## digital compass

Quite different from the Convert to Profile command, the Assign Profile command allows the user to tell Adobe Photoshop the actual definition of the numbers in a file.

It doesn't change the pixels or pixel values, just the meaning of the values. This command is usually necessary when some device or another user provides a file with no embedded profile. That's a problem, because Photoshop can only provide the correct color appearance when it knows the color profile that is associated with the image. To see this in action:

## Open an image in Photoshop.

1. Make sure Photoshop's **Info palette** is open and visible.

2. Select Photoshop's Eye Dropper Sampler tool (click on the I key to select this tool, shift-I will toggle through the Eye Dropper options). Be sure you have selected the Sampler and not the standard Eye Dropper tool, as seen in Figure 1. This tool allows you to place up to four sample points



Sample Stor: 5 b

Figure 1 shows the Photoshop Tool palette set for the Eye Dropper Sampler tool. Notice that when the cursor is paused above a tool, the tool tip shows up, labeling the selected tool.

## What is color management?

Part 7: The Assign Profile command

| Assign Profile  |                 |
|---|-----------------|
| Assign Profile:<br>O Don't Color Manage This Document | OK              |
| O Working RGB: Adobe RGB (1998)                       |                 |
| Profile: ColorMatch RGB                               | Preview Preview |

Figure 2 shows the Assign Profile command. Be sure the Preview check box is on.

within an image. Place all four sample points in your image and notice the numeric feedback on the Info palette.

3. Choose Image>Mode>Assign Profile, and make sure the Preview check box is on, as seen in Figure 2.

4. Select the **Profile** radio button and pick various ICC profiles in the pop-up menu list. You'll see the color appearance of the document change, but the numbers in the Info palette will remain the same. When you tell Photoshop which profile to associate with the document, it will update the preview based on that information. Click on the Cancel button when you're finished.

## When to use the Assign Profile command

Almost always with an untagged document, the Assign Profile command is how you'll tag (assign, embed) a profile to define its color. (In the rare instance that a user has assigned the *wrong* profile to a document, you could also use the Assign Profile command to correct it.)

Suppose you set your digital camera to capture an image in Adobe RGB 1998, but the camera fails to embed that data in the files. You would use the Assign Profile command to embed the correct color profile, thus to produce the correct color appearance.

There will also be times when someone or some device provides an untagged file, and you need to use this command to instruct Photoshop how to properly preview the data, and use it for future conversions to other color spaces.

There are only three options available in the Assign Profile dialog, but only one *correct* answer: Let's assume that you have to deal with an untagged file. Either you know the correct tag or you have to make a guess. If you know that the file's color space should be the current working space, you would pick the middle radio button, which would assign the working space to the image, or you would select the right profile from the pop-up menu.

The pop-up menu next to Profile will allow you to select any profile that resides on your computer. If you don't know the color space of the document, the task becomes a big guessing game. The only way to know the correct space for sure is to apply each and every profile until a good-looking preview appears. It's possible that none will work to your satisfaction. After you've tried assigning dozens of profiles only to find none produces a good color appearance, you'll be as frustrated as I am with an untagged workflow. I will say that if you're having to play the guessing game, first try assigning standard working spaces to your untagged RGB files. If the file came in such a space, your first guess will likely be the right answer. If the document is in CMYK (or for some reason an RGB output space), picking the right profile is akin to finding a needle in a haystack. If you're lucky, you might actually have a profile that is the right descriptor of the document, or reasonably close to it.

Using the option to untag a profile is something you should do with caution, considering the evils of untagged files. When you really do want to remove the profile from a document, select Don't Color Manage from the Assign Profile command. The profile will be stripped from the document, and it will be saved untagged. Now the next person in the workflow can go through the grief of figuring out the correct color space.

Why would you save a file without an embedded profile? Suppose you're sending a large group of images to a Web page. Most Web browsers can't recognize an embedded profile. The profile only increases the size of the resulting Web page file. In such a case, removing the profiles could make some sense.

Or suppose you have hundreds of images for a book or catalog, all in a print/output space, all set to go to one device. You know that no one will be opening, viewing or editing the files. With the numbers already optimized for the output device, there is little reason to have the profile embedded. You could apply the Don't Color Manage command to free up some of your disk space.

If all users were forced by law to tag their files with the correct ICC profile, Adobe might be able to remove the Assign Profile command. Since that's unlikely to happen, we'll continue to need some mechanism to deal with untagged or incorrectly tagged files. The Assign Profile command is such a mechanism.

Andrew Rodney consults and trains photographers, designers, print shops and government agencies, as well as Fortune 1000 companies. Rodney is the tech editor for ImagingRevue, www.imagingrevue.com.