

INTRODUCTION TO GRAPHICS

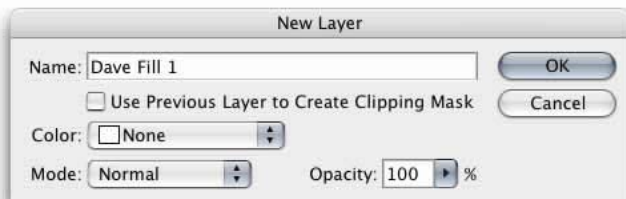
Custom Gradient Creation

Information
Sheet No. PS726

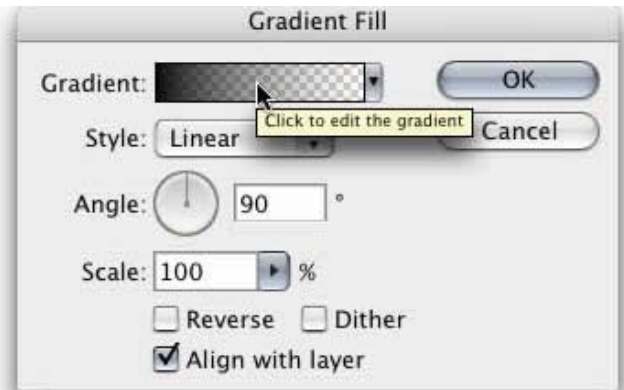
It's impractical for most users to get to know every aspect of Adobe Photoshop. Even advanced Photoshop users limit themselves to a certain workflow that precludes comprehensive knowledge of the program. Yet, every now and again, we all have to expand beyond our comfort zone and get into areas of the program that we're not familiar with, even on the most basic level. So I thought we'd launch a new tutorial series that takes a step back to explore some of these fundamentals for compositing, painting, masking and effects creation, starting with the first in a two-part miniseries on gradients.

We've presented several tutorials covering techniques that involve gradients, everything from sky and landscape effects to gradient masks, text overlays and layer styles. But we rarely discuss gradients themselves, especially the crucial element of custom gradient creation. Photoshop, of course, ships with a variety of predefined gradients, including several libraries' worth of extras. But these, regardless of quantity, can't fulfill your every need, and eventually you'll need to make your own. Here's how it works.

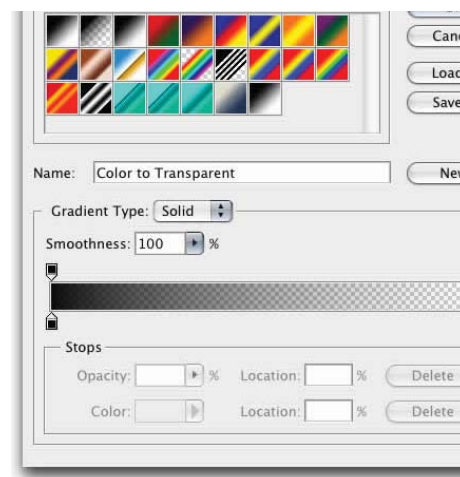
Gradients can be accessed and created from a variety of locations, including the Adjustment Layer, Fill Layer and Layer Styles menus, as well as the Tool Options bar when the Gradient tool is selected. For our example, we'll create one using a Gradient Fill Layer. So first, create a new document, and then select Layer > New Fill Layer > Gradient. A dialog pops up asking you to name your layer.



Click the OK button, and a new dialog shows up, allowing you to select one of the pre-defined gradients.



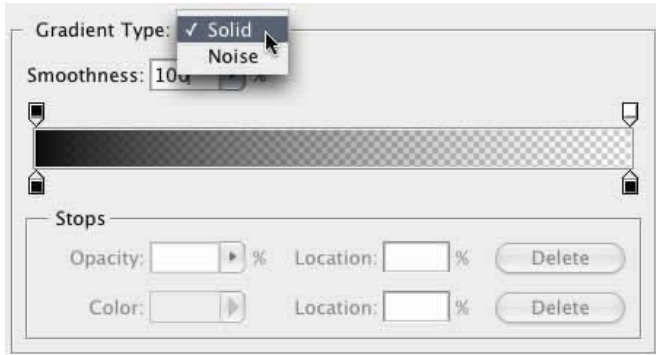
Although it isn't immediately apparent, this is where you access the Gradient Editor function. It's not available in any menu; rather, you enter the Gradient Editor by clicking on the image of the gradient itself. (The same is true for creating gradients in other workspaces, such as the Gradient Overlay Layer Styles panel.) Once you click on the gradient, the Editor will show up displaying the currently selected pre-defined gradient.



