



Adobe Photoshop CC (2014 version) update

Welcome to the latest Adobe Photoshop CC bulletin update. This is provided free to ensure everyone can be kept up-to-date with the latest changes that have taken place in Photoshop CC.

This bulletin describes the latest changes to the main Photoshop program. For a complete description of how to use these new Photoshop tools, with diagrams and step-by-step tools, I recommend you buy the *Adobe Photoshop CC for Photographers* book.

The 2014 version of Photoshop CC contains some significant new features, such as Color Lookup table exports, Focus Area selections, enhanced Content-Aware filling plus new Spin and Path blur gallery effects.

Minimum operating system requirements (Mac)

With this new major release of Photoshop the minimum operating system specifications for Macintosh users means that this version of Photoshop (and all other programs within the Creative Cloud) are only able to run on Mac OS X 10.7 and higher. Those who are running Mac OS X 10.6 will still be able to use their current applications, but will need to upgrade if they wish to install this newest version of Photoshop.

Flash support

Adobe are discontinuing support for Flash, which is now being removed from dialogs and panels. This has resulted in the removal of Mini Bridge, Kuler and Adobe Exchange.

Font Search

You can now use the Font Search feature in Photoshop to locate installed fonts. For example, if you want to find a font that belongs to the 'Times' family, you just type in 'times' and the fonts matching that search will be revealed in a drop-down list, as shown in Figure 1 below. You can also carry out searches to find fonts that are 'italic', or 'bold'. You can also combine search criteria. So for example, if you type 't bold italic', this will shortlist those fonts with a 'T' in the name and which are also available in bold italic.

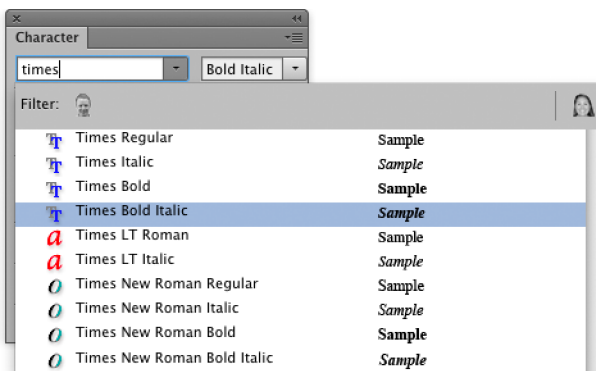


Figure 1 The Character panel showing the results of a font search for 'Times' fonts.

Windows screen resolution support

Following the introduction of Mac OSX Retina support, the Photoshop interface has now undergone a significant number of changes in order to support higher resolution screens on the Windows OS. These changes to the layout design of many of the dialogs affect the traditional 1X scaling, as well as the more dense displays (also known as 2X or HiRes).

Some user interface elements, such as Camera Raw, Liquify and Adaptive Wide Angle remain unchanged, but most other dialogs including all the adjustments and filters have been revised in this latest version. The layouts are different, as are the pull-down menus and buttons. Some have changed from being vertical to horizontal in layout, such as Curves, Shadow/Highlight and Color Settings (see Figure 3). This has been necessary in order to ensure these will fit more universally on any screen display.

The font size is now consistent between the Mac and Windows platforms. If you go to the Interface preferences (Figure 2) you'll see the following font size options: Tiny (9pt), Small (10pt), Medium (11pt) and Large (12pt). 9pt is new for the Windows platform and 10pt is new for the Mac.

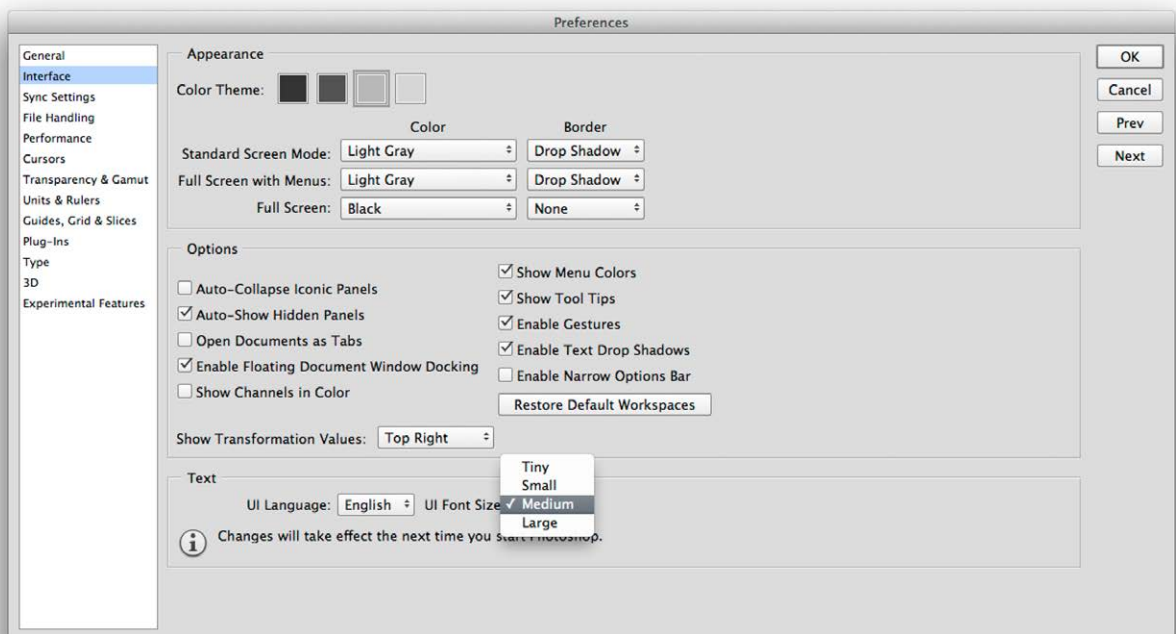


Figure 2 The Photoshop Interface preferences, showing the new UI Font Size menu options.

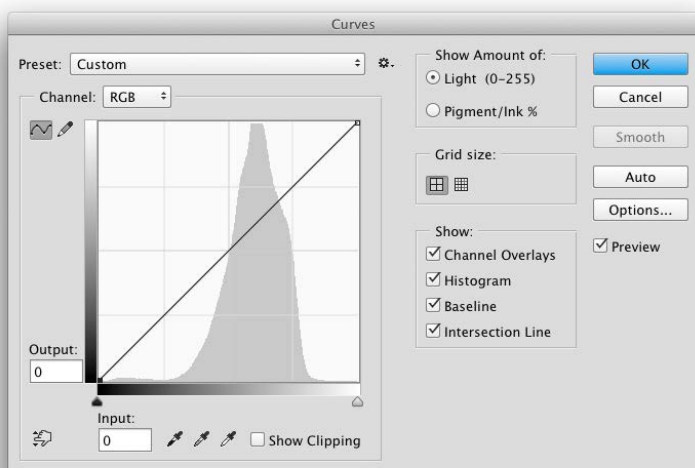
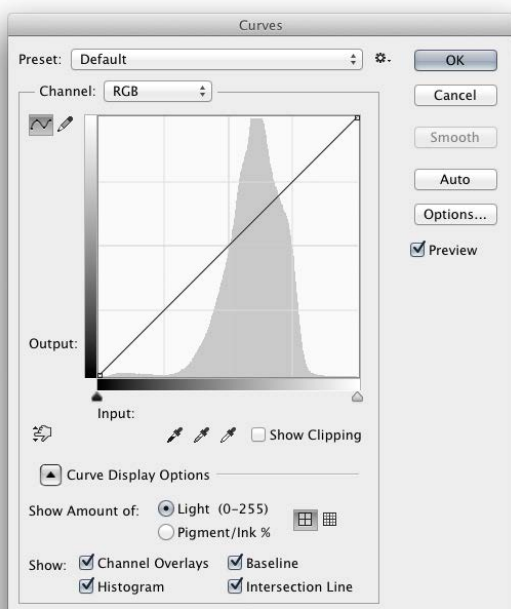


Figure 3 This shows a comparison between the Photoshop Curves panel in Photoshop CC v14.2 (top) and v.15 (bottom).

