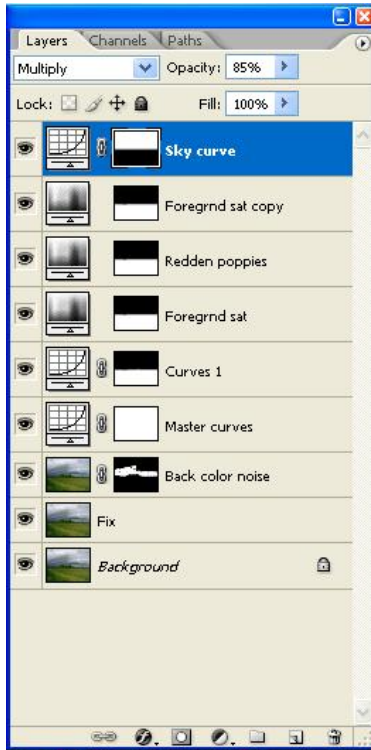


Layers in CS2, Update

Rob Dublin, Sept 10, 2005



1. Layers are fundamental building blocks of a Photoshop image, also called a document. Like transparent acetates you construct your final image by adding successive overlays. These can contain:
 - a. Bit image layers; that is, images or parts of images.
 - b. Adjustment layers, which are the same adjustments which can be applied directly to an image via Image → Adjustments.
 - c. Fill layers, which are just layers that are just composed of a solid colors, patterns, or gradients.
 - d. Shape/Type layers, which are where vector images are stored.
 - e. **And with CS2, Layer Groups** (called Layer Sets in CS), which are containers that hold several layers.

2. New and changed layer features in CS2
 - a. **Multiple layer control:** You can select multiple adjacent layers by “Clicking” the first layer and “Shift-Clicking” the last layer in the sequence, or you can select (or de-select) multiple non-adjacent layers by “Ctl-Clicking” them one at a time. To de-select the layers either “Click” another layer or an empty area in the Layers palette.
 - b. **Layer linking** is similar to multiple layer selection described above except it is permanent and layers are always “linked” until you specifically release them. In CS2 the layer linking column was removed. To link multiple layers first select them as above and then click on the link icon at the bottom of the Layers palette; the link icon now appears on the rightmost part of each linked layer when you select one of the linked layers. To unlink layers, just select one of the linked layers and click the link icon on the bottom of the palette.
 - c. **Layer Groups** are containers that hold either layers or even other groups, that is, groups can be nested. Groups are a convenient way of managing

related layers (this was called Layer Sets in CS). You create a group by Clicking on the “Create a New Group” button on the bottom of the Layers palette. You can simultaneously create and add layers to the group by dragging a grouping of layers and dropping them on the “Create a New Group” button or going to the Layers menu and choosing Layers→Group Layers. You can add layers at any time by dragging them to an open group or dragging a group member out of the group. Clicking the Group layer arrow expands or hides the group members. If you “Right Click” on a Group layer you can choose “Ungroup layers” to remove a group and leave the layers in tact or you can delete the Group and all of its layers.

- d. **Merging layers:** To merge a group of layers select them, as described above, by “Ctl-Clicking” and then in the Layers menu select Layers→Merge Layers. To merge all visible layers into a new layer press Alt and choose Layers→Merge Visible. In CS, you had to first create a layer to receive the merged layer and then select it before executing Layers→Merge Visible; in CS2 the layer is created automatically.
- e. **Loading a selection:** “Ctl-Click” on the Layer icon or mask icon to load a selection based on the layer or mask, respectively.
- f. **Clipping mask visibility:** Clipping masks use the content of a layer to to mask the layers above it, that is, the base layer reveals the content above it just in the Clipping Mask. You can hide all layers except the clipping mask layer “Alt-Click” the base layer visibility icon, the eye.
- g. **Smart objects** are objects that can be edited outside the document in which they are placed with all changes reflected back in the original document. Smart objects can be created in another program like Illustrator or they can be Photoshop documents. To create a smart object select one or more layers and choose from the Layers menu Layers→Smart Objects→Group Into New Smart Object. A new document will be formed with the smart object and with .PSB file type, while the a layer will appear in the original document indicating it is now a smart object. Any edits you make to the new .PSB file will be reflected back into the original document after you save them. To make an Illustrator file a smart object, drag an existing layer into your Photoshop file from Illustrator; to make a Photoshop file a smart object use the “File→Place...” command.

3. Layers review

- a. You work with Layers via the Layer command menu at the top of the screen or the Layers Palette. Icons at the bottom of the layers palette provide an alternative to the Layers command menu for common tasks.
- b. You can name a layer. I find it helpful to give descriptive names for layers to indicate what the layer contributing to the final image. For example, if I copy a layer to apply a filter effect like a Watercolor Brush, I might call the layer Watercolor and include the filter settings in the name.
- c. The Background layer is a special bit image layer – it is locked, which means some functions won’t work or work differently than on other layers, e.g., the eraser tool will erase to transparency on any layer but the background layer where it will erase to the background color. (You can

- make the background layer a regular layer by double clicking to get its properties and then re-naming it.)
- d. You can include or exclude layers in the final image by clicking on the eye icon on the left.
 - e. A layer can have a mask that hides part of that layer. When you create a new adjustment layer a mask is automatically created. To add a mask to an image layer (the Background is the only layer that doesn't have an associated mask) choose the Layer → Add Layer Mask → Reveal/Hide command or just click on the rectangular icon with the white circle at the bottom of the layers palette.
 - i. To mask part of a layer click on the second rectangle in the layers palette and it will show a double border. Then paint with black on your image in areas that you want to hide or white in areas that you want to reveal. If you paint with gray then the layer will be partially masked.
 - ii. A Vector mask (defined by shape or path) is another type of masked for hard edge masks that can be easily scaled – it is more often used by graphic designers than photographers.
 - f. You link layers to the active layer by clicking on the second check box in the layers palette – a chain link will appear. When layers are linked they will move together if you use any of the move tools. You can prevent accidentally moving or editing a layer by clicking on one of the lock icons at the top of the Layers palette.
 - g. Layers can be put into groups, called layer sets, for easier management.
 - h. The Opacity percentage at the top of the Layers palette controls how opaque or transparent a layer is. You can use this, e.g., to moderate an effect.
 - i. A layer has a blend mode, defined by the choice box at the upper left of the palette that defines how it is to be combined with layers below it to produce the final image. E.g., you can sharpen an image by duplicating the image, applying the high pass filter (which retains edge details while making everything else middle gray) to the duplicate layer, and setting its blend mode to soft light.
 - j. Layers can also have styles (used mostly for type, buttons, and other graphic effects). You can access a complex set of dialog boxes by clicking on the leftmost icon, the one with the script f in a dark circle, at the bottom of the palette.