

## Overview

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# Printing high-quality grayscale output on an InfoPrint 4100 printer

An insurance company wants to migrate to AFP color printing slowly, so they start the process by using AFP color management to print high-quality grayscale output on their InfoPrint 4100 printers.

The insurance company runs an in-house print shop that has four duplex InfoPrint 4100 lines. They use a document composition tool to create AFP print jobs and submit the jobs to InfoPrint Manager for Windows, which they use to balance the printing loads and keep all the printers running as much as possible.

They have decided that they want to add images to some of their output. To start, they want to add photographs of their insurance agents to the letterhead on letters to their clients. They are not ready to move into full color printing, so they want to print black and white images using their existing printers. Unfortunately, they have not been satisfied with the appearance of the images; they are too black and one-dimensional, so they look unprofessional.

## The solution

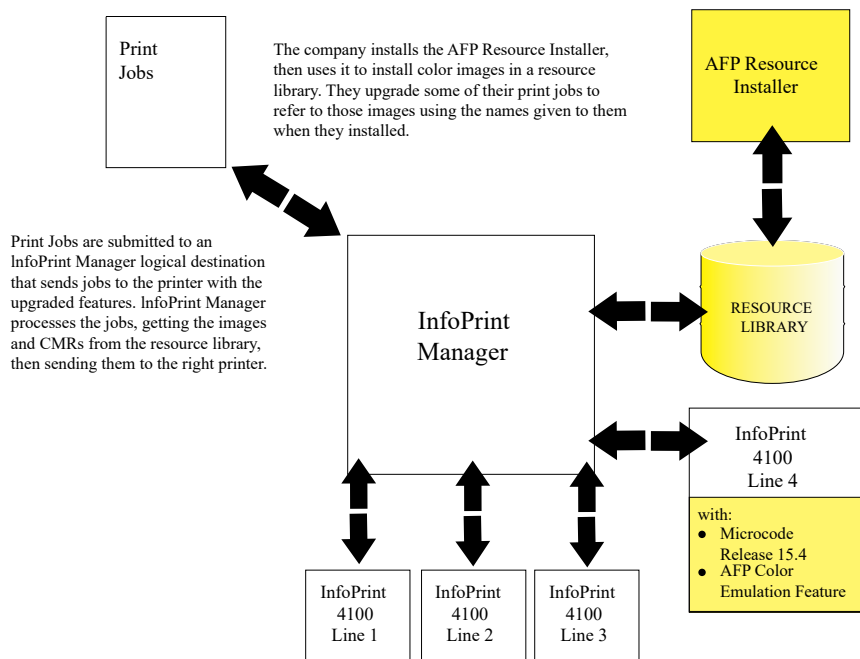
The Ricoh team suggests these changes to improve image quality:

- Upgrade the printer to use a controller with the InfoPrint POWER architecture with microcode release 15.4 or later. This update adds support for the AFP color management, which includes high-quality grayscale printing using halftones and tone transfer curves.
- Purchase and install the AFP Color Emulation feature for the printer.
- Use AFP Resource Installer to manage the images, including associating them with the correct halftones and tone transfer curves to create the best quality output.

Solution diagram for adding AFP Resource Installer and a resource library, and updating one InfoPrint 4100 printer line to use microcode release 15.4 and the AFP Color Emulation Feature.

□ Existing system objects

■ New system objects



## Implementation

To implement the solution, the print shop works with their Ricoh representatives to upgrade one of their print lines to try the new function. They:

- Upgrade the print controller to the microcode release 15.4 or later.
- Install the AFP Color Emulation feature on the printer controller.
- Install AFP Resource Installer.
- Use AFP Resource Installer to:
  - Create and install the color conversion CMRs for the InfoPrint 4100 printer and for the digital camera used to take the photographs.

- Choose the generic halftone and tone transfer curve CMRs to use with the InfoPrint 4100 based on the line screen frequency and appearance values that you want to use.
- Install the photographs of the insurance agents in a resource library, then associate them with the appropriate CMRs.
- Update the RICOH InfoPrint Manager destinations so they send the print jobs that contain photographs to the printer line that has the AFP Color Emulation feature installed.
- Create print jobs that call the images using the names that they were given when they were installed.

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