Optimizing ink usage without changing the color space

If you have already added CMYK input files to a color setup to give correct output color, you can add a Ink Optimizing Input device as a color input and define a DeviceLink between the Ink Optimizing Input device and the PCO to optimize ink usage without changing the color space of the input files.

LimitationIn the current version of ColorFlow, you cannot add an Ink Optimizing Input for a discontinuous Flexographic PCO.

1. Find the desired color setup that you want to optimize ink usage for.
2. Enable the **Devices** dialog box and drag the Ink Optimizing Input device to the color setup as a CI.
   Note: The Ink Optimizing Solution is a licensed feature. An Ink Optimizing Input device is available in the **Devices** dialog box if you have the license. The Ink Optimizing device condition is automatically defined. The color response of the Ink Optimizing device condition is a copy of the PCO's color response.
3. Click the **Conversion** icon ? Unknown Attachment between the CI and PCO to define a CI to PCO ICC DeviceLink.
4. To use the same settings that you use for pictures for text or linework , on the Graphic tab, select the Graphic Conversion Same as Image Conversion check box.
5. In the **Rendering Intent** list, choose the gamut mapping that should be used when mapping colors from one color gamut to another:
   The following table describes each rendering intent and their applications:

Rendering intent	Where to use for	Description
Perceptual	Photographs (scans and images)	Fits all colors in the source space into the destination space while preserving overall color relationships. This method is suitable for images that contain significant out-of-gamut colors (RGB to CMYK)
Saturation	Business graphics (charts and solid colors)	Converts saturated colors in the source to saturated colors in the destination. This method may not be suitable for preserving original colors in an image
Relative Colorimetric	Proof output where the destination gamut is larger than source gamut	Maps white in the source to white in the destination, reproducing all in-gamut colors and clipping out-of-gamut colors to the closest reproducible hue. This method preserves more of the original colors than the **Perceptual** method

Absolute Colorimetric	Proof output where the media white color of the source needs to be reproduced on the destination media	Maintains color accuracy and does not change any colors that fall inside the destination color gamut (including white)

6. Set up the following options:
   - **Total Ink Limit**: Specify the maximum sum of tint values of all the inks
   - **Black Start**: Specify the start point on the neutral axis for black ink. For example, if you set the start point value to 20%, tones less than 20% will print with CMY inks only
   - **Max Black**: Specify the maximum allowable percentage of black ink used in the black separation
   - **Black Strength**: Use the slider or the text box to specify the relative quantity of black vs cyan, magenta, and yellow used to generate the neutral gray component of colors. As you move the slider towards the maximum value, colors can contain more black
   - For **Perceptual** rendering intent, you can adjust the way the source gamut is mapped to the destination gamut by entering the desired value in the **Brightness Boost** and **Contrast Boost** boxes. It's recommended that you generate the profile with default settings, and then adjust the **Brightness Boost** and **Contrast Boost** settings if the visual appearance of separated images is not pleasing
7. Click **OK**.