

Basic Masking with the Quick Selection Tool

We use selections to constrain edits and adjustments to a specific part of an image. Take a look at Figure 18.4. While the subject of this image is plainly the dog, the background details are competing for our attention. There are a couple of things I could do to make the background less distracting. I could darken it, or desaturate it, or lower its contrast. But any of these operations will require that I first create a mask to constrain my edits.



Figure 18.4

We want to make the background less distracting in this image, which we're going to do by creating a mask to protect the dog from our adjustments.

Tutorial

Creating a Simple Mask

The plan is pretty simple: we'll select the dog and then *inverse* the selection so that it is the *background* that ends up selected. Then we'll apply an adjustment to downplay the background.

STEP 1: COPY THE IMAGE

Open the image `dog.jpg` from the Chapter 18 folder of the tutorial files.



Figure 18.5

The Quick Select tool is often the easiest way to make a complex selection.

STEP 2: CHOOSE THE QUICK SELECTION TOOL

Choose the Quick Selection tool from the main tool palette (see Figure 18.5).

STEP 3: SELECT THE DOG

With the Quick Selection tool, you paint over something in your image that you want to select. The tool employs Magic Wand-like algorithms to analyze the area you're painting and then makes a selection.

Quick Selection is a brush tool, and like all Photoshop brush tools, you can change its size using the [and] keys. Set the brush to a size slightly smaller than the dog's nose and paint over the dog's head. As you do, Photoshop should select the dog (Figure 18.6).



Figure 18.6

After simply brushing over the dog with the Quick Selection tool, we have a good selection. It's got one flaw, which we can correct with the same tool.

Quick Selection works by analyzing the color in the areas you brush. It assumes a sudden color change is an edge, and so defines that as the edge of the selection. You might find, as in Figure 18.6, that Quick Selection sometimes selects too much. Because the color of the dog's fur is close to the color of the bricks, it selected part of the staircase behind the dog.

STEP 4: ADJUST THE SELECTION

In the center of the Quick Selection brush, you should see a +. This indicates that, as you brush, you'll be adding to the selection. If you hold down the Option key (Alt on Windows), then the + will change to a -, indicating that areas you brush will be removed from the selection.

If you need to remove something from the selection, hold down the Option/Alt key, and brush over the selected area that you want to remove (see Figure 18.7). You might need to make the brush smaller.