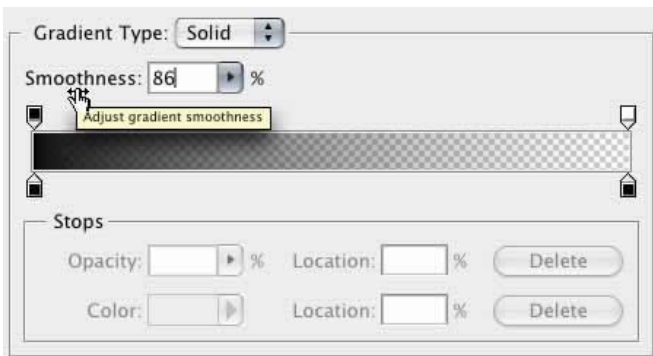
This is where you create your own custom gradient. But what do all of those controls mean?

General settings

First, for Gradient Type, you can select between Solid and Noise. Noise is a gradient generated from noise using RGB values. It's useful for creating complex gradients with numerous color bands quickly, though the result is somewhat random. Solid is the type of gradient that moves between user-defined bands of color, with the bands of color set manually rather than generated algorithmically. We'll be working with Solids for this information sheet.

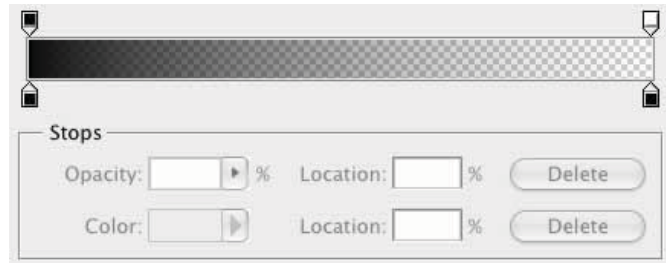


The next setting, "Smoothness," determines the smoothness of the transition between color bands. A high Smoothness value means an even transition, while a low Smoothness value will give you longer intermediate steps with abrupt transitions to the color bands (or "stops") that you define.

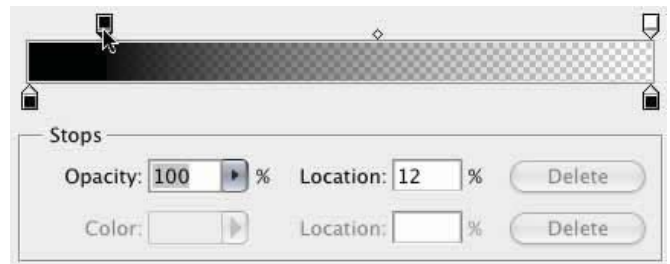


Opacity stops

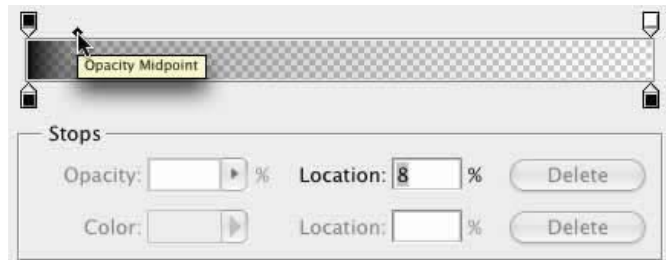
Next you see a linear gradient bar representing your gradient. Above and below the bar are, by default, two stop markers. The top markers represent opacity, while the bottom markers represent color.



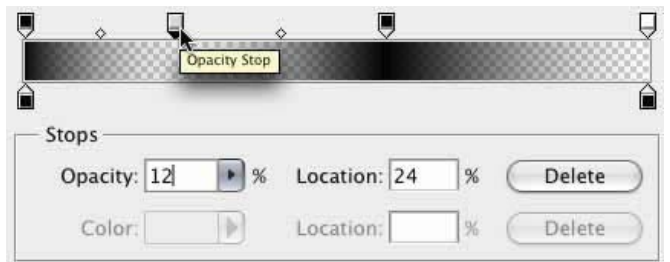
We'll start with the top markers. Select the marker on the top left. When you do, the "Stops" section of the Gradient Editor becomes active. This allows you to adjust opacity and location of the opacity stop numerically. (A location of 0 percent is all the way left; 100 percent is all the way right.) You can also drag the stop interactively to the location of your choice. The Location info box will update in real-time as you drag the stop.



You will also see a small diamond appearing between your stop markers. This diamond (called the Gradient Midpoint) is located by default at the midpoint between stops, but you can adjust it left or right to increase or decrease the smoothness of your gradient from one stop to the next.



You can also add stops for opacity simply by clicking directly above the gradient bar. These additional stops can also be adjusted for location, opacity and smoothness, just like the default stops.



