Using raw conversion to save images with excessively wide tonal range

By George Garbeck


original image **after combining 2 raw conversions**

Technique used to eliminate blown-out highlights in a time exposure.


original image **after combining 2 raw conversions**

I didn't crop in on just the main subject as I wanted to show enough of the background to show him in his environment. Technique used here to reduce distracting bright areas so that the focus of image stays on the man.

One of the greatest challenges for the natural light photographer is capturing an image in bright light situations that allows for detail in both highlights and shadows. I like to shoot on bright, sunny days and I enjoy candid people photography; two situations where I have little control over the lighting, so often I end up with images that have an extremely wide range of contrast. No matter how carefully I meter the scene, either some of the highlights are blown out or I've lost detail in the shadows. If I've shot such a scene using the RAW format, I can often compensate for this excessive contrast, effectively expand the range of contrast by several stops, and produce a print with detail at both ends of the range by using the following technique.

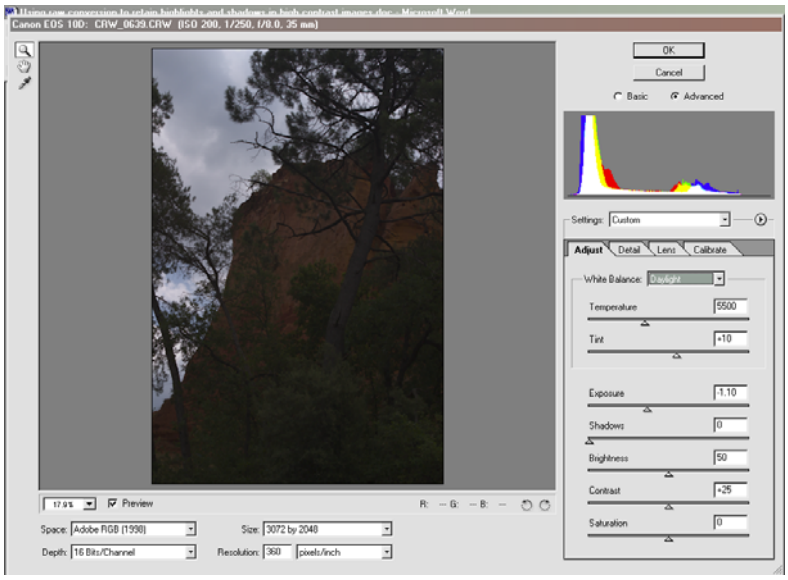
I begin by making one raw conversion of the image for highlights and then a separate conversion for shadows. This technique will work when all the information required is in the original 16 bit raw file but cannot successfully be displayed in a single raw conversion.

I start first with the highlights and adjust the exposure control in the raw conversion software so that highlight areas show correct detail on my monitor. Usually I will have to lower the exposure of the photograph to accomplish this. I then convert this image. Then, going back to the original raw file, I make

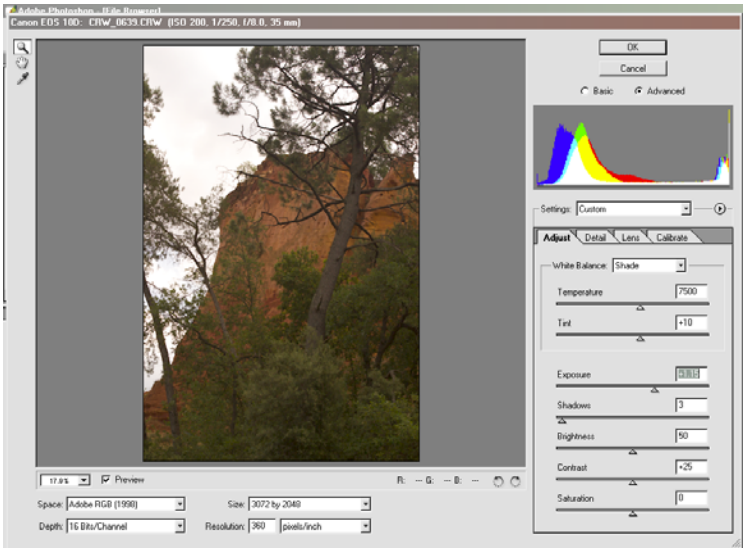
adjustments to the shadows so they too look just the way I want them this time usually by increasing the exposure in the shadows. I then make a second conversion of the same image.

I open both images in Photoshop and drag one of the images on top of the other with the move tool while holding down the shift key to assure that they are in perfect registration. I add a layer mask to the topmost layer by clicking the New Layer Mask button in the Layers palette (or by choosing Layer > Add Layer Mask > Reveal All) and proceed to mask out the unwanted areas of the top image. For example, if I place the version with the overexposed highlights on top, I will mask the highlight part of this image to reveal the properly converted highlights on the layer below. It doesn't matter which layer is on top, so the determination is made by whether it is easier to mask the shadow or the highlights. The mask can be created by either painting on the layer mask in black with a soft brush or by making a feathered selection of the area of the image to be masked, inverting the selection and then filling the inverted selection on the layer mask with black.

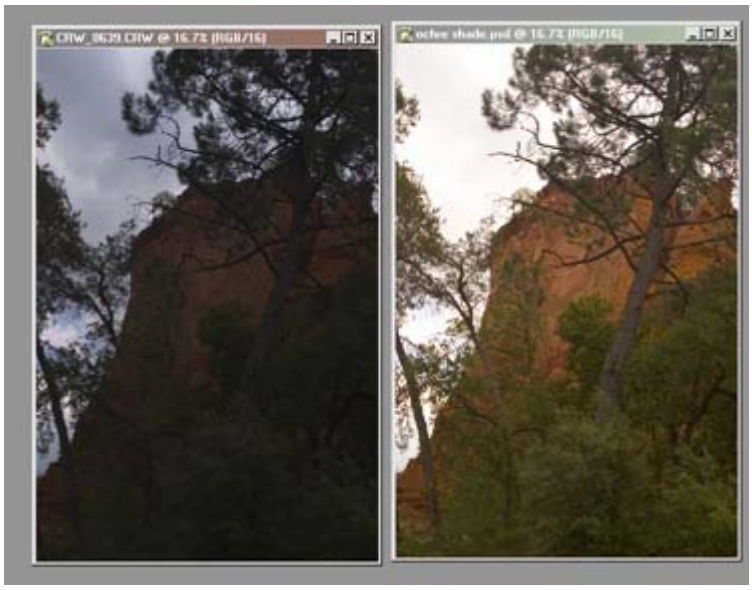
Lowering Exposure to bring detail into highlights



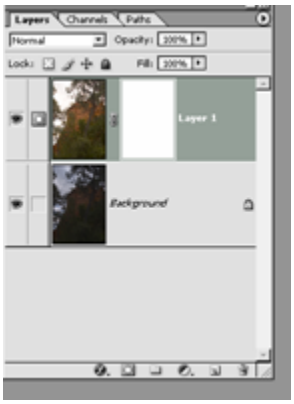
Increasing Exposure to bring detail into shadows



Both files open in Photoshop



Layers Palette after files are combined



Layer mask blocks overexposed areas of lightened layer