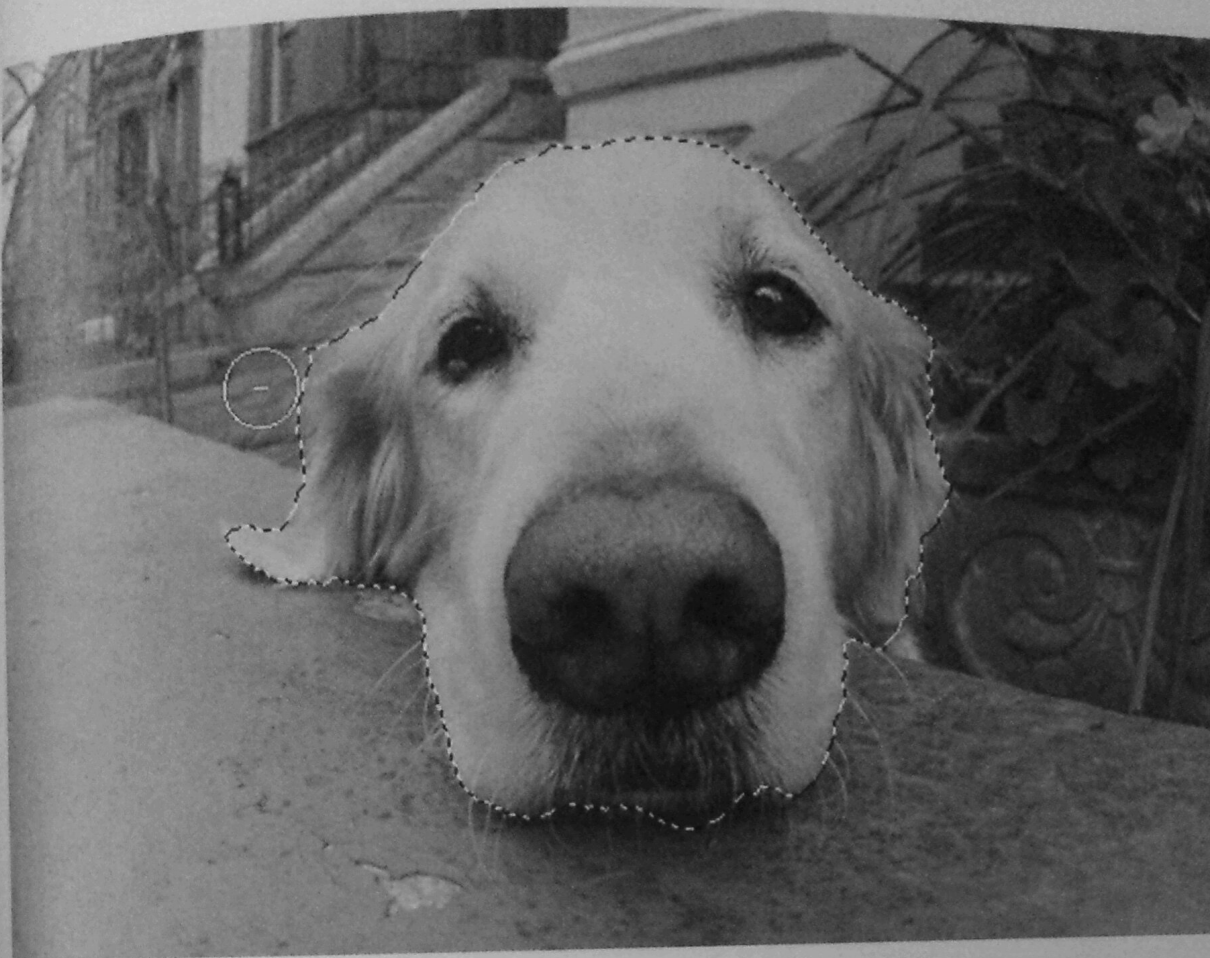


Figure 18.7

You can remove areas from a selection by holding Option/Alt while painting with the Quick Select tool.

STEP 5: TEST THE SELECTION

If you want to double-check that the selection has worked, grab the Eraser tool and brush across the image. You should see the erased stroke confined to the inside of the selection (Figure 18.8).

