

Overview

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Rendering Intents

Rendering intents indicate what you want a printer to do with colors that are outside its gamut.

ICC profiles support these rendering intents:

- **Perceptual**

If an image includes any colors that are out-of-gamut for the printer, the printer adjusts all the colors in the image, even those that are already in the gamut of the printer, so they are all in-gamut and maintain their color relationships to each other. The result is an image that is visually pleasing, but is not colorimetrically accurate. The perceptual rendering intent is useful for general reproduction of images, particularly photographs.

- **Saturation**

If a print job includes colors that are out-of-gamut for the printer, the printer replaces the out-of-gamut color with the nearest color in the gamut. It also adjusts the in-gamut colors so that they are more vivid. Saturation is the least used rendering intent, but it is useful for business graphics, such as images that contain charts or diagrams.

- **Relative colorimetric**

If a print job includes colors that are out-of-gamut for the printer, the printer substitutes the nearest in-gamut color; in-gamut colors are not adjusted. Colors printed on papers with different media white points might not match visually. The *media white point* is the color of the paper that the print job is printed on. For example, if you print an image on white paper, on off-white paper, and on blue paper by using the relative colorimetric rendering intent, the printer uses the same amount of ink or toner for each one and the resulting color is technically the same. However, the images might seem different because your eyes adjust to the color of the background and interpret the color differently. This rendering intent is typically used for vector graphics.

- **Absolute colorimetric**

All colors are mapped by using the same method as the relative colorimetric rendering intent, however, all colors are adjusted for the media white point. For example, if you print an image on white paper, on off-white paper, and on blue paper by using the absolute colorimetric rendering intent, the printer adjusts the ink or toner used for each one. The resulting color is technically not same, but the images might look the same because of the way your eyes interpret them in relationship to the color of the paper. The absolute colorimetric rendering intent is typically used for logos.

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