Minimum display size

The minimum display size for Photoshop has been revised from 1024 x 768 pixels to 1080p @ x2 pixel density. In other words a computer display with a pixel density of 1920 x 1080 pixels at a x2 density. This effectively now means a display resolution of 960 x 540 pixels is the new minimum size. This has presented a problem for the Photoshop user interface whereby existing dialogs now have to fit within tighter constraints so that when a 1920 x 1080 display is set to function at a x2 pixel density, the Photoshop user interface elements can all now fit within this. For the most part it has meant making some of the traditional Photoshop dialogs more widescreen. While the dialog design changes here may not suit everyone it has to be pointed out that applying direct adjustments (such as with the Curves dialog) is the old way of doing things. It is more appropriate to use adjustment layers, where the Properties panel layout is adaptable and less intrusive.

Color Lookup Table Export

The Color Lookup feature was first introduced to Photoshop CS6 and offered a way to package a lot of complicated adjustments into a single adjustment. It can use ICC profiles (Abstract and Device link), or the less standardized 3D LUT formats (which are widely used in the film and video industry). Added to this now is the ability to generate your own Color Lookup tables via Photoshop for use in Photoshop, After Effects, and other image/video editing applications.

To use, open an image, add some adjustment layers to give the image the desired look and then go to the File menu and choose Export ⇒ Color Lookup Tables... (Figure 4). The dialog will prompt you to give the Lookup table a name plus an optional copyright string: i.e. "(©) Copyright YEAR" followed by your custom text. Selecting more grid points will result in bigger tables, but higher quality. In the export dialog you can save the look using the 3DL, CUBE, CSP or ICC profile formats (the first three are all 3D LUT formats).

To export as a Color Lookup table the image you work must contain a Background layer plus additional layers to modify the colors. This can include the use of color filled pixel layers, gradients and patterns incorporating the use of conditional blending. However, for best results try using adjustment layers only to create the desired coloring effect, as the use of pixel layers may give unexpected results in the final exported Color Lookup table.

Tips for generating lookup tables

If you start with an image in Lab color mode, the Export Color Lookup Tables command will allow you to save an Abstract ICC profile, which is the most useful kind for coloring work. If you start out with a document in RGB mode only 3DLUT and RGB device link formats can be saved.

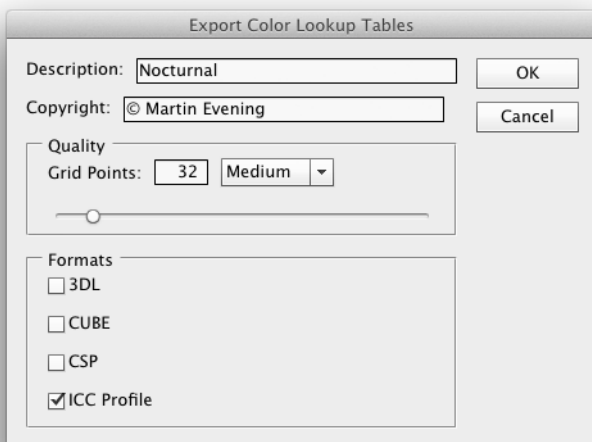
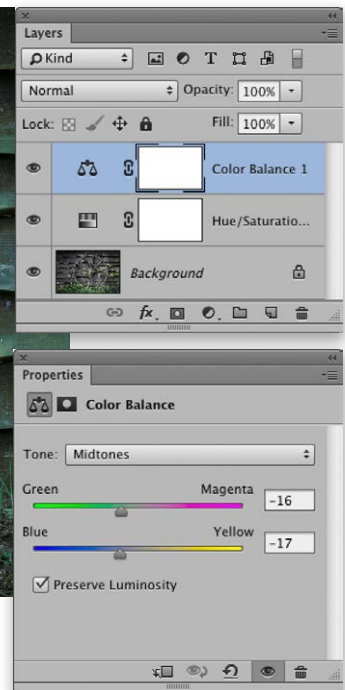
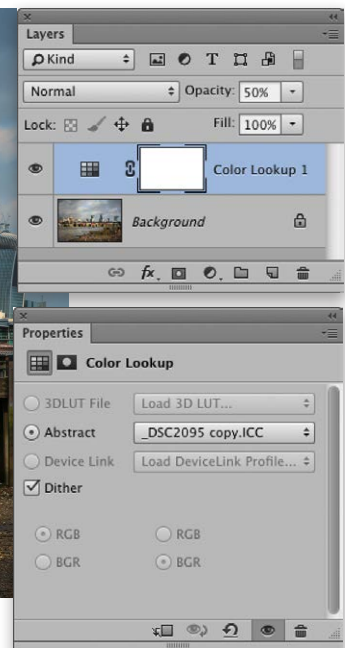
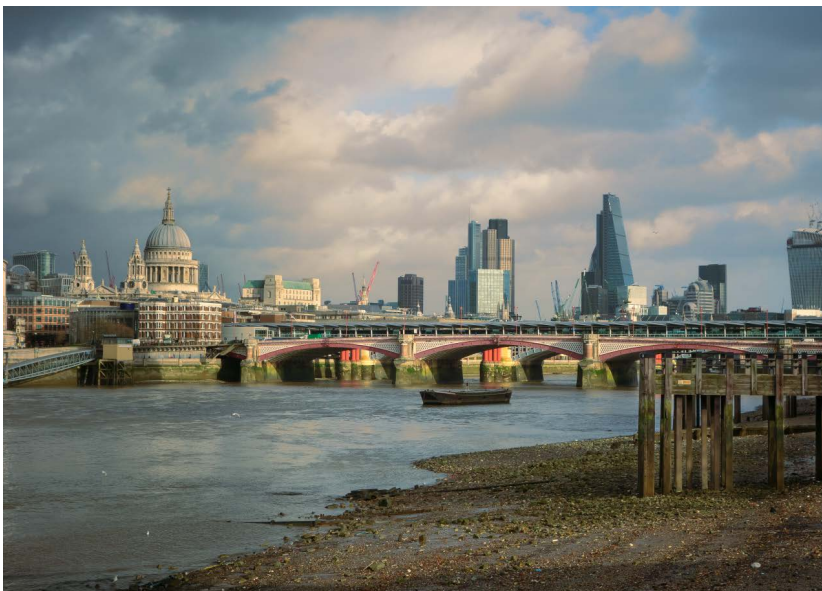


Figure 4 The Export Color Lookup Tables dialog.



