Overview

AFP color and grayscale solutions

You can assemble printing products from Ricoh and other companies in different configurations to support Advanced Function Presentation (AFP) color and grayscale printing, including configurations that use the AFP Color Management Object Content Architecture (CMOCA) to provide optimal performance and color accuracy in high-speed color printing.

Color printing without explicit color management

You can include color images or specify colors for AFP objects in your print jobs and send them to an AFP color printer. The color images and objects print in color, based on the default settings in your print server and printer.

If you like the colors that the default color management settings provide, or if it is not essential that you print in exactly the right colors, you probably do not need to implement a full color management solution. However, if you want better control over the consistency and accuracy of your colors for devices, you might consider color management at some point in the future.

To understand some of the basic concepts about color printing, see:

- Color Printing Concepts
- Grayscale Printing Concepts

Resources that document composition software includes inline

Most often, print bureaus use document composition software to generate highly customized and personalized color output. AFP color management is largely built into the document composition tools that support their processes. The software puts all the resources that the printer needs into the print job and sends it to a print server. The print server sends the print job to the printer, and the printer uses the resources as appropriate.

By using this method, you know that the required resources, including the resources required for color management, are available for any print job that is sent to the printer. However, including all the resources can make the print job very large, and moving large print jobs through your system might slow down system performance. Also, you might not be able to save resources that are downloaded with a print job on the printer so they can be reused without being downloaded later.

For more information about color printing, see:

- General information about color printing and color management:
  - Color Printing Concepts
  - Color Management
- Tips for images
- Scenario describing a possible implementation:
  Eliminating physical inserts

For a list of the companies that participate in the AFP Consortium and support AFP color management in their products, see:

http://www.afpcinc.org

Resources stored and managed centrally

To take full advantage of the AFP CMOCA, you can store your color and image resources in a central resource library, and let your print system manage those resources. This option optimizes system performance by:

- Creating some of the color management resources for you automatically
- Reducing the number of color conversion resources that the system creates at print time by generating link color conversion color management resources in advance
- Reducing the size of some images by removing embedded profiles when you store them, yet still retaining the association between the image and the profile
- Letting you mark resources as *capturable*, so they can be saved on the printer and used in other print jobs without being downloaded again

For an introduction to the full AFP CMOCA and how you might implement it, see:

- General information about color and grayscale printing and color management:
  - Color Printing Concepts
  - Grayscale Printing Concepts
  - Color Management
- AFP Color Management
- RICOH AFP Resource Installer

- [RICOH AFP color and grayscale products](#)
- [AFP color solution scenarios](#)
- [Related publications](#)
- Scenario describing a possible implementation:
  [Replacing pre-printed forms](#)

Parent topic: [Color and Grayscale Printing](#)