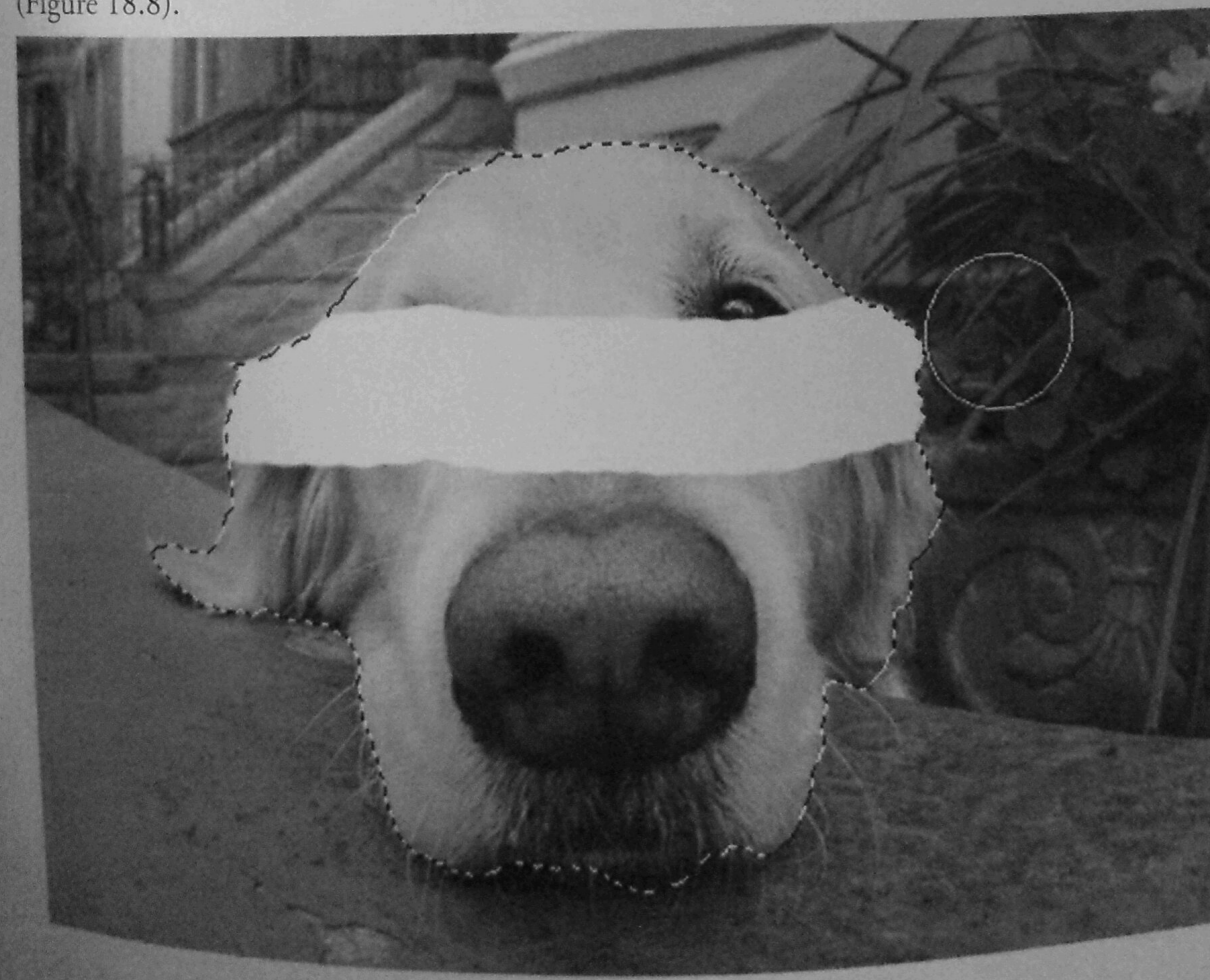


Figure 18.8

A quick test with the Eraser shows that, in fact, the dog is selected, while the background is completely masked.

Note that the selection isn't perfect. There are bits of fur that aren't selected, and the boundary of the selection has a hard edge. We'll address that next.

Choose Edit > Undo to undo the erased stroke.

STEP 6: FEATHER THE EDGE OF THE SELECTION

We can soften the edge of the selection by applying a feather to it. Choose Select > Modify > Feather and enter a value of 3 into the Feather dialog box. This will add a 3 pixel-wide blur to the edge of the selection. With this blurred edge, any edits we make will have a smoother, more natural transition from the selected to non-selected area.

The width of the feather is determined by how much of a transition you want from selected to non-selected, and how big your image is. An image with larger pixel dimensions might need a larger feather. With experience, you'll get a better sense of how wide a feather you need on a particular selection. Until then, just use trial-and-error.

STEP 7: INVERT THE SELECTION

We've got a good selection now, unfortunately it's the dog that's selected, and what we want to do is alter the background. Fortunately, it's easy to invert the selection.

Choose Select > Inverse.

You should still see the selection around the dog's head, but you should also see a selection around the entire border of the document. If you were to swipe with the eraser tool now, you'd see something like Figure 18.9.



STEP 8: DESATURATE THE BACKGROUND

Now we're finally ready to make an edit. Choose Image > Adjustments > Hue/Saturation to bring up the Hue/Saturation dialog box. Drag the Saturation slider to the left to desaturate the selected area a little bit. I liked it at about -40. The goal is to make the background less distracting, but without making an edit that's too obvious.

STEP 9: HIDE THE SELECTION EDGES

With the “marching ants” tromping around, it can be hard to see whether the desaturated background looks like a conspicuous edit or not. Fortunately, Photoshop provides a way to hide the selection boundary without discarding the selection.

Choose View > Extras to hide the selection boundary.

You can also press Cmd/Ctrl-H. On a Mac, the first time you press Cmd-H, Photoshop will ask if you want to hide Photoshop or just the Extras. Choose Extras.

Note that we were able to hide the edges, even though the Hue/Saturation dialog was still visible.

STEP 10: REFINE THE SATURATION

With the selection edges hidden, we can now refine our adjustment; remember, our selection is still in place. I backed the Saturation adjustment down to -50 (see Figure 18.10). While the desaturation helps, there's one more edit we should make. Click OK to accept the Saturation change.