1 I processed this photograph in Photoshop by starting out with the image in Lab color mode and adding a couple of adjustment layers: a Hue Saturation layer to desaturate the color combined with a Color Balance adjustment to alter the color. I then saved the image, went to the File menu and chose Export Color tables, checking the ICC profile option (see Figure 4).



2 I then opened another image in Photoshop (this time in RGB mode), added a Color Lookup adjustment layer and loaded the color lookup table I had just exported as an Abstract Device profile. In this example, I reduced the adjustment layer opacity to 50%.

Focus area

The Focus Area feature can be used as a selection tool to make selections based on focus. It is basically another tool in the retoucher's arsenal that can be used to make speedy selections. For example, the quick select tool can be useful to make quick selections based on color difference. This tool that's in the Select menu can be used to make selections based on sharpness and is useful for cutting out objects shot against an out-of-focus background.

When creating a selection you have the option of overriding the Auto option and manually adjusting the In-Focus Range slider (Figure 5). This can help refine the selection. You can also click on the add and subtract tools to add to or remove from a focus area selection (just like you would when working with the quick select tool).

The Focus Area selection will always have a hard edge though, which you can resolve by checking the Soften Edge option, or by clicking the Refine Edge... button to open the Refine Edge dialog where you can fine-tune the edges of the selection as desired.

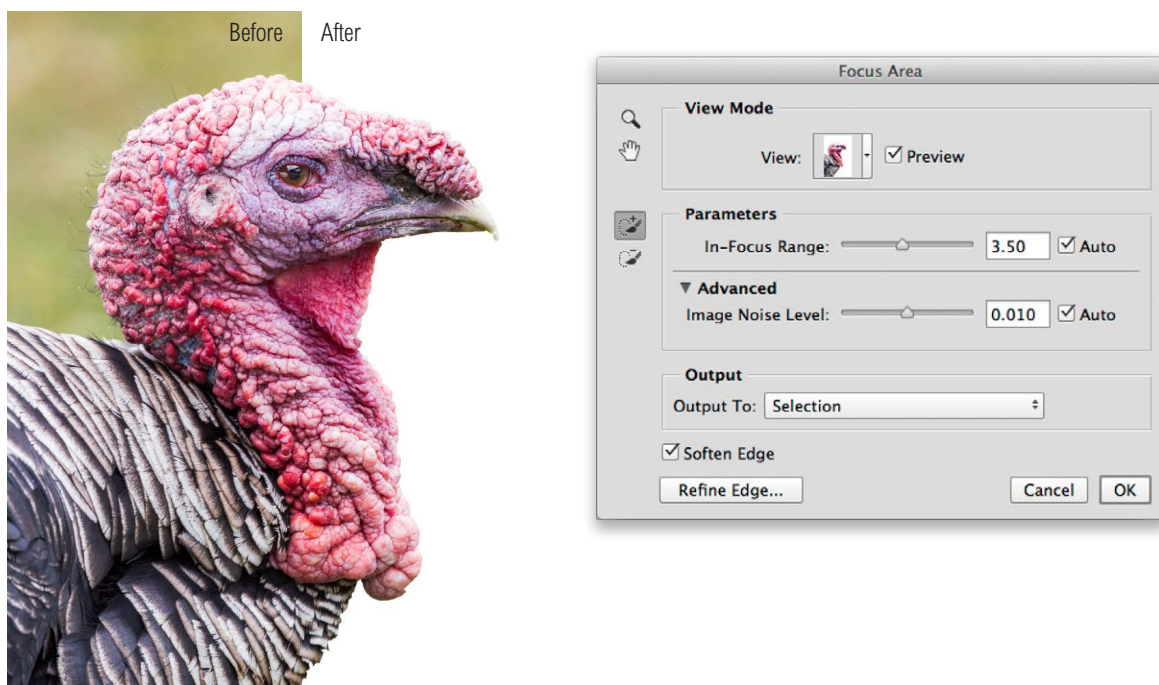


Figure 5 Here is a photograph of a turkey photographed using a long focus lens, where the background was out of focus. In Photoshop I chose Select ⇨ Focus Area... to open the dialog shown here with the default In-Focus Range Auto option.

Tips when working with Focus Area

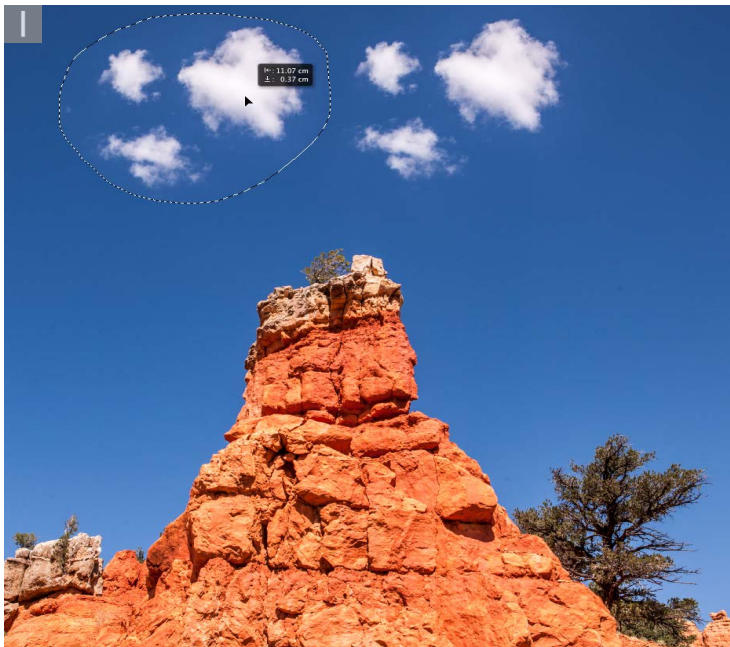
If the selection needs improvement it is best to override the Auto option and adjust the In-Focus Range slider. If the In-Focus Range selection happens to include a lot of the out-of-focus background area this could be because the Focus Area selection is picking up noise. If this happens expand the Advanced options, set the Noise to manual and gradually increase the Noise slider to see if this clears up the selection area. Basically, with higher ISO images you will need to increase the slider setting. However, sometimes when the Noise slider is set high, everything will be selected. So it is best to make small careful adjustments and if it's not looking right check the Auto option to reset to auto mode again.

