

Preparing an image for the web

Whilst the principles of creating a good photograph are constant regardless of the way in which the image is finally displayed (for example, good composition is important for transparencies, slides and web images), and image that is to be displayed on the web needs to be prepared differently to one that is, say, to be printed.

For example, an 12 by 8 inch print will probably need to have a resolution of 3600 by 2400 pixels. The same image, displayed on a standard monitor would be about 50 by 33 inches – and would take around an hour to download on a typical modem dial-up connection. Since most web users will wait less than ten seconds to see a web page, this clearly isn't practical.

In the rest of this page I will give you some suggestions for what you can do to prepare an image for the web. There are no right and wrong ways of doing this. What follows is simply one way that works reasonably well for me.

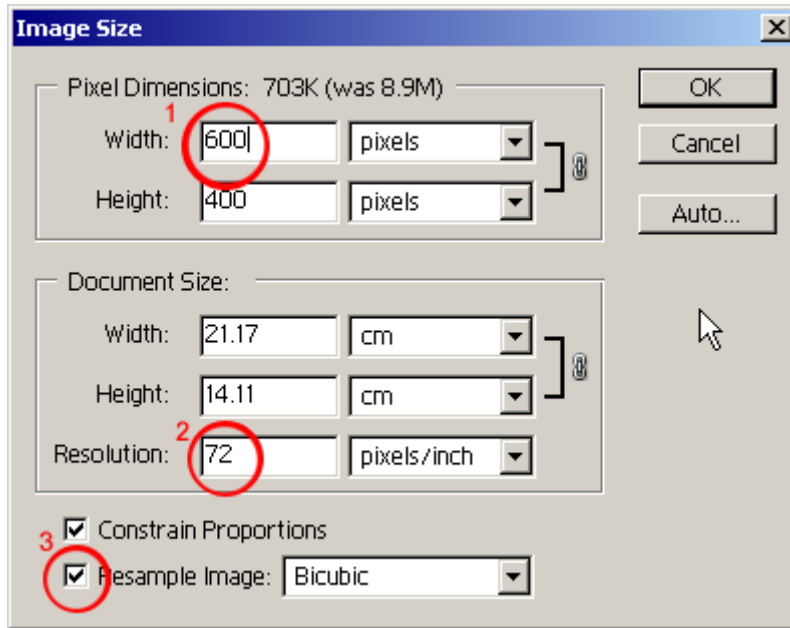
I start with the assumption that you have a “finished” image: that is, all the cropping, touching up, colour adjustments that you think are necessary have been done. All you want to do is to convert a “printable” image to a “webbable” one.

All screenshots and menu paths are taken from Photoshop version 7, but I will always give a plain text description of what I'm trying to do, so if you use a different version, or even a different package, you should be able to work out what you need to do.

Step 1: Resize the image

If you have any layers in the image, flatten them (**Layer** | **Flatten image**).

Resize the image to your chosen size (longest size of 700 pixels for the club gallery). For completeness, set the resolution to 72 ppi. (**Image** | **Image size**). Make sure that you've checked the Resample image check box and that the resampling mode is **Bicubic**.

