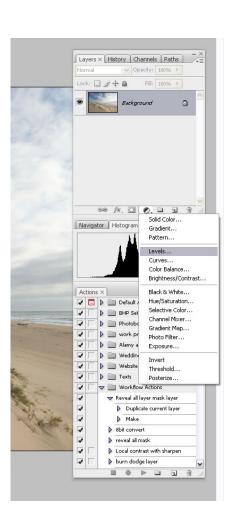
## **Quick and Dirty Layers and Masks Tutorial**

This tutorial is not intended to be the definitive lesson to beat all lessons regarding Photoshop's (PS) layers and masks controls. Rather this is a quick introduction what I deem to be the single most important set of tools and techniques for advanced image enhancement through PS. The beauty of being able to use masks and layers is that you can make non-destructive selective changes to the image. Let's say that I want to only adjust the colour of a rope in a photograph of a climber against a cliff. This is easy is extremely easy using an adjustment layer and mask with a colour range selection tool.

The paragraphs below will follow a very simple process from the simplest use of layers and masks through to more complex selections. The idea is that once you have gone through this introduction you will be able to apply the concepts mentioned here in a more advanced fashion.

## 1. Layer as non-destructive broad changes.

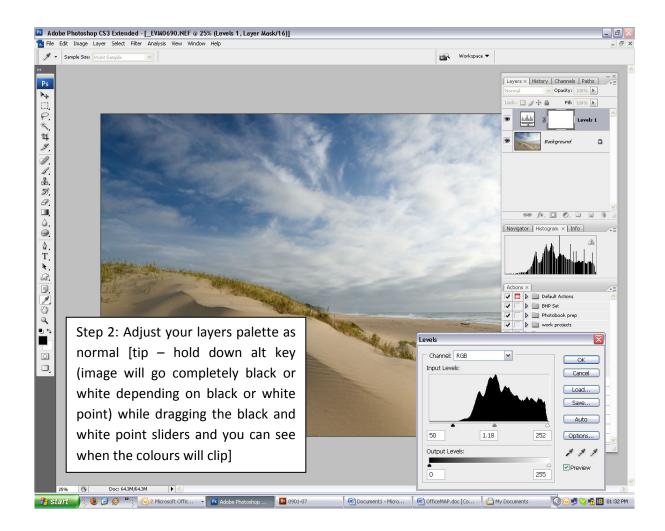






In this example let say that we have an image that we want to adjust using levels. Rather than only using the levels control (ctrl+L) open up the layers palette (hit F7). Click on the 'new fill or adjustment layer icon' and choose the levels dialogue.

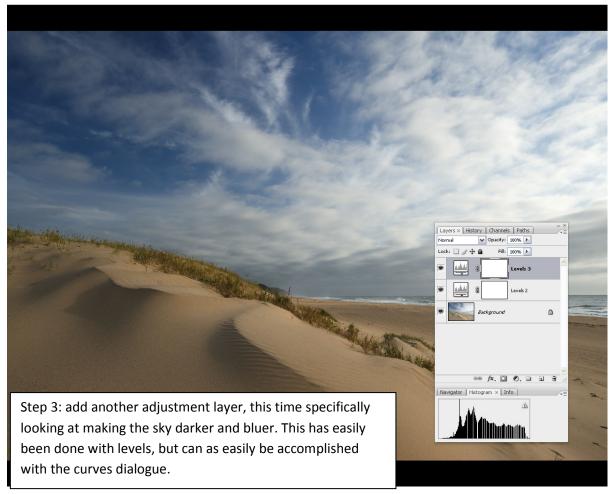
You now have two layers, a background layer and a levels adjustment layer with an empty mask. Simply by clicking on the eye icon next to each layer you can switch on or off the layers effect, thus jumping between states without resorting to the undo button.

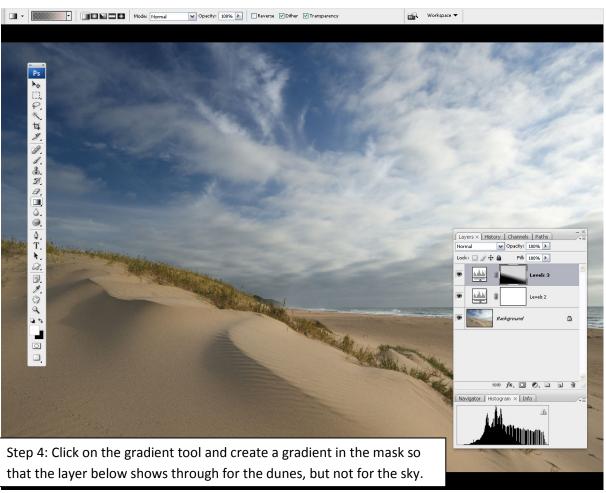


As many layers as your computer's RAM can handle can be placed on top of each other. As a basic rule of thumb, for every major adjustment that you make there should be another layer. Let's say that I want to increase the blue in the sky now without affecting the colour of the dune's below. Click on the adjustment layer icon and choose layers again. Make the adjustment for the specific part of the scene that you require to be changed, in this case the sky (see step 3 below). Once this has been completed you now need to mask off the area that you do not want affected.

Masks are really easy to use once you get the idea of how they work. Essentially the layers are all stacked on top of other like a deck of cards of which you are looking at the top card. The mask, the square on the right of each layer icon, either lets you see down to the layer below, or 'masks off' so that you can only see the top layer. When the mask is completely white, it means that it is a solid layer – you can't see through to the layer below. By painting black paint onto this mask you are essentially cutting a window through to the layer below.