Enhanced content-aware

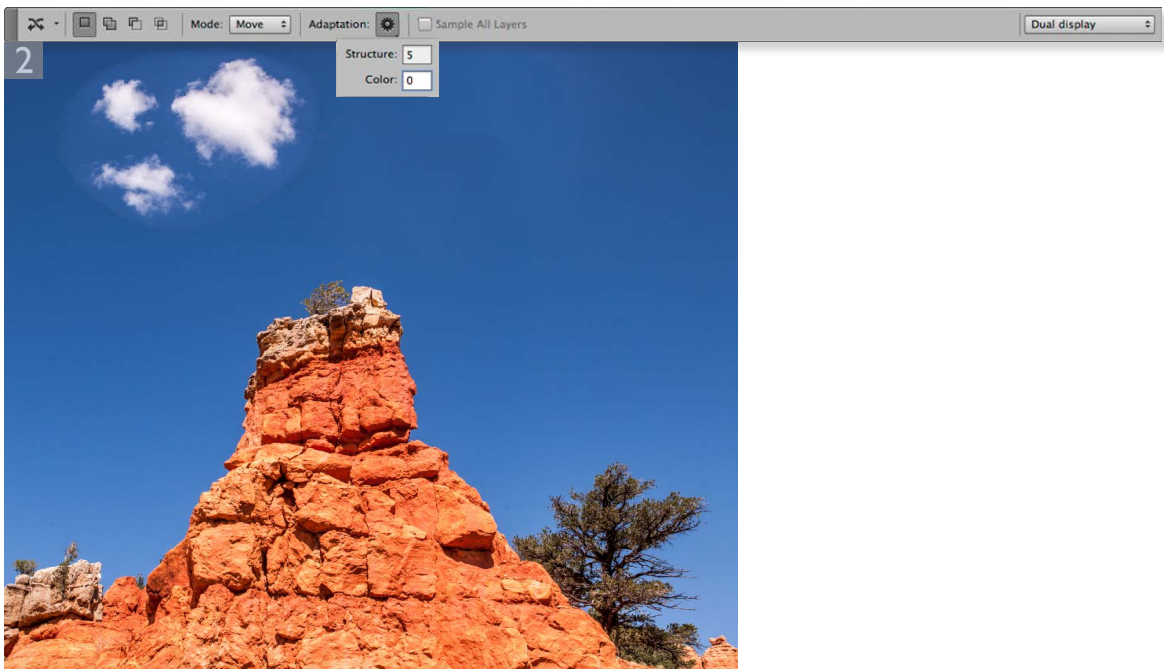
Content-aware processing has been improved in this current release. There has been an overall improvement in terms of quality and speed. For example, content-aware is now around 10 times faster when working on really large repair areas and around 4 times faster when editing smaller images.

Enhanced content-aware color adaptation

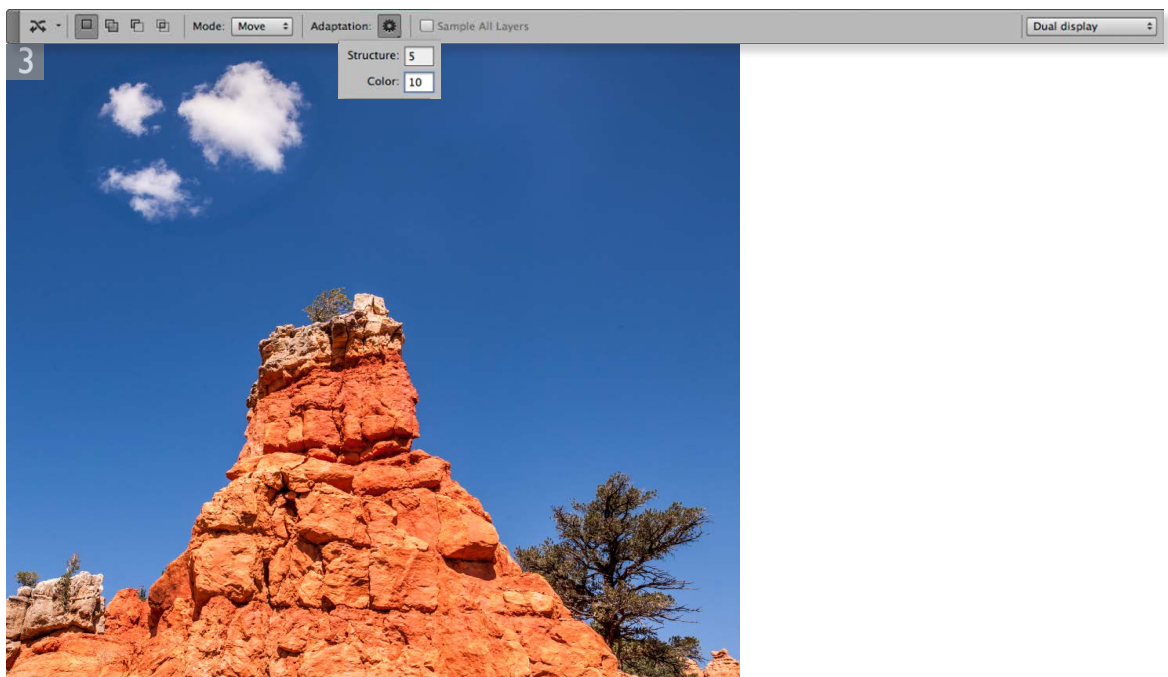
In the Fill dialog there is now a Color Adaptation checkbox, while in the Options bar Adaptation menu for the patch tool and content-aware move tool there is also a Color setting. A zero setting means no color tolerance occurs (just as before). As you increase this value more color blending occurs up to a maximum blend setting of 10 (an example of this is shown over the page). The Content-aware algorithm generally has a preference for smoothness over texture. Increasing the color tolerance further improves the smoothness and this method of filling and repairing is mainly useful when working on smooth graduated areas. A Color Tolerance setting of 10 will tend to over compensate, so the best setting options are within the 3–7 range.



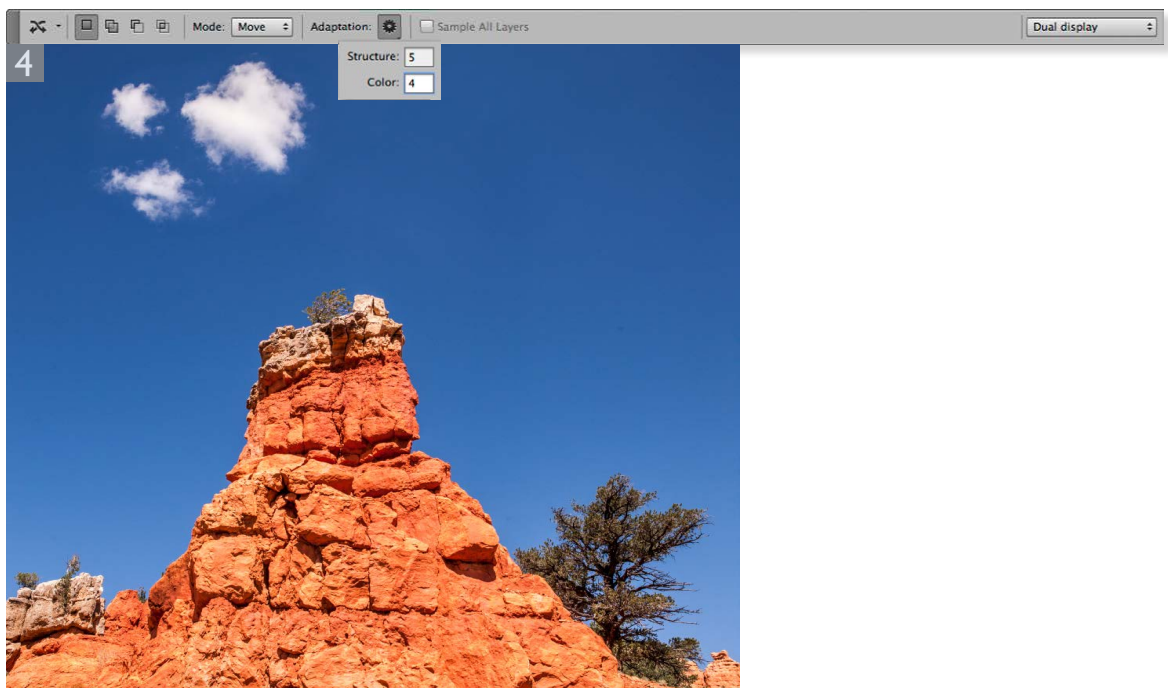
1 To demonstrate the power of the new Color Tolerance controls, I used the content-aware move tool to move the cloud selection in this photograph.



