About overprint handling

Overprint handling is a feature in the **ColorConvert** section of the process template that helps to prevent overprinting objects from generating unintended knockouts. You can apply overprint handling in the refine, loose page output, and imposition output process templates.
The following examples show the effects of using overprint handling.
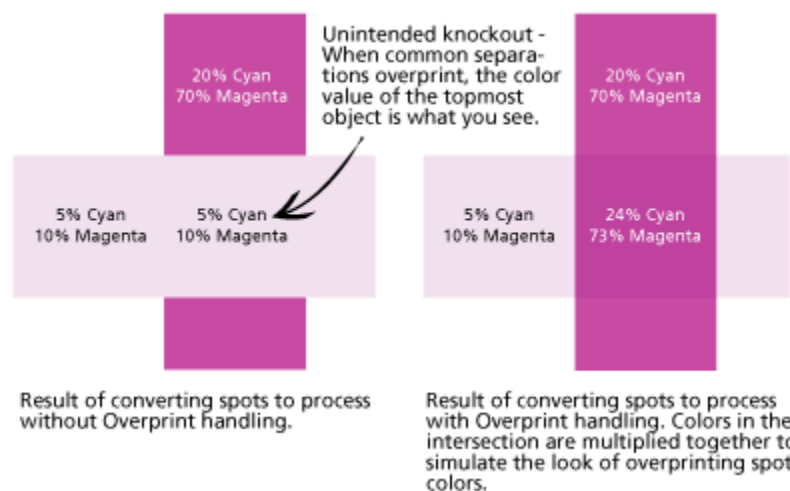
Example 1: All colors are shared

100% Dark Purple

100% Light Purple   100% Dark Purple
Set to Overprint   100% Light Purple

Originally, file is built with spot colors.
Since no separations are in common,
overprinting gives this result.

Figure 1. The desired overprint effect

20% Cyan
70% Magenta

Unintended knockout -
When common separa-
tions overprint, the color
value of the topmost
object is what you see.

20% Cyan
70% Magenta

5% Cyan   5% Cyan
10% Magenta   10% Magenta

5% Cyan   24% Cyan
10% Magenta   73% Magenta

Result of converting spots to process
without Overprint handling.

Result of converting spots to process
with Overprint handling. Colors in the
intersection are multiplied together to
simulate the look of overprinting spot
colors.

Figure 2. The outcome without and with overprint handling

Example 2: Some shared, some unshared colors

100% Dark Pink

100% Spot Blue
Set to Overprint

100% Dark Pink
100% Spot Blue

Originally, file is built with spot colors.
Since no separations are in common,
overprinting gives this result.

Figure 3. The desired overprint effect

70% Magenta
10% Yellow

Unintended knockout -
When common separa-
tions overprint, the color
value of the topmost
object is what you see.

70% Magenta
10% Yellow

70% Cyan
10% Magenta

70% Cyan
10% Magenta
10% Yellow

70% Cyan
10% Magenta

70% Cyan
73% Magenta
10% Yellow

Result of converting spots to process
without Overprint handling.

Result of converting spots to process
with Overprint handling. Colors in the
intersection are multiplied together to
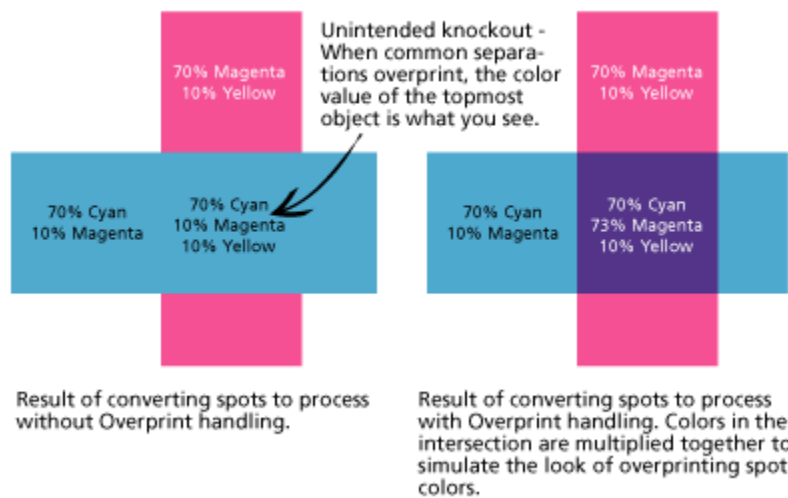simulate the look of overprinting spot
colors.

Figure 4. The outcome without and with overprint handling

Multiplicative blend formula

Prinergy uses the following formula to calculate the proper channel color amount for the intersecting area of overprinting objects:

1 - (1 - Color1) x (1 - Color2) = multiplicative blended amount

where Color1 and Color2 are the underlying and overprinting amounts of a shared channel color. For example, if 70% magenta and 10% magenta were used, then Color1 and Color2 would be 0.7 and 0.1.