks with the controls in the Masks panel
· More refined, natural results with the updated Dodge and Burn tools that protect key tones as enhance, and a new Vibrance mode for the Sponge tool
· Enhanced Auto-Align and Auto-Blend features as well as 360° panoramas, the automatic detection of fish eye lenses, and a new free-form Collage option bring more flexibility and accuracy to Adobe Photomerge
· Content-Aware Scaling that leaves key image elements unchanged while adjusting overall image height or width
· Extended depth of field by combining multiple source photos focused at different points
· Fluid canvas rotation enabling editing of photos at any angle
· Ultra-smooth pan, zoom, preview, and painting tools using the power of your graphics processor
· Tighter integration with Adobe Photoshop Lightroom® with cross-application support for automated functions such as opening multiple photos from Lightroom directly into a layered Photoshop document, high dynamic range image, panorama, or Smart Object.

System requirements

Windows

- Intel® Pentium® 4 or AMD Athlon® 64 processor
- Microsoft Windows XP with Service Pack 3; Windows Vista Home Premium, Business, Ultimate, or Enterprise with Service Pack 2; or Windows 7
- 1GB of RAM
- 1GB of available hard-disk space for installation; additional free space required during installation (cannot install on removable flash-based storage devices)
- 1024x768 display (1280x800 recommended) with qualified hardware-accelerated OpenGL graphics card, 16-bit color, and 256MB of VRAM
- Some GPU-accelerated features require graphics support for Shader Model 3.0 and OpenGL 2.0
- DVD-ROM drive
- QuickTime 7.6.2 software required for multimedia features
- Broadband Internet connection required for online services*

Mac OS

- Multicore Intel® processor
- Mac OS X v10.5.7 or v10.6.3
- 1GB of RAM
- 2GB of available hard-disk space for installation; additional free space required during installation (cannot install on a volume that uses a case-sensitive file system or on removable flash-based storage devices)
- 1024x768 display (1280x800 recommended) with qualified hardware-accelerated OpenGL graphics card, 16-bit color, and 256MB of VRAM
- Some GPU-accelerated features require graphics support for Shader Model 3.0 and OpenGL 2.0
- DVD-ROM drive
- QuickTime 7.6.2 software required for multimedia features
- Broadband Internet connection required for online services*

For updates to system requirements, visit:
www.adobe.com/go/photoshop_systemreqs
(Photoshop CS5).
www.adobe.com/go/photoshopextended_systemreqs
(Photoshop CS5 Extended).

Expected ship date
Second quarter 2010

For more information
Product details:
www.adobe.com/photoshop

- Localized, nondestructive adjustments in Adobe Camera Raw apply enhancement changes to specific areas of the image using the Adjustment Brush and the Graduated Filter features
- Breakthrough 3D editing, volume rendering, and compositing allow you to work with 3D models as easily as you can 2D images (Photoshop CS4 Extended)
- Enhanced motion graphics with enhanced preview of non-square-pixels images, keyboard shortcuts for animation tasks, better handling of audio content, and the ability to animate 3D object and camera position, render settings, and cross-sections (Photoshop CS4 Extended)
- Easier data collection and analysis with the Count tool for scientific and technical applications (Photoshop CS4 Extended)
- Unified tabbed interface with self-adjusting panels keeps your work area clutter free
- Smarter Smart Objects allows for nondestructive scaling, linking of masks and the transformation of layers
- More powerful printing options providing out-of-gamut color preview, a redesigned, streamlined, interface, and 16-bit printing on Mac OS X

About Adobe Systems Incorporated

Adobe is the world's leading provider of software solutions to create, manage, and deliver high-impact, reliable digital content. For more information, visit *www.adobe.com*.

Photoshop CS5 and Photoshop CS5 Extended new feature comparison

New and enhanced features compared	Photoshop CS5	Photoshop CS5 Extended
Maximum creative impact		
Mixer Brush and Bristle Tips	•	•
Adobe Camera Raw 6 plug-in with support for more than 275 camera models	•	•
Re-engineered noise removal and additive grain	•	•
Enhanced post-crop vignetting	•	•
Enhanced sharpening	•	•
Automated lens correction	•	•
HDR Pro for high dynamic range imaging	•	•
HDR Toning	•	•
Puppet Warp	•	•
Content-Aware Fill	•	•
LAB B&W Action	•	•
New black-and-white presets	•	•
Boost Productivity		
Intelligent edge-selection technology	•	•
Color decontamination	•	•
Refine Radius and Erase Refinements tools	•	•
Adobe Bridge CS5 and Adobe Mini Bridge	•	•
Integration with CS Review, a new CS Live online service.*	•	•
Cross-platform 64-bit support	•	•
More flexible custom panels	•	•
Workspace Switcher and Live Workspaces	•	•
More powerful printing options	•	•
GPU-accelerated Crop Guides, on-screen Color Picker, Eyedropper, and color sampler ring	•	•
Broader file format support	•	•
More than three dozen user-inspired features and enhancements	•	•
Creative exploration in three dimensions		
Adobe Repoussé technology		•
Shadow catcher		•
3D materials library and picker		•
Overlays for materials and mesh boundaries		•
Depth of Field for 3D		•
Enhanced ray tracer with progressive rendering		•
Image-based light option		•
Context-sensitive widget for easy control of objects, cameras, meshes, and lights		•
3D merging and scene compositing improvements		•
3D workflow improvements		•
Preferences that allow for the customization of 3D features		•

* This product may allow you to extend its functionality by accessing certain features that are hosted online, including CSLive online services ("Online Services"), provided you have a high-speed Internet connection. The Online Services, and some features thereof, may not be available in all countries, languages, and/or currencies and may be discontinued in whole or in part without notice. Use of the Online Services is governed by separate terms of use and by the Online Privacy Policy, and access to some services may require user registration. Some Online Services, including services that are initially offered at no charge, may be subject to additional fees and require a separate subscription. For more details and to review the applicable terms of use and Online Privacy Policy, visit *www.adobe.com*. For more information about CS Live online services, see *www.adobe.com/go/cslive*.