2 In this example the Adaptation Structure was set to the default 5 setting with zero Color tolerance. This matches the legacy setting for this tool. Notice how the moved selection shows poor blending around the selection edges.



3 I then redid the last step, but this time set the Color setting to 10. However, this overcompensated with the cloud selection blending.



4 Here, I used the content-aware move with a Color setting of 4 to produce a much smoother-looking result.

New Motion Blurs for Blur Gallery

There are now two new blur effects added to the Blur Gallery: Spin Blur and Path Blur. These allow you to apply circular spin blur or camera motion blur type effects. Both can be accessed by going to the Filter ⇒ Blur menu.

Spin blur

When the Spin Blur effect is selected you can apply a spin blur in varying intensity. This filter effect you can produce is similar to the Radial Blur filter in Spin mode, except when applied here as a Blur Gallery filter you have a lot more interactive control over the final effect. For example, you can apply an elliptical shaped blur, recenter the blur effect and adjust the Blur angle (see Figure 6) while being able to see a live preview.

You can adjust the Spin blur by dragging the Blur Angle slider to increase or decrease the strength of the effect (or click and drag clockwise or anti-clockwise on the blur ring). You can then drag the handles to change the Spin blur size and shape, plus drag the feather handles to adjust the feathering. You can reposition by click dragging anywhere inside the ellipse area and further spin blurs can be added by clicking anywhere else in the image area and you can also have them overlap.

The rotation center point can be adjusted by **alt** dragging the blur ring. This allows you to create spin blurs on objects that are viewed from an angle. To copy a Spin Blur, click inside a Blur ring, hold down the **⌘** key (Mac) **ctrl** key (PC) and then the **alt** key and with both keys held down drag to copy to a new location within the image. To hide the blur ring go to the View menu and deselect 'Extras', or use the **⌘ H** (Mac) **ctrl H** (PC) shortcut.

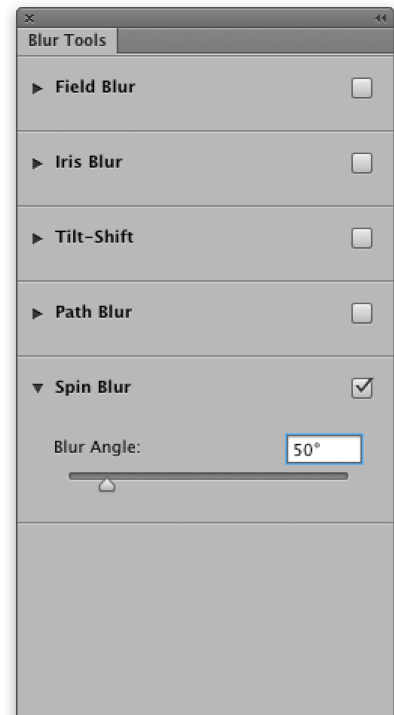
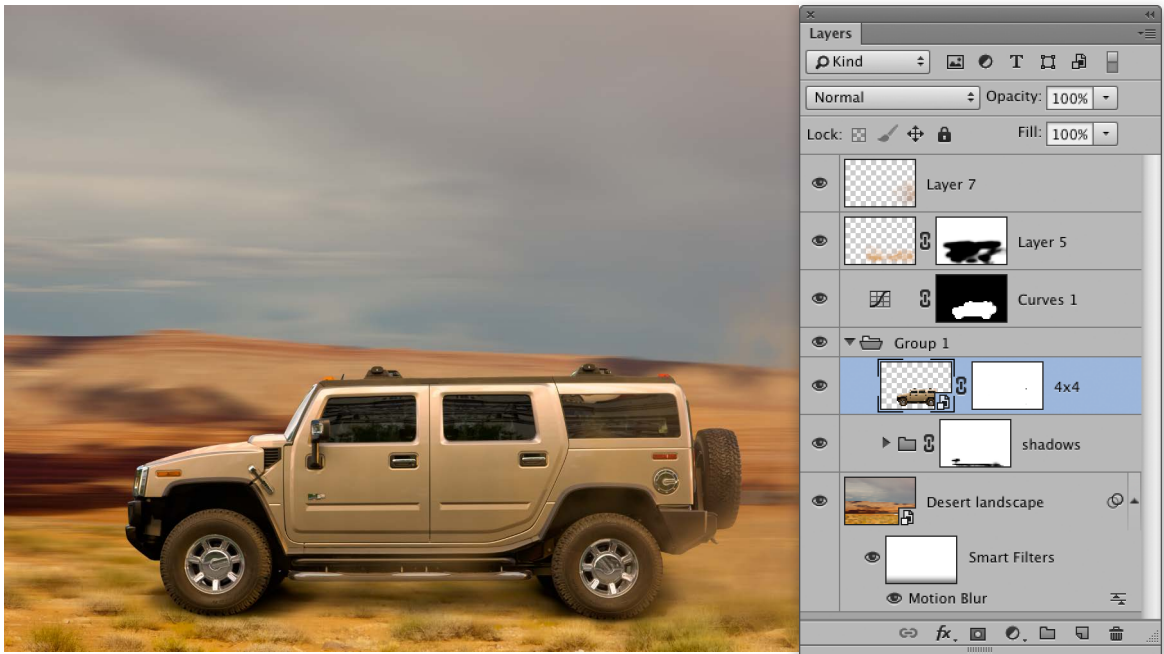
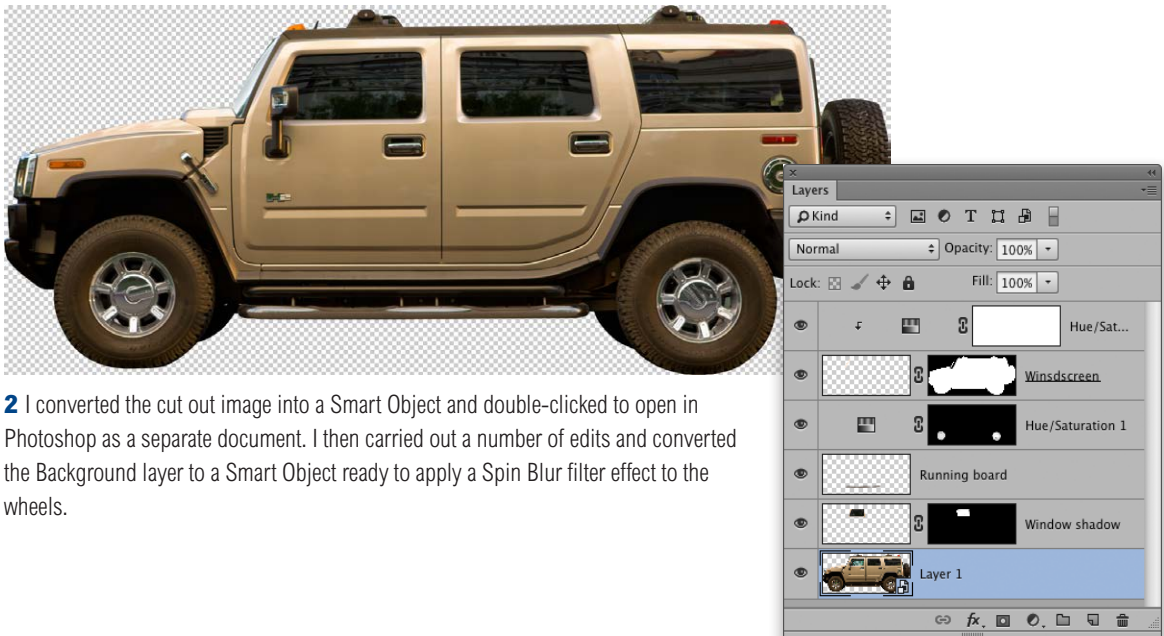


