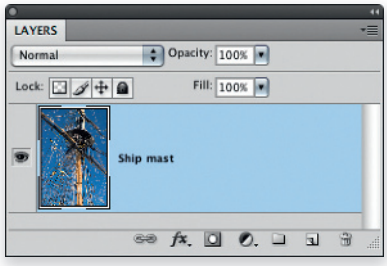
Color Range masking

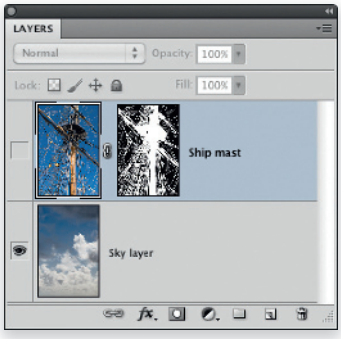
So far I have shown how to replace the background using the quick selection tool combined with Refine Edge/Refine Mask command. Let's now look at how to create a cut-out mask of a more tricky subject where the quick selection tool would be of little help. Advanced users might be tempted to use channel calculations to mask a picture like this. That could work, but you know, there is a much simpler way. Since Color Range was updated in CS4 it can now be considered an effective tool for creating mask selections that can be used for compositing images together. In fact, I would say that the quick selection and Color Range adjustment are powerful tools that now offer relatively speedy (and sophisticated) methods of masking.

1 This shows a photograph taken of a sailing ship mast against a deep blue sky. Obviously, it would be potentially quite tricky to create a cut-out mask of the complex rigging in this photo. One approach would be to analyze the individual RGB color channels and see if there was a way to blend these together using Calculations to create a new mask channel that could be used as a cut-out layer mask. A much easier way is to use the Color Range command. So to start with, I went to the Select menu and chose 'Color Range…'

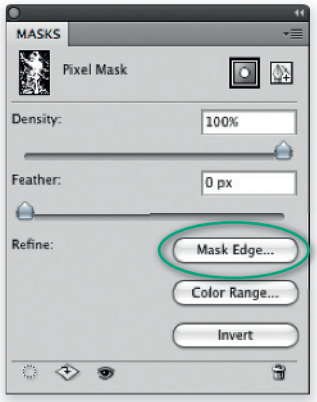


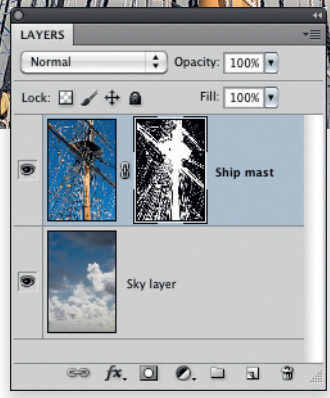
2 This opened the dialog shown below with the standard eyedropper selected. I could then simply click with the eyedropper anywhere in the image window to sample a color to mask with. In this instance I clicked in the blue sky areas to select the sky and checked the Invert box so that I was able to produce the inverted selection shown here. To create a more accurate selection, I checked the Localized Color Clusters box and used the plus eyedropper (circled) to add to the Color Range selection. You can click or drag inside the image to add more colors to the selection and also use the minus eyedropper (or hold down the ⌥ alt key) to subtract from a selection. The Fuzziness slider increases or decreases the number of pixels that are selected based on how similar the pixels are in color to the already sampled pixels, while the Range slider determines which pixels are included based on how far in distance they are from the already selected pixels. The Color Range preview is rather tiny, so you may find it helps to do what I did here, which was to select the Grayscale Selection preview (circled red) so that I could view the edited mask selection in the full-size image window.

3 Having completed the selection I clicked on the Add Layer Mask button in the Layers panel to convert the active selection to a layer mask, which masked the ship mast layer; I then wanted to blend the masked image with a photograph of a cloudy sky. This could be done by dragging the masked ship mast layer to the sky image, or as I did here, by draging the sky image to the ship mast image and placing it as a layer at the bottom of the layer stack. Shown here is the cloudy sky layer on its own with the layer visibility for the masked ship mast layer switched off.



4 This shows a 1:1 close-up view of the masked layer overlaying the sky layer with the ship mast layer visibility switched back on. In the Masks panel there was no need to feather the mask. Instead, I clicked on the Mask Edge… button to open the Refine Mask dialog.





5 This shows the finished composite image, in which I used the Refine Mask controls to fine-tune the mask edges. As in the previous example, I selected the 'On Layers' view mode. I was then able to preview the Refine Mask adjustments on a layer mask that actively masked the ship mast layer. I didn't have to do too much here. I disabled the edge detection by setting the Radius to 0 pixels, applied a Feather of 0.5 pixels and contracted the mask by –15%. I checked the 'Decontaminate Colors' option and set the Amount slider here to 60%. This combination of sliders appeared to produce the best result using the new, revised Refine Edge/Refine Mask dialog.