



## Understanding Emulate Overprint

### At A Glance:

Emulate Overprint is a setting within PDFRender Separation parameters that allows mapping between colors and facilitates the overprinting of transparent and other unique layers during the render process.

### Applies To:

Prepress Manage, Integrate, Control, Render

### How It Works:

When a spot color is converted to process, a set of CMYK values are determined and used. When the spot color overlays other color or image elements, these must be handled and their color values potentially adjusted. Transparencies, blends, duotones, pre-separated files and color space conversions introduce additional rendering challenges. Emulate Overprint was designed to automatically compensate for potential rendering issues.

Based on input file types, required color (behavior) and document content, Emulate Overprint is automatically activated or deactivated on a color by color basis.

On a normal composite file, Emulate Overprint is enabled when mapping spot to process or process to process, and when converting spot colors with transparency, blends or duotones. If a pre-separated file is printed, Emulate Overprint is required for any mapping or overprinting.

*Note: for best results, spectral color books (Pantone 2005 and GOE Books) and spectral press profiles must be used. Accurate Spot Mixing also should be enabled. Using CMYK values from the originating application or that have been manually entered in the job ticket will result in unpredictable results.*

### Why is this Important:

Emulate Overprint automatically compensates for potential rendering issues. This feature was first introduced with PDFRender in Prepress 4, it has been enhanced with Prepress 7 to be more automatic and require less user intervention.

Advanced Overprint Handling preserves the Adobe Level 1 Overprint behavior during CMYK to CMYK conversions even if applied to separate objects that will be flattened or resolved afterwards. Color-converting objects with level 1 attributes can be risky because the resulting color after CMYK-CMYK conversion combined with the overprint attributes can result in significant color differences. This algorithm is also referred to as zero/nonzero preserving feature, however it is completely hidden from the user and automatically enabled.

Warnings can be enabled in the Debug tab of the PDFRender configuration, but are disabled by default.