Figure 6 The Spin Blur controls in the Blur Tools panel.



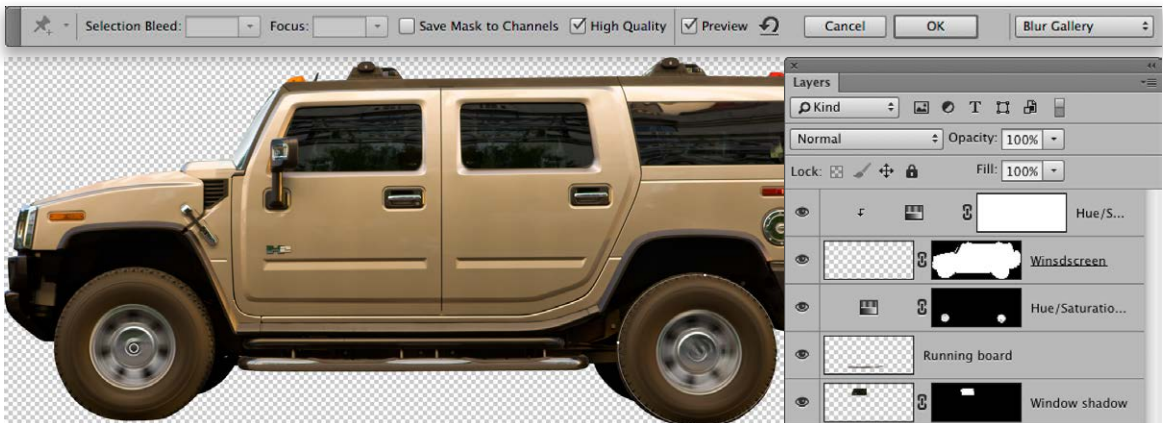
1 I created this image by taking a photograph of a 4x4 vehicle that was shot in a town, cut it out and placed as a layer above a photograph shot in a deserted landscape.



2 I converted the cut out image into a Smart Object and double-clicked to open in Photoshop as a separate document. I then carried out a number of edits and converted the Background layer to a Smart Object ready to apply a Spin Blur filter effect to the wheels.



3 I then went to the Filter menu and chose Blur ⇒ Spin Blur... I dragged the Spin Blur ellipse over to the front wheel and manipulated the shape so that the Spin Blur ellipse matched the shape of the tire. I then applied a 35° Blur Angle via the Blur Tools panel Spin Blur section.



4 I held down the **⌘** key (Mac) **ctrl** key (PC) and then the **alt** key and clicked on the Blur ring center and dragged to create a duplicate of the first Spin Blur effect. I dragged to locate this second Spin Blur effect over the rear wheel. Once done, I checked the High Quality option in the Options bar and clicked the OK button. This applied the Spin Blur effect as an editable Smart Filter to the 4x4 layer.



5 Lastly, I chose File Save to save the edited Smart Object layer and closed the Smart Object document window. The original image with the 4x4 plus landscape was now updated to show the vehicle with wheels that appeared to be in motion.

Path blur

The Path Blur tool can be used to create a motion blur effect along a user-drawn path. Basically, by adjusting the path shape you can manipulate the shape and direction of the motion blur to create an effect similar to camera shake, such as when photographing a moving subject and the camera shutter is left open for a long exposure time. You can manipulate the curve shape to control the length and curvature of the Path Blur, click on the path to add more control points and click on existing curve points and drag to further modify the shape. **alt**-click on a Path Blur control point to convert it to a corner point, or convert a corner point back to a smooth point.

The path blur shape will have red blur direction arrows at either end point. You can click on a path blur shape end point, or a blur direction arrow and click and drag to determine the blur direction (the End Point Speed) and adjust the angle. The

blur directional arrows also have a midpoint control you can click on and drag to further alter the shape of the blur direction. To disable an end point blur direction arrow, hold down the **⌘** key (Mac) **ctrl** key (PC) and hover over a path blur end point, you'll see a filled circle appear next to the cursor. Click on the end point to disable. Hold down the **⌘** key [Mac] **ctrl** key [PC] and click again to enable. If you hold down the **Shift** key you can click and drag a blur direction arrow at one end and simultaneously move the arrow at the other end as well.

It helps to understand here that the defined blur shapes at the two ends of a path are interpolated between the two end-points. Also, as you add more path blur shapes to an image these will influence each other and it is this aspect of the Path Blur filter that provides lots of opportunities to produce creative blurring effects. To add a new path blur keep clicking to add more control points and press **Enter** or **esc** to end the path blur shape, or just click on the last control point. To reposition a path blur, hold down the **⌘** key (Mac) **ctrl** key (PC) and click on the blue path or a control point and drag to relocate. To remove a control point, select a path blur control point and hit the **Delete** key. To duplicate a Path blur, hold down **⌘ alt** (Mac) **ctrl alt** (PC) as you drag a blue path or one of the control points.

The overall blur strength can be controlled by adjusting the Speed slider in the Path Blur section of the Blur Tools panel (Figure 7). There are two starting point modes here: Basic Blur and Rear Sync Flash (examples of which are shown over the page). The Taper slider can be used to dampen the path blur effect and adjust the edge fading from either end. The Centered Blur checkbox governs the way the blur shapes are calculated. This box is checked by default to ensure the blur shape for any pixel is centered on that pixel. This produces a more controlled behavior when editing path blur shapes. When it's unchecked the image it will sample from one side of any pixel only and will flow around a lot more as you edit the path blur shapes. As I just mentioned, the End Point Speed slider is linked to the length of the blur direction arrows, and the Edit Blur Shapes box allows you to view/hide the blur direction arrows. In the Options bar is a High Quality checkbox (Figure 8). Check this to produce high quality rendering to prevent any jaggedness appearing in a path blur effect.