Color stops

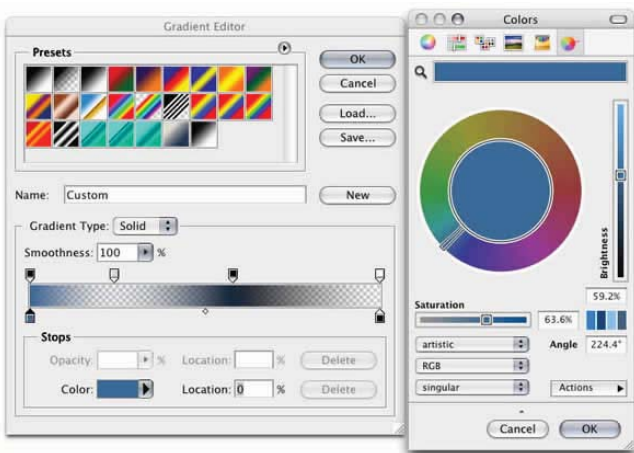
Below the gradient bar, you'll also see, by default, two color stops. These function much the same way as the opacity stops, except that they're used to define the color, rather than the transparency, of your gradient. Selecting one of the existing stops activates the Color and Location settings in the Stops section of the Gradient Editor.



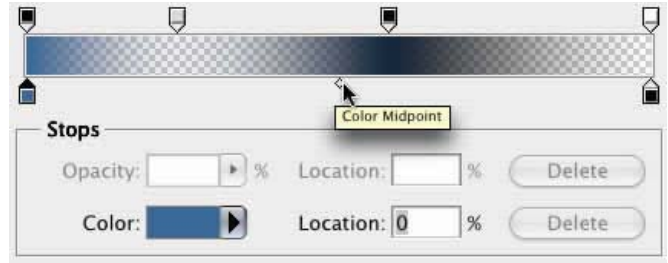
In order to change the Color, select a stop, and then select the little flyaway menu to choose either the foreground color or the background color.



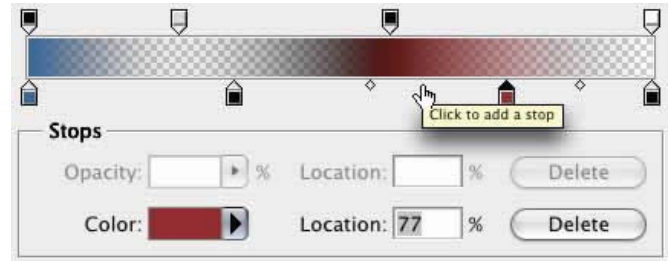
Click on the color itself will call up your chosen color picker, and sliding it left or right will change its position within the gradient.



As with opacity stops, you can adjust the smoothness of the transitions between color stops by moving the Color Midpoint (the little diamond between your two stops).

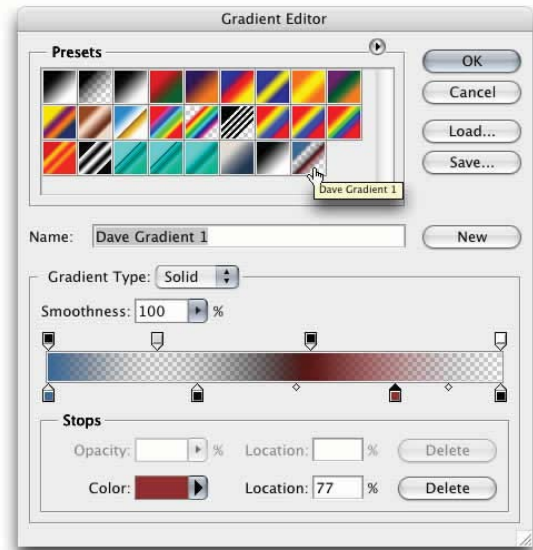


And you can add new color stops simply by clicking below the gradient bar. By default, any new stops will take on the color attribute of your previously selected color stop. You can change this by clicking on the Color button at the bottom of the Editor.



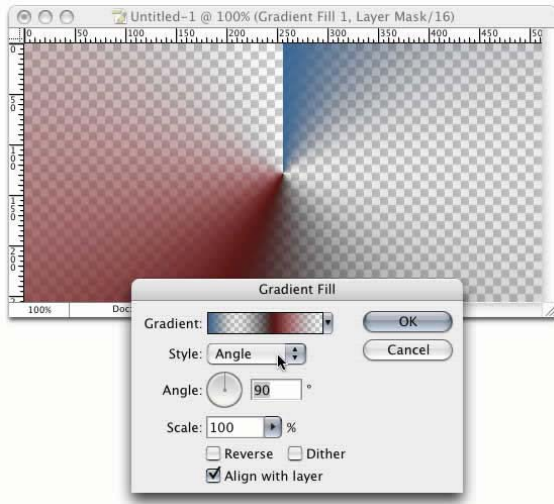
Saving the gradient

Finally, when you're done setting up your gradient, type in a custom name for the new gradient, and click the "New" button. This will add your gradient to the list of pre-defined gradients.



