

# The Adobe Photoshop new features cheat sheet.



List of new features introduced since Photoshop CS3 based on the documentation available in the help files for each version at Adobe.com.

## CS3

Version 10.0 | April 2007

### Streamlined interface

Take advantage of the self-adjusting docks, workspace presets for specialized tasks, and other refinements in the streamlined interface.

### Zoomify report

Export full-resolution images in the Zoomify format so you can display them on the Internet or send them by e-mail without having to first decrease their resolution.

### Adobe Bridge CS3 with stacks and filters

Organize and manage your images with the new tools—the Loupe tool, filters, and stacks—in Adobe Bridge.

### Improved print experience

Get better control over print quality with color management and better print preview features.

### Adobe Device Central

Create and view artwork for display on cell phones and other mobile devices, and preview how your photos will look on different devices.

### Next generation Camera Raw

Process raw data—at high quality—from more than 150 digital cameras. You can also apply Camera Raw processing to JPEG and TIFF files.

## CS4

Version 11.0 | October 2008

### Canvas rotation

Click to smoothly turn your canvas for nondestructive viewing at any desired angle.

### Smoother panning and zooming

Gracefully navigate to any area of an image with smoother panning and zooming. Maintain clarity as you zoom to individual pixels, and easily edit at the highest magnification with the new Pixel Grid.

### Better raw processing in Camera Raw

Apply corrections to specific areas of an image using the Camera Raw 5.0 plug-in, enjoy superior conversion quality, and apply postcrop vignettes to images.

### Improved Lightroom workflow

Enhanced integration between Photoshop CS4 and Photoshop Lightroom 2 allows you to open photos from Lightroom in Photoshop and seamlessly roundtrip back to Lightroom. Automatically merge photos from Lightroom into panoramas, open as HDR images, or open as multilayer Photoshop file.

### Efficient file management with Adobe Bridge CS4

Enjoy efficient visual asset management with Adobe Bridge CS4, which features faster startup, workspaces that suit the task at hand, and the ability to create web galleries and Adobe PDF contact sheets.

### Powerful printing options

The Photoshop CS4 print engine provides tight integration with all the most popular printers, the capability to preview out-of-gamut image areas, and support for 16-bit printing on Mac OS.

### Higher performance on very large images (Windows only)

Work faster with very large images by taking advantage of additional RAM. (Requires a 64-bit computer with a 64-bit version of Microsoft Windows Vista).

## CS5

Version 12.0 | April 2010

### Easier interface management with live workspaces

Automatically store task-specific workspaces that reflect your workflow, and quickly switch between them.

### Automated lens correction

Quickly fix distortion using installed profiles of popular lenses, or custom profiles of additional models.

### Streamlined creative reviews

Collaborate with colleagues and quickly get client feedback with CS Review, an online service that accelerates the review process.

### Integrated media management

Take advantage of improved watermarking, web galleries, and batch processing in Adobe Bridge CS5. Access assets directly in Photoshop using the Mini Bridge panel.

### State of the art Camera Raw processing

Remove noise in high ISO images while preserving color and detail. Add creative effects like film grain and post-crop vignettes. Or precisely sharpen images with minimal artifacts.

### ★ Dozens of customer-inspired productivity enhancements

Boost your efficiency with countless workflow improvements. Selected highlights let you:

- Create layers by dragging files from Windows or Mac OS.
- Straighten images with the Ruler tool.
- Protect detail with the Sharpen tool.
- Apply a graduated neutral density filter.
- Reverse the direction of a clone source.
- Customize defaults for layer styles.
- Paste in the same relative location, or into or outside selections.
- Store image-specific print settings.

### New GPU-accelerated features

Harness increased hardware power with features like brush previews, a color sampler ring for the Eyedropper tool, and a Rule Of Thirds grid for the Crop tool. See Choose a color while painting and Crop an image using the Crop tool.

### Faster performance with cross-platform 64-bit support

Complete day-to-day imaging tasks at least 10% faster on 64-bit versions of Mac OS and Windows.

## Productivity

### Smart Filters

Preserve image data integrity as you enhance your images with flexible, nondestructive smart filters. These filters may be added, replaced, and re-edited at any time.

### Black and white conversion

Quickly remap colors in an image to monochrome, or have Photoshop analyze the image and recommend conversion settings.

### Improved curves

Use the color-correction presets to make automatic adjustments to curves. You can also create your own Curve presets.

### Adjusted cloning and healing with preview overlay

Control multiple clone sources, as well as rotate and scale each clone source. You can also view an overlay of the clone source as you paint.

### Expanded 32-bit HDR functionality

Capture bracketed exposures and then combine them into a single 32-bit HDR image with maximum range and fidelity using nearly every tool and feature in Photoshop, including brushes, layers, selection tools, and other image-adjustment and filter features.

