

Activity 12: Maintain transparency attributes

Overview

Why you should complete this activity

The transparency feature maintains transparent objects in PDF files 1.4 and newer, without flattening the file, therefore preserving the improved attributes of transparent objects in a native transparency file.

This activity is important because it illustrates how to:

- Maintain native transparent attributes associated with PDF versions 1.4 and higher
- Maintain these attributes in a Prinergy workflow

What you'll need

For this activity you need to locate:

- Prinergy Activity Practice Files / Act_12_Transparency

The instructor or coach will provide you with the location of the practice files.

Note: This activity is optional.

The aim of this activity is to demonstrate how transparent objects saved as PDF 1.4 and newer, can be maintained in Prinergy. This activity is rated as optional, as not all customers will use this feature.

Use this activity to describe and demonstrate the feature and why it is used. The file used for this activity is very basic, but easily demonstrates the function of the feature. Use any customer files for additional practice if available.

If you need an additional file for further explanation/illustration, locate the AloeSoapBox wTransp.pdf file located in the Prinergy Activity Practice Files/Act_12_Transparency folder (available on the Kodak Partner Place internet portal at <https://partnerplace.kodak.com/>).

If you skipped Activity 1, consult the Activity 1 *Instructor's Notes* for information about best practices for managing activity practice files during a training session. Activity 1 also contains important information related to the Prinergy client and server relationship, which could be helpful to the customer.

What you need to know

Definition of Flattened Transparency

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

- PS
- EPS
- DCS
- PDF 1.3 or earlier
- PDF/X-1a

As these formats do not include native transparency, they will not be gaining any further benefits by using the transparency feature.

Definition of Native Transparency

Native transparency files support transparent objects in a digital master. Native transparency files contain improved attributes and consist of PDF versions 1.4 and newer.

Some of the improvements linked to native transparency are:

- Smaller file size
- Simpler to edit
- Easier to trap
- Don't contain flatten "bugs" such as:
 - incorrect flattening
 - fatter text
 - artifacts

Where does this feature get applied in Prinergy?

Transparent objects are reserved during the refine process. In the Refine process template, the **Normalize** pane provides the following options:

- **Flatten to PDF 1.3** - Prinergy will detect and flatten all files with native PDF 1.4 transparency using the highest quality setting. This is the behavior from Prinergy 3 and earlier.
- **Leave as is** - Prinergy will detect and preserve transparent effects in PDF 1.4 or later files.
- **Fail** - Prinergy will detect but fail when encountering transparent objects

Transparency workflows in Prinergy

Workflows\ Stages	Design Applications	Prinergy 4 + later Refine Process	Prinergy 4 + later RIP
Workflow 1	Acrobat 1.3 or older <i>Flattening here</i>	Flatten to 1.3 or Leave as is	CPSI or Acrobat PDF Print Engine
Workflow 2	Acrobat 1.4 or later	Flatten to 1.3 Flattening here	CPSI or Acrobat PDF Print Engine
Workflow 3	Acrobat 1.4 or later	Leave as is	CPSI Flattening here
Workflow 4 No flattening at all	Acrobat 1.4 or later	Leave as is	Acrobat PDF Print Engine

PDF 1.3 Input > Refine to PDF 1.3 digital master > Output with CPSI RIP

Flattening occurs at the input creation step (from the desktop application). Sites that receive PostScript, EPS, DCS, PDF 1.3, or PDF/X:1-a input use this. This workflow is useful for people that need PDF 1.3, PDF/X-1a or PostScript for downstream processing, and want to put the responsibility for flattening on the page creator.

- **Application:** Save as 1.3
- **Refine:** Flatten to PDF 1.3 or Leave as is
- **RIP:** CPSI or Adobe PDF Print Engine

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 higher can use this. Flattening occurs when Prinergy Refines the input file. This workflow is useful for people that 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).

- **Application:** Save as 1.4
- **Refine:** Flatten to PDF 1.3
- **RIP:** CPSI or Adobe PDF Print Engine

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 up. Sites that receive PDF 1.4 or higher can use this. Flattening only occurs when Prinergy's CPSI RIP processes the PDF digital master file. This workflow is useful for people that want the benefit of native transparency workflow, and prefer the file not to be flattened during Refine.

Drawbacks to this is that CPSI'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.

- **Application:** Save as 1.4
- **Refine:** Leave as is
- **RIP:** CPSI

PDF 1.4 Input > Refine to PDF 1.4 digital master > Output with Adobe PDF Print Engine RIP (APPE)

This workflow is possible only in Prinergy 4.0 and up. Sites that receive PDF 1.4 or higher can use this. Flattening does not occur anywhere in this workflow. This workflow is useful for people that want the benefit of native transparency workflow, and prefer the file not to be flattened. Drawbacks to this is that the Adobe PDF Print Engine may sometimes render transparency blend modes in unexpected ways.

- **Application:** Save as 1.4
- **Refine:** Leave as is
- **RIP:** Adobe PDF Print Engine

Note: If you are completing this activity on your own or coaching others in your shop, copy the Prinerger Activity Practice Files folder (available on the Kodak Partner Place internet portal at <https://partnerplace.kodak.com/>) directly to your workstation. For further information about these procedures, see Activity 1.

Process templates used:

- Refine process template: **Refine > Refine > 1st Ref-Normz**