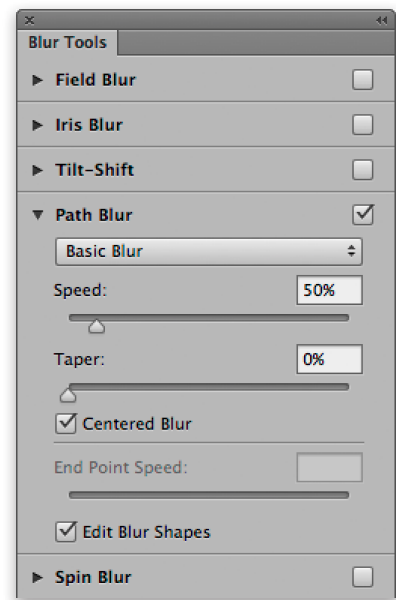


Figure 7 The Path Blur controls in the Blur Tools panel.

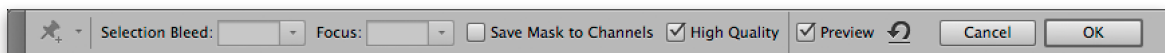


Figure 8 The Blur Tools Options bar.

Smart Guides

Smart Guide behavior has been enhanced in this version. The preferences settings remain the same. Smart Guides are now enabled by default and you will notice how reference guides appear that call out the distance between the current selected object and a referenced object (see Figure 9). This distance is calculated based on the distance between the object bounding box rectangles, rather than measuring between the text baselines, or individual path points of a vector shape. As you move an object, Measurement Guides visually indicate the spacing between the selected object and its immediate neighbors. To disable Smart Guides go to the View menu, select Show ⇨ Smart Guides and check to turn off.

Smart Guides modifier key behavior

If you hold down the **alt** key as you drag to duplicate a layer or text layer using the move tool, or duplicate a vector shape using one of the path selection tools the reference measurement guides will show the distance between the duplicate object and the original (see Figures 10 & 11).

If you select a layer and hold down the **⌘** key (Mac) **ctrl** key (PC) as you hover the cursor over another layer this will show the Measurement Guides. You can then use the keyboard arrow keys to nudge the selected layer as you do this (see Figures 12 & 13).



Figure 9 If you rely on Smart Guides to measure the distance between two objects it is calculated based on the distance between the object and the bounding box object. In this case it will be the distance measured between the outer bounds of the text bounding boxes.

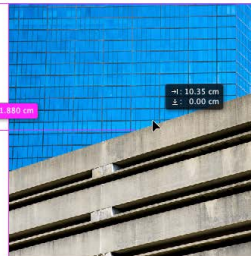
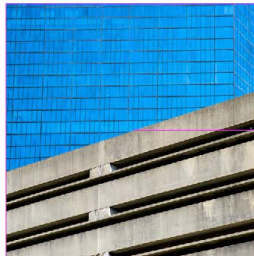
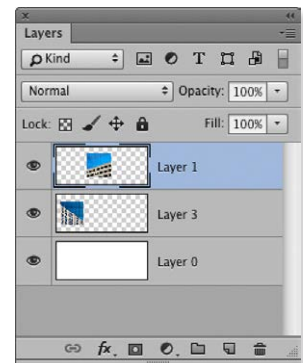


Figure 10 In this example, I held down the **alt** key as I dragged the selected Layer 1 layer. This made a duplicate of the layer and a Smart Guide appeared to indicate the distance apart for this and the original layer.



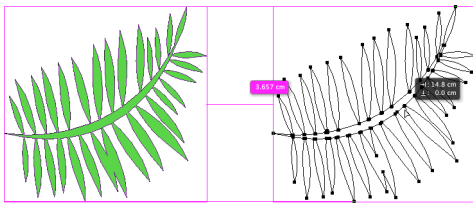


Figure 11 In this example I created a vector shape layer and held down the **alt** key as I dragged to create a duplicate of the shape. The Smart Guide indicated the distance moved from the original by the duplicate.

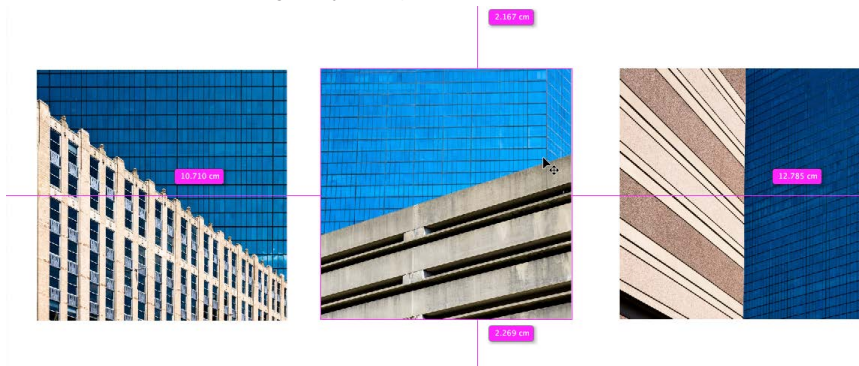


Figure 12 In this example I held down the **⌘** key (Mac) **ctrl** key (PC) as I hovered the cursor over the image. The Smart Guides in this instance indicate the distances relative to the current selected object. Here it indicates the distances relative to the document bounds. If I rolled over one of the other layers it would indicate the distances relative to the selected object.

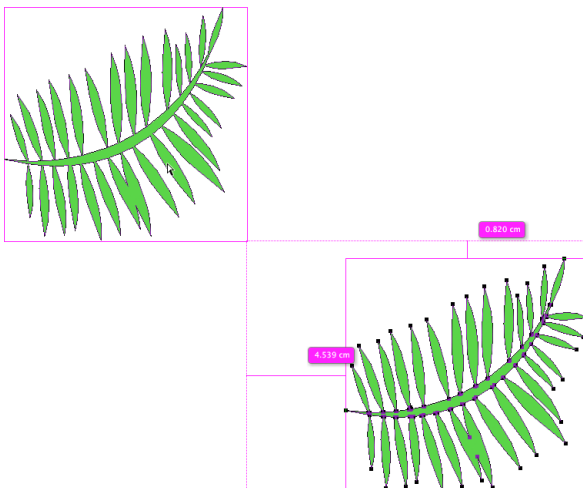
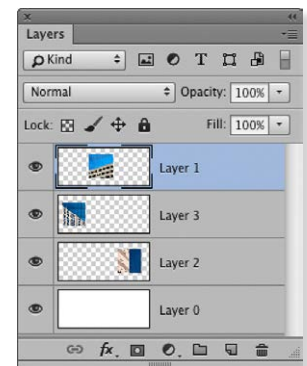


Figure 13 In this example I had duplicated a vector shape and held down the **⌘** key (Mac) **ctrl** key (PC) as I hovered the cursor over the image. This indicated the gap distance between the bounding boxes of the two objects.

Matched Spacing

When you move an object, such as a layer, Measurement Guides will visually indicate the spacing between this layer and other layers where the spacing matches. These Measurement Guides will suddenly pop up as you move the layer (or other object) just within range of the same measured distance as the other objects (see Figure 14 below).



Figure 14 As you move an object closely within range of a similar measured distance to two or more other objects, you will see matched spacing Measurement Guides appear as shown here.