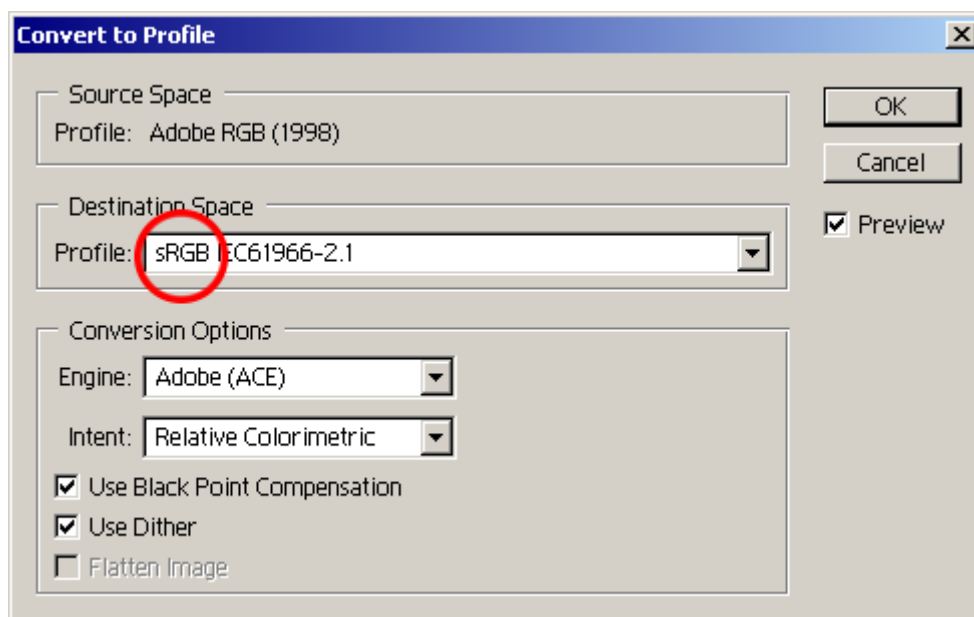


Note: Some people find that, if their image is much larger than 600 pixels in size, they get better results by doing the resizing in several stages, reducing the dimension of the image by roughly half at each stage.

Step 2: Change the mode to sRGB

sRGB is the “safest” of colour modes for web display: monitors have a much narrower gamut than film, or even inkjet printers. Of course, this does nothing to help with the problem of monitor calibration, but a badly calibrated monitor is the viewer’s problem, not yours. All you can do is make the source image as good as possible. After that, it’s up to the viewer.

Select **Image | Mode | Convert to profile** and select **sRGB** as the destination space.



At this stage, you may want to save a lossless version (eg a Photoshop or TIFF) of the image at this point. This will be useful if you need many different versions of the same file.

Step 3: Sharpen the image

The subject of sharpening could fill an entire book on its own. Suffice it to say that sharpening adjusts the image to make it look snappier (sharper) when displayed. The correct amount of sharpening depends on many things, amongst them the image itself, its size and the medium on which it is to be displayed. Therefore, there is no single rule that always be applied to give the best results. However, for web images, Photoshop offers at least three different options. From simplest to most complex, they are:

1. The Sharpen filter
2. Unsharp mask
3. Save for web

Using the sharpen filter is simple: select **Filter | Sharpen | Sharpen**.

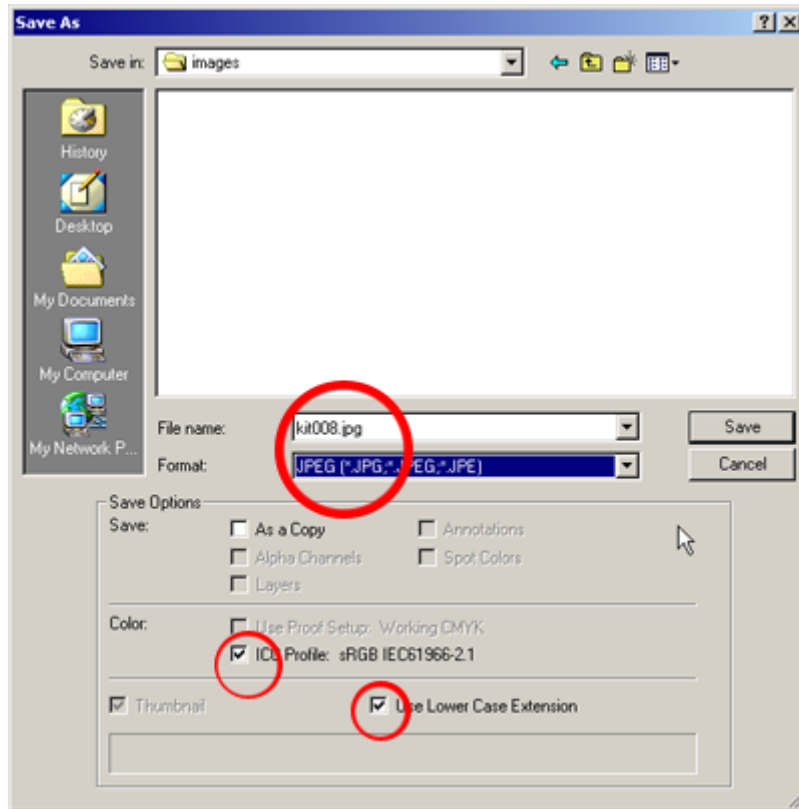
Using unsharp mask is a little more complicated: select **Filter | Sharpen | Sharpen**, and then adjust the values of **Amount**, **Radius** and **Threshold** until you get a look that you're happy with. If you have the **Preview** checkbox checked, you'll see the effect of your changes as you make them.