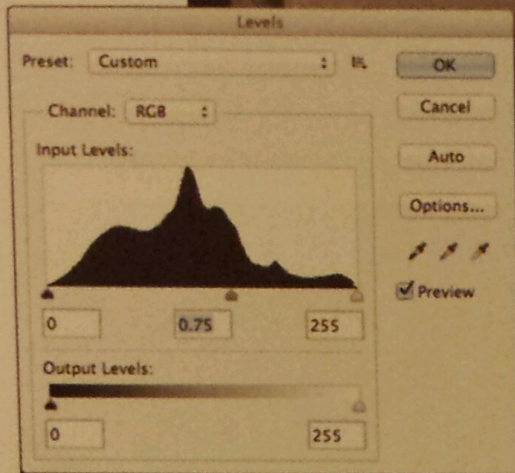
STEP 11: DARKEN THE BACKGROUND

Remember—even though you can't see it, there is still a selection in place. Press Cmd/Ctrl-H to toggle the view of the selection boundary. If it's not there, then you must have accidentally deselected it somehow, and you will need to remake the selection.

If they're not hidden, hide the selection edges.

Now press Cmd/Ctrl-L to bring up the Levels dialog box. We're going to use it to add a slight darkening to the background.

Drag the midpoint to the right to darken the background. I found .75 to be about right (Figure 18.11).



Again, the goal is to bring more attention to the dog, but not make a conspicuous edit. With a little bit of darkening in the background, the dog draws more focus. This is the power of selective editing and adjustment.

If you want, you can experiment with some other adjustments. For example, you might want to try increasing the saturation on the dog. You can easily do this by inverting the current selection and then applying a Hue/Saturation adjustment.

At any time, you can get rid of the current selection by choosing **Select > Deselect** or pressing **Cmd/Ctrl-D** to deselect.

We'll be working with this image again later, so when you're done working, save it as a Photoshop document. 📄

Tutorial

Using Refine Edge and Smart Radius

While Photoshop's Feather command lets you soften the edge of a selection, the fact is a lot of things in the world don't have clearly defined edges. What's more, their edges vary from one point to another. At other times, you might be stymied by extremely complex edges, such as hair or fluffy fur. How do you select each strand of hair?

In this tutorial, we're going to create a mask and perform an edit that would have been extremely difficult in previous versions of Photoshop.

STEP 1: OPEN THE IMAGE

Download the image *Heather.jpg* from the Chapter 18 section of the companion Web site at www.completedigitalphotography.com/CDP7. Open the image in Photoshop (see Figure 18.12).



Shot at an aperture of $f1.2$, this image has extremely shallow depth of field, which gives it a nice, dreamy quality and lends a lot of focus to the woman's eyes. However, her coloring so closely matches that of the mural on the wall behind her that she's a little lost in a field of pink and red tones. We want to desaturate the background to bring more focus to her.

STEP 2: CREATE A MASK

Using the Quick Selection tool, create a mask for the woman. Remember, if you accidentally select part of the background, hold down the Option/Alt key and paint with the Quick Selection tool on those background areas. Holding down Option/Alt while painting with Quick Selection removes the painted area from the selection.

Changing brush size is also a good way to improve the effectiveness of the Quick Selection tool. Because the edge of her face and scarf are so blurred, you're not going to create a selection that tightly wraps around her (Figure 18.13).

STEP 3: INVERT AND HIDE YOUR SELECTION

Remember, when you painted with the Quick Selection tool, you selected the woman. But we want to operate on the background, not on her. Choose Select > Inverse to reverse the selection. You will now see that the selection traces around the edge of the background.

As you did in the last tutorial, press Cmd/Ctrl-H to hide the selection, to provide a clearer view of our edits.

STEP 4: TRY TO DESATURATE

Choose Image > Adjustments > Hue/Saturation to bring up the now-familiar Hue/Saturation dialog box. Drag the Saturation slider all the way to the left (Figure 18.14).

She's definitely standing off the background more, which is what we wanted, but the hard edge around her face—the sudden shift from color to black and white—doesn't look real. We've plainly discolored the background, and the effect is distracting.

Click Cancel in the Hue Saturation dialog box to cancel the desaturation option. You should see your full-color image again. Though you can't tell, your selection is still active.



Figure 18.13

With the Quick Select tool, we created this very rough mask of the woman.



Figure 18.14

After desaturating the selected background, we get this image that doesn't look quite natural.

STEP 5: INVERSE THE SELECTION AGAIN

This step isn't going to be intuitive, but trust me on this one, you want to inverse the selection again by choosing **Select > Inverse**. We're about to open the Refine Edge dialog box, and our Refine Edge action will be much easier if she's selected, rather than the background.

STEP 6: REFINE EDGE

Choose **Select > Refine Edge** to call up the Refine Edge dialog box.