And you can save your gradients for use on multiple computers by clicking the "Save" button. When you're done, click "OK," and then set the style, scale and angle of your gradient. It will be updated in real-time on your canvas, so you can preview how the final gradient fill will look. If you don't like it, you can click on your gradient again to go back and edit it further.

Incidentally, with a gradient fill layer, such as the one we've created here, you can always go back and make changes to it simply by double-clicking the layer in the Layers palette.

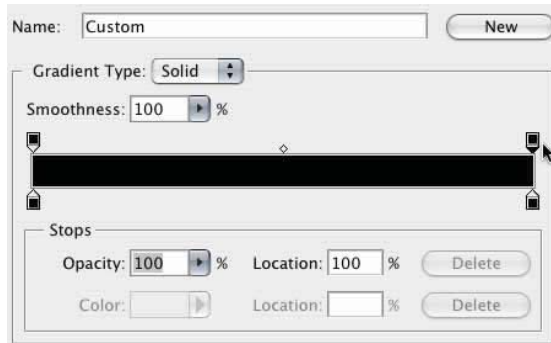


Making a sky/horizon gradient

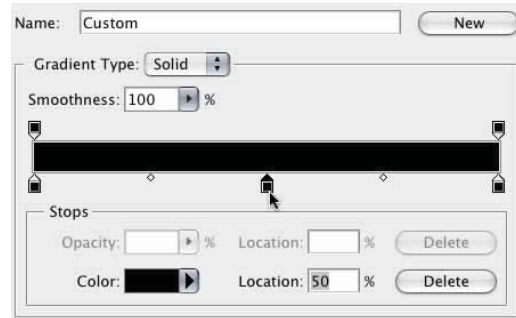
So, now that we know what everything does, we'll take a quick look at how to apply these capabilities to a practical example. In this case, we'll create a gradient that will simulate a sky, horizon and ground plane, presumably to be used as a backdrop for a landscape composition.

Create a new fill layer, and launch the Gradient Editor as before. Then follow these steps.

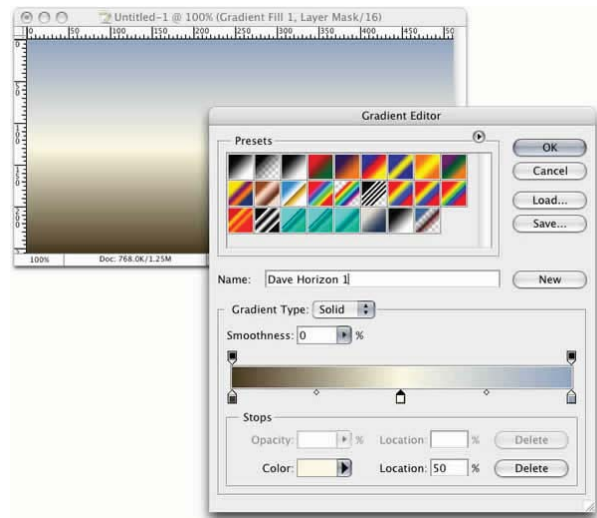
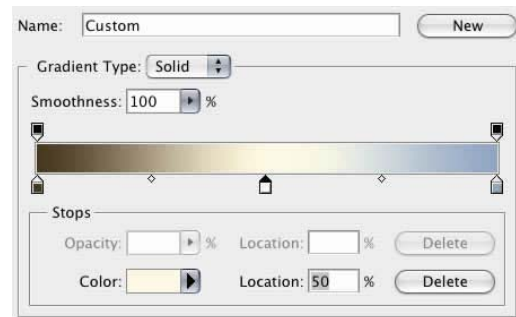
1. Set the two top opacity stops to 100 percent.
2. Create a new color stop at the 50 percent location.



3. Then adjust the color values for your three color stops. For mine, I'll use (left to right, values in HSB): brown (H 40, S 61, B 27), cream (H 51, S 11, B 100) and blue (H 214, S 26, B 76).



4. Finally, I'll set the Smoothness value to 0, which will create a thin band of "haze" for my horizon. And here's the result. (Be sure to name and save your gradient, if you intend to use it on future projects.)



After you apply the gradient, you can always go back and clean things up. To move the horizon lower, slide the center stop to the left. To make the horizon stand out more, adjust the Gradient Midpoint markers closer to the center stop. You get the idea.