There's a very good explanation of these settings on Michael Reichmann's website: <http://www.luminous-landscape.com/tutorials/understanding-series/understanding-usm.shtml>.

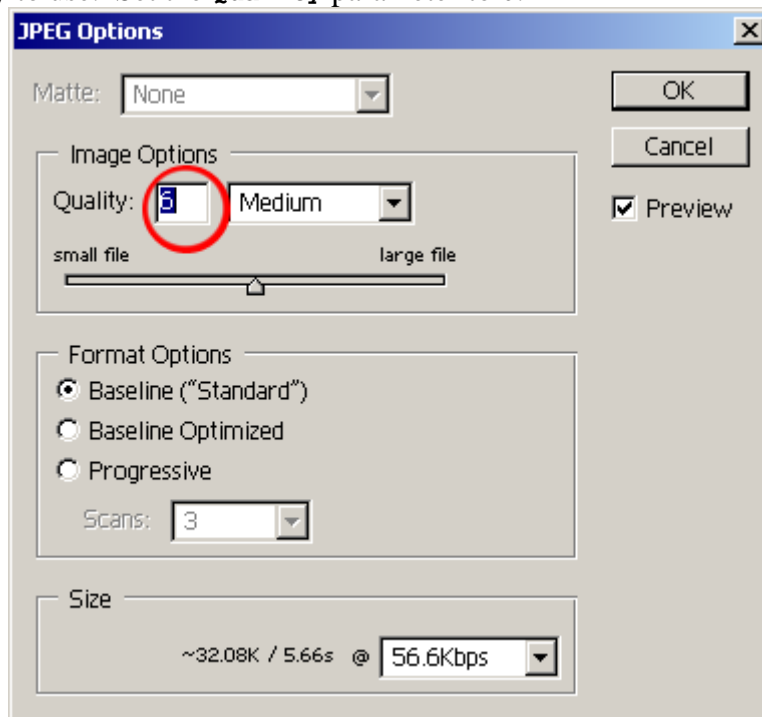
Step 4: Saving the image

The image should be saved as JPEG file. Normally, a medium quality setting is sufficient for web display.

Select **File | Save as** and navigate to the folder in which you want to save the image. Make sure the format is JPEG, **ICC profile** check box is checked (and its setting is **sRGB**) and that the **Use lower case extension** checkbox is checked.



When you click on Save, you'll see the following dialog, which lets you specify the JPEG quality to use. Set the **quality** parameter to 6.



Close the original version of the image, and open the one you've just created. If the image is too lossy, resave the JPEG version with a higher quality setting.

Alternatively, you can use the **File|Save for web** menu option: change “**GIF**” to “**JPEG**” and use the **Quality** slider (which runs from 1 to 100, not 1 to 12) to adjust the quality parameter. You’ll see the effect of the quality setting in the preview window, which you can zoom to different areas of the image if you need to.