### Adjustments panel

Quickly access the controls you need to non-destructively adjust image color and tone in the Adjustments panel. Includes on-image controls and presets in one location.

### Masks panel

Quickly create precise masks in the Masks panel. The Masks panel offers tools and options for creating editable pixel- and vector-based masks, adjusting mask density and feathering, and selecting non-contiguous objects.

### HDR Pro

Apply greater tone-mapping power, creating high dynamic range images that range from photorealistic to surreal. Or apply an HDR look to standard images with the HDR Toning adjustment.

## Image Editing

### Quick Selection tool

Make a quick, accurate selection of an irregularly shaped object without having to manually trace the object's edges. You just paint the selection using a brush tool and apply the Photoshop automatic edge enhancement for greater selection accuracy.

### Refine Edge feature

Modify the edge of a selection by expanding or contracting, feathering, or smoothing it using slider controls. Refine Edge is a simple, flexible way to modify the edge of a selection.

### Photomerge with advanced alignment blending

Create advanced composite images with Photoshop. Place images with overlapping content on separate layers and let Photoshop analyze the contents and blend the images seamlessly into a continuous image.

### Content-Aware Scaling

Content-Aware Scale resizes an image without changing important visual content such as people, buildings, animals, and so forth. While normal scaling affects all pixels uniformly when resizing an image, content-aware scaling mostly affects pixels in areas that don't have important visual content.

### Advanced compositing

Create more accurate composites using the enhanced Auto-Align Layers command, and use the spherical alignment to create 360-degree panoramas. The enhanced Auto-Blend Layers command smoothly blends color and shading, and extends your depth of field by correcting vignettes and lens distortion.

### Intelligent selection technology

Extract subjects from backgrounds more quickly and accurately, creating realistic composites.

### Content-aware filling and healing

Easily remove image elements and replace them with content that seamlessly integrates into its surroundings.

### Extraordinary painting effects

Take advantage of realistic painting effects, mixing colors on the canvas and simulating bristles to produce results that rival traditional painting media.

### Puppet Warp

Radically transform specific image areas, while anchoring others in place.

## 3D & Motion Compositing

### Vanishing Point with 3D support

Edit images in perspective across multiple planes at any angle, and export 3D information in formats supported by 3D applications.

### 3D visualization and texture editing

Import 3D models; change model position, lighting, or rendering; edit model textures; and easily composite models with 2D content.

### Motion graphics and video layers

Edit a video on a frame-by-frame basis, or add a layer to the video and create edits that will appear in every frame. The Animation palette now includes a new timeline with keyframe capabilities in addition to the frame-based interface.

### Movie paint

Quickly find and edit any frame of a movie file with Photoshop tools. Photoshop painting, retouching, and pixel-level editing is available for every frame of your movie file.

### 3D acceleration

Enable OpenGL Drawing to accelerate 3D operations.

### Comprehensive 3D tools

Paint directly on 3D models, wrap 2D images around 3D shapes, convert gradient shapes to 3D objects, add depth to layers and text, and enjoy exporting to common 3D formats.

### Easy extrusions with 3D repoussé

Convert 2D text and artwork into 3D objects, and then extrude and inflate their surfaces.

### Enhanced 3D performance, workflow, and materials

Quickly optimize performance with dedicated 3D preferences. Get faster previews and rendering with the improved Adobe Ray Tracer engine. Apply materials interactively with Material Load and Drop tools.

## Image Analysis

### Measurement

Assign a measurement scale to an image and measure length, area, perimeter, density, or other values in accurate scale units. Record results in the Measurement Log as well as export the measurement data to a spreadsheet or database.

### Ruler and Count tool

Measure distance across an image, or count features in an image or in a selection. You can count manually, count automatically, or use a script.

### DICOM file support

Open, edit, annotate or animate single-frame or multi-frame radiological images. View and edit metadata stored in DICOM files.

### MATLAB support

Access Photoshop from the MATLAB (Matrix Laboratory) command prompt, run image-processing routines, and view the results in Photoshop.

### Image stack processing

Combine multiple images and apply advanced rendering options to produce enhanced composite images, eliminating noise or unwanted content.

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Source for Photoshop CS3: <http://rufus.li/mwh5vn>

Source for Photoshop CS4: <http://rufus.li/mmw4Gj>

Source for Photoshop CS5: <http://rufus.li/izm2JC>

Photoshop

Photoshop Extended

Many times do I hear users asking me "so what are the new features in Photoshop?" or telling me "there is nothing in the new versions that would benefit my workflow". Really!? To make this list, I went to Adobe.com and copied the "what's new" section for each of the above mentioned versions of Adobe Photoshop, and I then reordered the new features by areas of interest (which do not necessarily reflect those chosen by Adobe).

Rufus Deuchler, May 2011 - Version 2 ([rufus.deuchler.net](http://rufus.deuchler.net))