

About transparency support

Transparency is an effect that you can build in Adobe Illustrator 9 and later and Adobe InDesign 2 and later. When you write a PDF 1.4 file from these software applications, the file contains native transparency.

Prinerger supports transparent objects in digital masters. This transparency support should:

- Enable simpler, faster, and more accurate trapping
- Retain the number of editable objects in Acrobat
- Help to eliminate artifacts (on output, especially in low-resolution proofs) that are sometimes introduced during flattening

Differences between Prinerger versions

Prior to Prinerger 4, transparent objects in PDF 1.4 and later files had to be flattened to PDF 1.3 objects during the normalizing process. Flattening is the process of converting all overlapping transparent areas into discrete, opaque areas to represent the look of the original transparency. Flattening retains the vector integrity of the objects as much as possible; however, flattening may rasterize some objects, depending upon file complexity.

The flattening feature is available in Prinerger 4 and later by selecting **Flatten to PDF 1.3** in the **Normalize** section of the refine process template.

Handling files with transparency

The following file formats (by their nature) do not contain native transparency:

- PS
- EPS
- DCS
- PDF 1.3 or earlier
- PDF/X-1a (PDF/X-1a is a restricted subset of PDF that prohibits transparency.)

(If the original file had contained transparency effects, they would have been flattened.)

Because these formats do not include native transparency, they cannot take advantage of Prinerger 4's transparency handling.

To take advantage of Prinerger's transparency handling, ensure that your incoming files contain native (unflattened) transparency. To do this, save incoming files as PDF 1.4 or later in Illustrator and InDesign.

To determine whether a PDF file contains native transparency, open the file in Acrobat and use the Transparency Flattening tool (the location of this varies by Acrobat version). Set the **Highlight** list to **Transparent Objects**. If any objects in the preview appear in red, there is native transparency in the file.

You can preserve transparency during the refine process. The **PDF 1.4 to PDF 1.6 (Acrobat 5 to 7)** list on the **Normalize** pane in the refine process template has the following options:

- **Flatten to PDF 1.3:** Prinerger detects and flattens all files with native PDF 1.4 transparency, using the highest quality setting. This is the behavior from Prinerger 3 and earlier.
- **Leave as is:** Prinerger detects and preserves transparent effects in PDF 1.4 or later files.
- **Fail:** Prinerger detects but fails when it encounters transparent objects.

Processing transparent files: possible approaches

Desktop Application	Refine	Output	Notes
Save as PDF 1.3 input	Refine to PDF 1.3 digital master	Output with CPSI RIP	This workflow was possible in Prinergy 3.x. Flattening occurs at the input creation step (from the desktop software). Sites that receive PostScript, EPS, DCS, PDF 1.3, or PDF/X:1-a input use this workflow. This workflow is useful when you need PDF 1.3, PDF/X-1a, or PostScript for downstream processing and want to put the responsibility for flattening on the page creator.
Save as PDF 1.4 input	Refine to PDF 1.3 digital master	Output with CPSI RIP	This workflow was possible in Prinergy 3.x. Sites that receive PDF 1.4 or later can use this workflow. Flattening occurs when Prinergy refines the input file. This workflow is useful when you need PDF 1.3, PDF/X-1a, or PostScript for downstream processing but want Prinergy to perform the flattening. (Prinergy's flattening assumes highest quality output so there is no possibility of the file being flattened with quality settings that are too low.)
Save as PDF 1.4 input	Refine to PDF 1.4 digital master	Output with CPSI RIP	This workflow is possible only in Prinergy 4.0 and later. Sites that receive PDF 1.4 or later can use this workflow. Flattening only occurs when Prinergy's CPSI RIP processes the PDF digital master file. This workflow is useful when you want the benefit of native transparency workflow and prefer the file not to be flattened during refine. Drawbacks to this are that CPSI RIP's flattening can slow output. Flattening can take time on complex files so not flattening on input means you are deferring flattening to the output stage. Additionally, when pages have text below transparent images, for example, low-resolution proofs might still have text that looks fat.
Save as PDF 1.4 input	Refine to PDF 1.4 digital master	Output with Adobe PDF Print Engine	This workflow is possible only in Prinergy 4.0 and later. Sites that receive PDF 1.4 or later can use this workflow. Flattening does not occur in this workflow. This workflow is useful when you want the benefit of native transparency workflow and prefer the file not to be flattened.

Important Note:

Color matching certain files with transparent objects can result in significant changes in appearance. The problem is file specific and is dependent on the transparency blending modes applied, the object's color and the DeviceLink or ICC profile used to colorconvert the objects. The problem occurs because each graphic and image object used in the transparency group is color-converted separately. Blending of the objects in the destination color space changes the appearance.

Recommendation: Flatten the PDF files. If your PDF files contain RGB data, it is highly recommended to Color-Convert this data prior to flattening. Please refer to Kodak Customer Portal Answer ID 72326 for best practices and setting up a 2-Step refine.