Automating the process

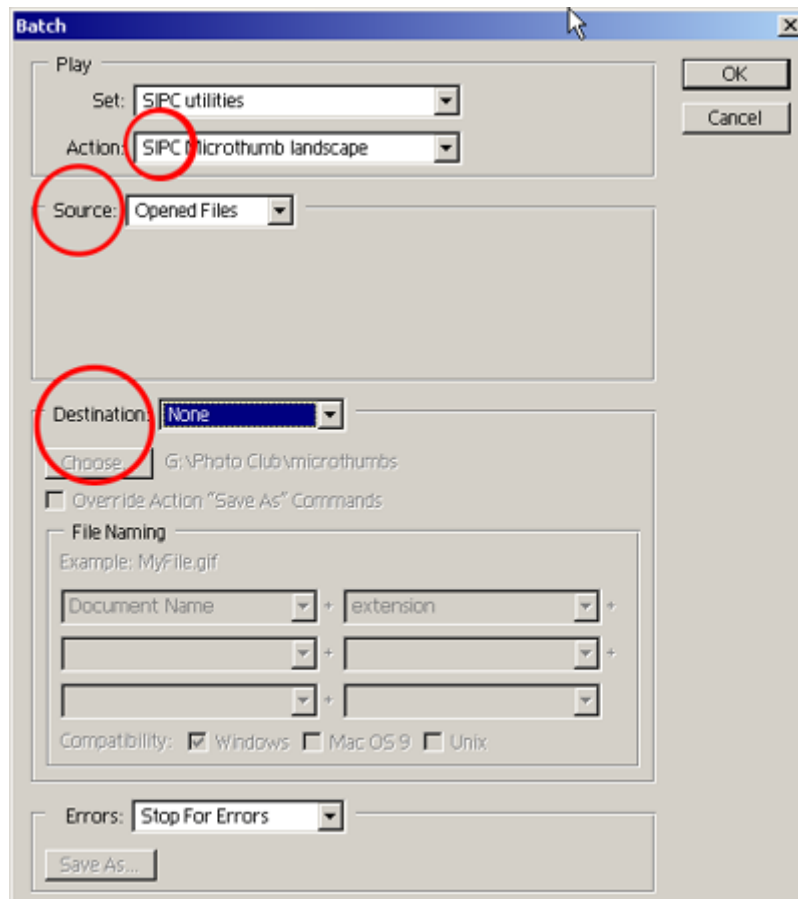
You can save yourself some time by using actions to automate the process of preparing an image, or a set of images for uploading. I’ve created a set of actions that you can use. You can download them (and instructions for their installation) [here](#).

There are two resizing actions, one for portrait images, the other for landscapes. To use the action, simply open the image you want to process, select the appropriate action from the actions palette and click run. Then save the result.

The actions flatten the image, resize it in a single step, convert to it sRGB, and then apply the sharpen filter. You may find this approach doesn’t work for you. If not, then feel free to edit the actions or create your own.

If you have a set of images that need processing, you can automate the actions using batch processing:

1. Open all the files to which you want to apply a single action
2. Select **File|Automate|Batch**
3. Set the **Action** dropdown to the name of the action you want to run (you may need to change the **set** dropdown to be able to see the correct action).
4. Set the **source** dropdown to **opened files**.
5. Set the **Destination** dropdown to **None**.
6. Click **OK**.
7. When all the files have been processed, save them as JPEG files.



Note: The reason for needing a different action for each orientation, and why the actions don't save the processed file, is that all of these steps need decisions to be made (for example: is the image in landscape or portrait format), and this is beyond the capabilities of actions. However, for the more technically minded, a single script could do all of this.

Comments

This document was written by John Kirkpatrick in May 2004. If you have any questions or comments, or notice an errors or omissions, please feel free to get in touch. You can contact me at webmaster@stives-photoclub.org.uk.