Soft-Proofing Images for Printing with ICC Paper/Printer Profiles from a Commercial Printer

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NOTE: you should always use a correctly calibrated monitor screen when working on your images and when soft proofing.

Soft proofing

Soft proofing in Lightroom Classic and Photoshop lets you simulate & evaluate on your monitor screen how images will appear when printed with particular paper/print machine combinations, so you can adjust the image as necessary on your monitor to reduce surprising tone and colour shifts in the print.

What is an ICC Profile? According to the International Color Consortium (ICC,) an ICC profile is a small set of data (a *.icc profile* file) that characterizes a color input or output device. Simply put, every device that displays color (e.g a paper from a particular print machine in our case here) can be assigned a profile, and these profiles define the color gamut that will be displayed by these devices (papers). That is, they enable the monitor to display colours in an image as they would appear when printed with a particular paper/printer combination.

Getting the Profiles

- A commercial printer (e.g. Streets Imaging, Frontier Digital, Momento Pro) emails you the *.icc profile* files for papers they use … usually as a Zip file. Ask if your commercial printer will supply you with the profiles for the papers they use with their particular print machines (some commercial printers will not supply their .icc profiles to clients; so it's your decision on whether you want to

continue to use that company or switch to a printer who will give you the profiles). Note: a *.icc profile* file is specific for a particular paper/printer machine combo. The same paper with a different print machine (e.g. at another commercial print lab) will need a different *.icc profile* file

- Download the Zip file to a suitable location on your computer (e.g., for profile files received from Streets Imaging, I put them in a folder

  Documents > Photography > Streets Imaging > ICC Profiles
- Unzip and extract the folders/*.icc files* to that location

Installing the profiles on a computer for use in Lightroom Classic & Photoshop

The profile files for specific papers used by that commercial printer (ending with xxx.icc) need to be installed into a specific location on your computer to soft proof your images.

Lightroom Classic & Photoshop then know to look for them there when you want to see the available profiles and choose one to soft proof your image (i.e. to check tones, colours and gamut warnings on an image that is open in LRC or PS on your monitor).

For Windows computers

The icc profile files are put into the following location where all .icc profile files are stored:

This PC > Windows (c): > Windows > System 32 > Spool > drivers > colour

Install Method a)

Right click on the chosen .icc file in the location you downloaded and extracted it to (see Getting the Profiles above) > click Install Profile and it puts it in the correct location.

The problem with this method is when you get updated profiles from the commercial printer (they sometimes update the .icc profile files annually), and then click "Install Profile", it sees there is a profile with the same name already there and won't overwrite it with the new one (and you don't get a message saying this … so you may think the new profile has installed but it hasn't!).

Install Method b)

Open Windows Explorer > navigate to the location where the downloaded and extracted .icc profile files have been saved to (see Getting the Profiles above). **Copy** the .icc profile files from this location and **Paste** them into the location on C Drive (see above) where Lightroom and Photoshop expect to find them.

If an .icc profile file of the same name already exists there, it will ask if you want to overwrite the existing file … say Yes.

<u>For Apple Mac computers</u>

The icc profile files are put into the following location where all .icc profile files are stored (Apple's now preferred location):

MacintoshHD > Users > (yourname) > Library > ColourSync > Profiles

> {The 'Library' folder is a hidden folder on a Mac under Users > (yourname), so if it does not show on your computer, use the following series of keystrokes to reveal it:
>
> *Command shift .* where the dot. after shift is the full stop on the keyboard
>
> Alternatively, Open Mac "Finder", click on "Go" drop down menu and select "Go to Folder". In the dialogue box type ~/library This will take you to your "Library" folder}

On Mac's, there is no automatic Install feature like Option (a) above for Windows machines.

So, simply **Copy** the extracted .icc profile files (from where they were unzipped to) and **Paste** them into the location where Lightroom and Photoshop expect to find them

MacintoshHD > Users > (yourname) > Library > ColourSync > Profiles

If you are loading an updated set of .icc profile files from your commercial printer (where you already have earlier versions on your Mac), you will be asked whether you want to overwrite the version already there … click Yes. Most commercial printers update their .icc profile files approx. annually. So, check with them for the latest versions.

Soft Proofing an Image in Lightroom Classic

(using Lightroom Classic CC 13.2 release)

With an image open in the Develop module, tick the "Soft Proofing" box in the toolbar below the image. If this box is not present, click the down arrow on the right-hand end of the toolbar and click 'Soft Proofing'.

In the right-hand panel of LRC, above the Basic tab and tools for Crop, Healing etc, you will see a *Soft Proofing* tab with *Create Proof Copy* section below the Histogram.

In the box beside 'Profile' (which may show Adobe RGB 1998 for example), click the down arrow > Other > and from the 'Choose Profiles' dialog box that appears, tick your desired paper profiles from those you have in your computer and that you might want to evaluate so they are listed each time in the Profile dialog box > OK

Then back in the Profile dialog box, use the down arrow to choose one of those listed profiles.

This will produce a "Proof Preview" image for you to evaluate what the image will be like when printed on that paper.

If the tones or colours are not as you want them, uncheck the "Soft Proofing" box in the toolbar below the image to go back to the regular Develop module window and adjust sliders as necessary.

Repeat the Soft Proofing steps above to see if the image now will print correctly (i.e., as you would like) on your paper of choice.

YouTube Videos for Soft Proofing in Lightroom

For example, see:

Julieanne Kost: Soft Proofing in Lightroom Classic: Tutorial

https://www.youtube.com/watch?v=LG7LjtqM9IQ

What in the World is Soft Proofing in Lightroom?

https://www.youtube.com/watch?v=g1ik4ET_qR8

Soft Proofing an Image in Photoshop

(using Photoshop CC 25.6.0 release)

With the image open in PS, from the top menu bar …

View > Proof Setup > Custom >

In the Customize Proof Condition dialog box:

- In Device to Simulate box use down arrow to select the desired printer/paper profile for the paper you want to print the image on
- Leave 'Preserve RGB Numbers' unticked
- Rendering Intent … suggest Perceptual or Relative Colorimetric
- Suggest tick 'Black Point Compensation'
- Tick or untick Preview box to see the difference between what your monitor shows without soft-proofing and what the image will look like when printed.

Image file name above the profile will show the profile being used.

To turn the soft proofing off … Ctrl Y or View > click off Proof Colours. You can toggle Ctrl Y to see regular and soft-proofed image.

YouTube videos for Soft Proofing in Photoshop

Various YouTube videos show how to use soft proofing in Photoshop to further edit your image on screen to produce the print you want with chosen paper.

For example, see

Soft-Proofing in Photoshop // Fotospeed Tutorial:

https://www.youtube.com/watch?v=nRR46FQrWsI

Soft Proofing in Photoshop (Michael Breitung)

https://www.youtube.com/watch?v=WBvVQwPCr3w

Soft Proofing in Adobe Photoshop 2020 (Joshua Holko)

https://www.youtube.com/watch?v=c0VdVz7VL6M