

# Ink Optimizing Solution

You can use the Ink Optimizing Solution (a licensed feature) to generate DeviceLinks. The solution reduces ink consumption and improves color stability. It reseparates images using Gray Component Replacement (GCR), which replaces achromatic CMY color components with black ink, which reduces the amount of C, M, and Y inks used in [midtones](#) and [3/4 tones](#).

The following image shows an example of ink-optimized separation:



For more information about Gray Component Replacement, see [Reducing Ink Consumption on Press: Using GCR or UCR Separations and Re-separations for Offset Printing White Paper](#).

Ink Optimizing can be used for Refine and Output:

Ink Optimizing Solution for Refine	If CMYK input files have already been added in a color setup to give correct output color, to apply Ink Optimizing Solution without changing the color space of the input file, add an <b>Ink Optimizing Input</b> device as the color input for the color setup. See instructions <a href="#">here</a>
	To apply Ink Optimizing Solution and also change color space of the input file, add a <b>CMYK Reference</b> device as the color input for the color setup, and select the <b>Ink Optimizing Solution</b> DeviceLink method during the <a href="#">color input conversion</a>
Ink Optimizing Solution for Output	If the output device condition you want to apply Ink Optimization Solution for is the PCO, select the <b>Ink Optimizing Solution</b> DeviceLink method in the <a href="#">PCO simulation</a>
	If the output device condition you want to apply Ink Optimization Solution for is an SCO, select the <b>Ink Optimizing Solution</b> DeviceLink method in the <a href="#">SCO conversion</a>

## Related topics

- [Best practices for Ink Optimizing Solution](#)
- [Verifying your ink savings](#)
- [Troubleshooting the Ink Optimizing Solution](#)