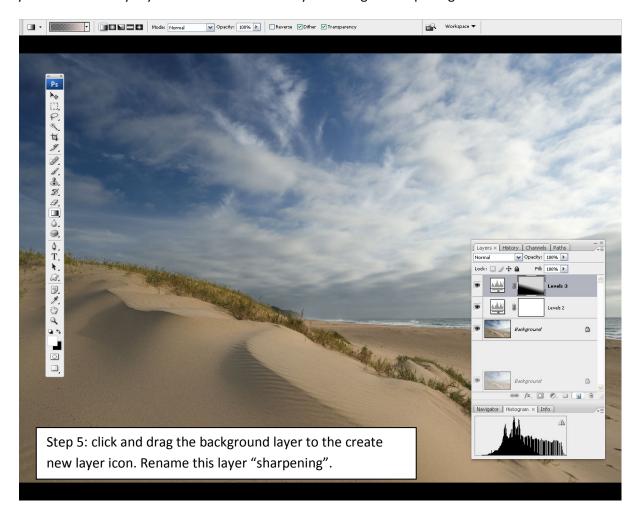
For the image of the dune and sky I am going to make a very easy mask simply by using the gradient tool (sub option of the bucket tool (shortcut key 'G'). Click on the mask block to the right of the levels adjustment layer and then go back to the image and create your gradient as per normal.





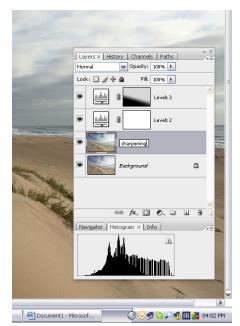
If this is then as far as you want to go you can click on the right hand uppermost corner of the layers palette, scroll down and flatten the image before saving it as a Tiff. My workflow usually involves sharpening the image as well though. For this it is best to create a duplicate layer on which to apply the sharpening (remember that by doing this on a new layer you are not damaging pixels – the original image is still unchanged until you flatten the image).

For step 5 click on the background image icon and drag it down to the create new layer icon (second from the left at the bottom of the layers palette). You can see this is action in the image below. Once you have a new layer you can make life easier by renaming it "sharpening".

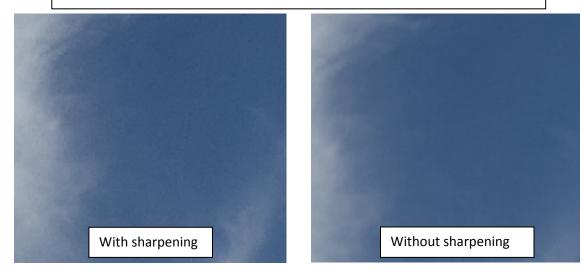


Sharpen the image using the sharpening technique of your choice. For the sake of simplicity (and less layers ©) I'm going to sharpen using the USM mask for this tutorial. Go to filter>sharpen>unsharp mask and sharpen the image as normal. Now what you have done is only sharpen the sharpening layer. The Background layer is still untouched.

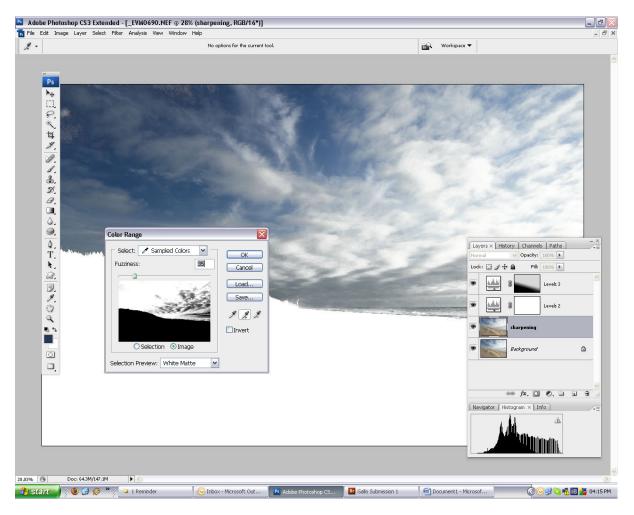
Time for pixel peeping. Blow up to 100% (shortcut ctrl+alt+0) and check the image for noise that has been created by the sharpening. The images below demonstrate that there is a difference between sharpened and the unsharpened image in the broad expanses of blue. What I want to do is create a mask that sharpens the whole image **except** for those expanses of a single tone.



These images were blown up to 200% to make the differences obvious.



Here's one of my favourite tools to help with this job – the colour range picker. Go to select>colour range and you will be presented with a new palette and the image will go white (if the selection preview is set to White Matt). Make an initial selection and then change the dropper to the +dropper (middle icon below the save button). Simply click around the image on the tonal values that you want to select and press OK when you are happy.



The colour range icon will disappear and the typical marching ants of a selection will take their place. In this particular case I actually want to select the brown tones but they weren't that easy to colour pick, so all I need to do is quickly invert the selection by right-clicking and hitting the select inverse

command. Once this is done click on the add layer mask icon in the layer palette (square with a white circle). The result is a perfect mask that only blocks the areas that you want sharpened (the sand in other words). If you want to you can selectively add to the mask by hitting using the painbrush (shortcut key 'B'). By painting black onto the mask you cut through to the layer below.



There's always more than one way of doing something in PS. I'd firmly recommend reading Tony Kuypers tutorials on luminosity masks (<a href="http://www.goodlight.us/writing/tutorials.html">http://www.goodlight.us/writing/tutorials.html</a>) and Ron Bigelows (<a href="http://www.ronbigelow.com">http://www.ronbigelow.com</a>) tutorials on layers for considerably more detail on how to enhance an image with layers and masks. At the moment this is my very basic workflow using layers and masks.