Sync Settings

The Sync Settings mechanism has been simplified. If you are subscribed to the Adobe Creative Cloud, your account will only allow you to activate Photoshop on two machines. Using the Sync Settings feature you can help keep your settings synchronized between those two active computers, which can be done manually from each machine to the user's Creative Cloud account. Note, when using multiple Adobe IDs you can synchronize settings separately to each account.

Figure 15 shows the Sync Settings preferences. This will show the Adobe ID you are currently signed in to and contains Upload and Download buttons you can use to sync settings. By default all settings (Everything) are synchronized. If you click on the pop-up menu in the Advanced Settings you can choose Custom and select specific settings to synchronize. Note that in addition to the items shown here, an *Adobe Photoshop CC Prefs.psp* file is synchronized automatically via the Creative Cloud. Note also these options do not include items specific to the machine running the application, such as scratch disk usage and memory allocation.

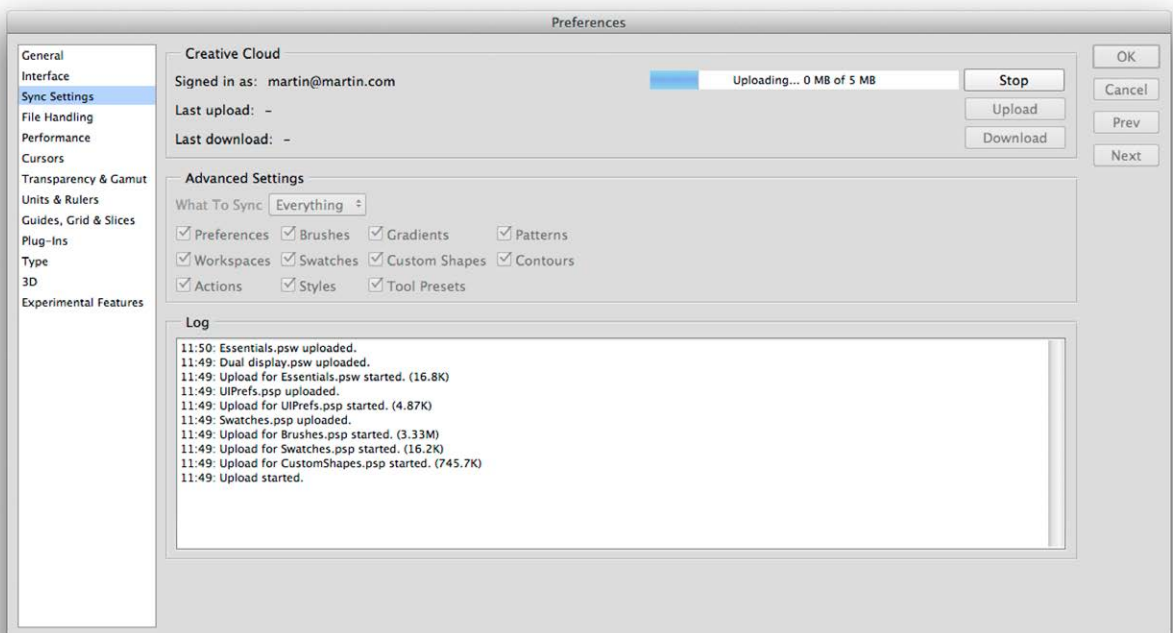


Figure 15 The Photoshop Interface preferences, showing the new Sync Settings.

When you click either the Upload or Download command buttons, this initiates the synchronization process. You will see a progress bar at the top of the Sync Settings and a log report appear in the Log window below. Alternatively, you can go to the Photoshop ⇨ Adobe ID submenu and choose 'Upload Settings', or 'Download Settings'. These commands are also based on the settings configured in the Sync Settings preferences and will bring up a modal progress dialog (see Figure x).

Upload takes all the non-factory settings files (ie. user modified settings) and uploads them to your Adobe ID Creative Cloud account. Files that have the same names are overwritten and there is no conflict resolution. Download takes all the settings files on the server and downloads them to your computer. Any files that have the same names are overwritten. Again, there is no conflict resolution.

Basically, the intention here has been to clarify the synchronization process and remove the confusion caused from having a single 'Sync' button and understanding the 'When Conflicts Occur' menu options that were present in the original Photoshop CC.

Workspace synchronization support

Workspaces, including those with keyboard shortcuts and menu customization are now supported in Sync Settings. However, this support is limited to single platforms only – there is no cross platform support.

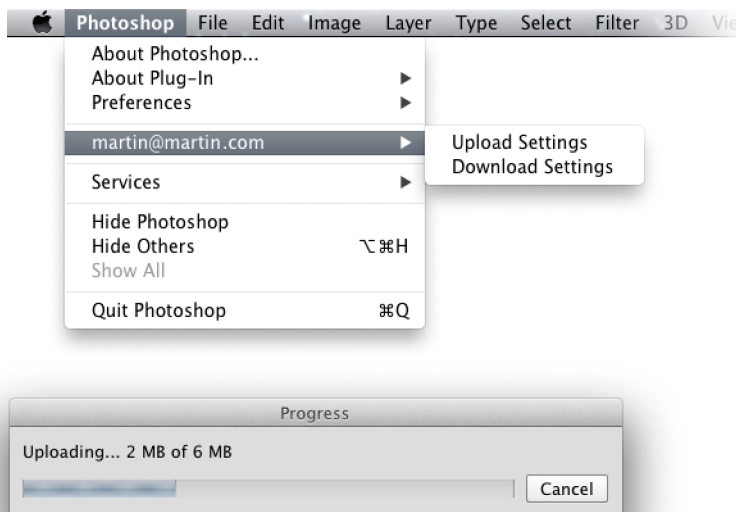


Figure 16 This shows the Photoshop ⇨ Adobe ID submenu. Selecting either Upload Settings, or Download Settings will bring up the modal progress bar shown here.

Smart Objects: creating a package file

Smart Objects can be added as embedded, or as linked Smart Objects. To help users share files that contain Linked Smart Objects and make them portable, there is now a Package... command available from the File menu. When you have an image open that contains Linked Smart Objects, this allows you to save a copy of the master to a packaged folder containing the master image plus a folder that contains the linked Smart Object files. To avoid redundancy, where there are multiple instances of Linked Smart Objects pointing to the same source file the Package operation only creates one copy of the Linked Smart Object source image.

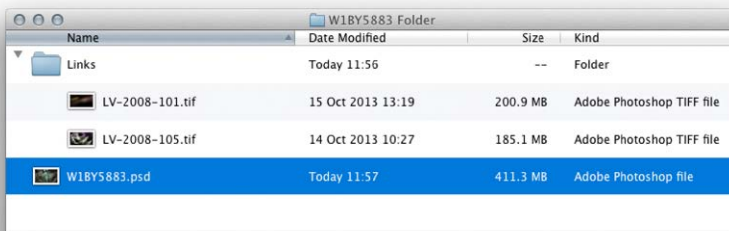


Figure 17 This shows an image that contains Linked Smart Object layers. When using the File ⇒ Package... command, this creates a folder containing a copy of the master image plus a Links folder containing the Linked Smart Object layers.

Package command limitations

The Package command currently packages image asset files only. It does not yet include other assets such as fonts.