By default, Refine Edge will show your selection on a completely white background. If you'd rather see it on a different type of background, you can choose a different one from the View pop-up menu at the top of the Refine Edge dialog box. White works well for this chore.

Now you can see why we needed to inverse our selection first. We need to be able to see where the edges of the woman are.

STEP 7: SMART RADIUS

Check the Smart Radius checkbox and then click on the Brush tool next to Smart Radius. Set the Radius slider to about 2 pixels. (I'll explain this in a minute.)

With this brush, you're going to brush along the edges of the selection—that is, the edges of the woman. Your painting is going to give the Refine Edge function a hint as to where the edge is. It will analyze that area and calculate a new edge for the mask.

You can change the size of the Smart Radius brush with the [and] keys, just as you can with any other brush in Photoshop. I chose a diameter roughly the size of about half of one of her eyeballs. The goal is to have a brush that's as wide as the entire blurry edge that we want to refine. Paint a stroke down her left side. When you let go of the mouse, you should see a very soft edge (Figure 18.15).

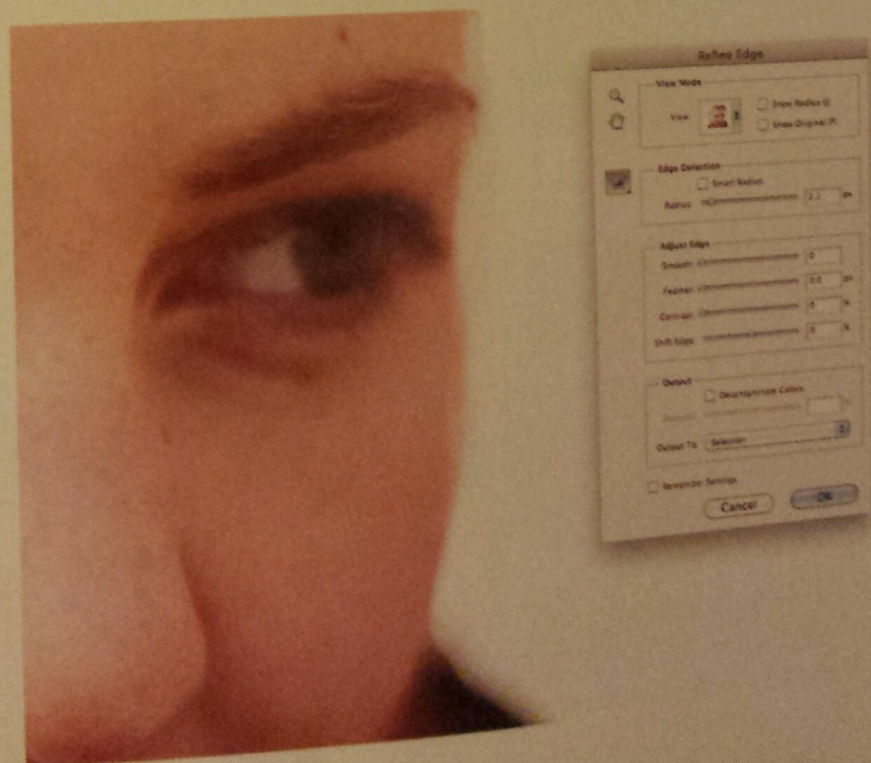


STEP 8: PAINTING HER OTHER SIDE

Now paint her other side. In general, it's best if you can do it all in one stroke.

STEP 9: REFINE

When you painted the right side, there's a good chance that some weird stuff happened around her eye (see Figure 18.16).



Refine Edge very likely selected too much of her face.

Click and hold on the Refine Edge brush, and a pop-up menu will appear, revealing the Erase Refinements brush. Select this brush, change to a small brush, and paint over the parts of her face that you'd like to restore. You should see them reappear.

STEP 10: ACCEPT THE SELECTION AND DESATURATE

After you've got the edges refined, press OK to make the selection. Choose Select > Inverse to inverse the selection, so that the background is selected.

Invoke the Hue/Saturation dialog box and desaturate. After seeing the completely desaturated results, I decided not to desaturate entirely, so that a little bit of color remains in the background. Your results should look something like Figure 18.17.



Note how the transition zones around her face look very realistic. She doesn't look "cut out" from the background, but blends with the background realistically. Refine Edge did an excellent job of masking around her hair and of creating a smooth transition along the soft edges of her face. 📷