# [MARKBERNDT]

CREATE AN ADJUSTABLE, NON-PERMANENT SHARPENING LAYER USING THE HI-PASS FILTER.

Virtually every digital image, whether a digital original or film scan, requires some degree of sharpening. The amount of sharpening needed depends on how you're going to output your file.

FINAL IMAGE SHARPENING should be done once you have created your complete image. By creating a separate sharpening layer from your final image in a COMP LAYER, you retain flexibility. You can discard, adjust or replace it in the future without permanently affecting your image.

1. OPEN A FINISHED IMAGE FILE (retouched, color-corrected, dodged & burned, etc) which you need to sharpen for printing.
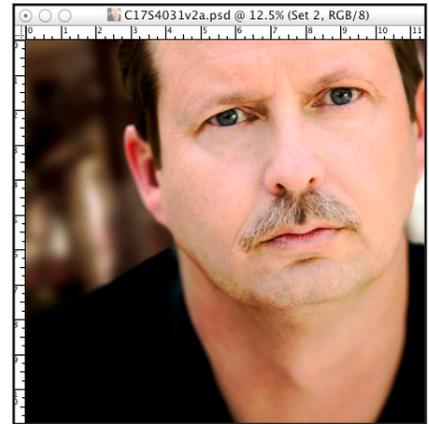
2. CREATE A NEW LAYER at the top of the existing layers in your layers palette. Hold down the OPTION KEY (ALT on PC) to bring up the layer options box when you click the NEW LAYER icon at the bottom of the layers palette. Name the layer "hiPassSharpen".
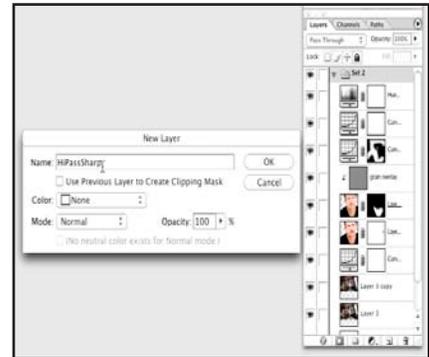
3. TO MAKE THE NEW LAYER A **COMP LAYER**, hold down the OPTION KEY (ALT on PC) while selecting MERGE VISIBLE from the layer palette drop down menu. Holding the option key merges the visible layers onto the selected layer, but leaves all of your layers intact below - PRESERVING your ability to go back and make changes later.

IN PHOTOSHOP CS2, you can accomplish steps 2 and 3 in one step by highlighting your top layer and pressing the SHIFT + OPTION + COMMAND + "E" keys.

NOTE: If you want to make changes to your original image after you've created a COMP LAYER, DISCARD the COMP LAYER, make your changes, then repeat the process to create a new COMP LAYER.
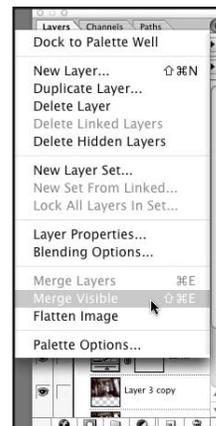
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You now have a single layer that comprised of all layers that were visible as your final image.

NOTE: THIS IS A COMP LAYER. This technique for creating a comp layer can be used at any stage of your image creation where you want to consolidate the work at that point (usually a composite of the layers below).

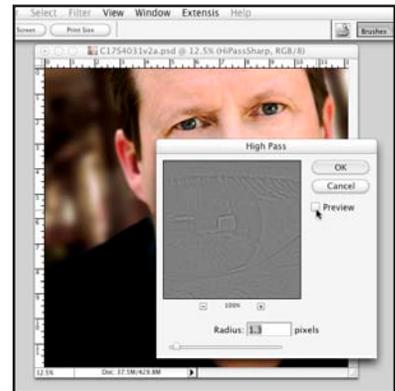Now convert your COMP LAYER to an adjustable sharpening layer.
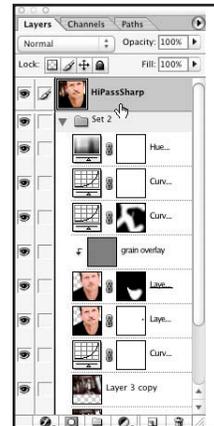
4. Select FILTER>OTHER>HI PASS from the FILTER menu.

5. SET the amount slider in the Hi Pass dialgue box to 1.3.

NOTE: You can use other settings, but you'll probably never want to go above 1.4 or 1.5 as the artifacts created at edges will be excessive

6. SET the LAYER MODE of the "hiPassSharp" layer, to OVERLAY.

You can reduce the amount of the sharpening effect by setting the OPACITY slider.

You can increase the effect of the sharpening effect by duplicating the layer, and then adjusting the opacity of the duplicate sharpening layer.
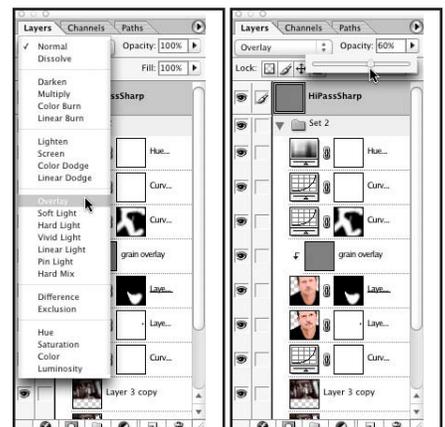
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Different types of output require different degrees of sharpening.

Hi-resolution inkjet output on glossy photo paper requires less, and more careful, sharpening (and will show the artifacts of excessive sharpening earlier) than matte papers.

Watercolor papers can take a higher degree of sharpening than glossy and some matte paper because you print them at a lower printer resolution, and because as ink adheres to the rougher paper surface it 'softens' edges a bit.

Printing to a LightJet, Frontier or Fujix printer (conventional photo prints from a la), will, like glossy inkjet paper, see more detail and require careful moderate sharpening.

Output for the web, which is by definition low-resolution (only 72dpi), shows reveals sharpening artifacts very quickly. These images are best sharpened at higher resolution, then reduced for the web.

You can create a different sharpening layer for each kind of output, and turn them off, one at a time, to create different finished files for each.

BEFORE HI PASS SHARPENING   AFTER

NOTE: Alternatively,   you   can   apply   UNSHARP   MASK (FILTER>SHARPEN>UNSHARP MASK) to your COMP LAYER, instead of the Hi Pass Filter.