Overview

AFP Support

The AFP Support feature lets you control and track jobs and individual documents in Advanced Function Presentation (AFP) format.

AFP is a set of formal information presentation architectures, including Mixed Object Document Content Architecture (MO:DCA) and Intelligent Printer Data Stream (IPDS) protocol. The printer driver component converts a device-independent AFP data stream into IPDS for input to printers.

AFP provides:

- A transaction-oriented data stream that guarantees integrity between the RICOH ProcessDirector server and its printers because the printers can deliver the exact status of every page as it is received, printed, and stacked.
- Support for open, industry-standard data formats.
- Secure central management of resources. Resources do not need to reside on each printer. They can be loaded once, processed as raster images, and then reused. Confidential resources like digital signatures can be downloaded on demand and deleted at the end of a job.

When processing documents within jobs, AFP carries the information that defines the documents within the data stream for the job. A separate control file is not required to define the documents in the data stream.

The AFP Support feature has these major parts:

- A new type of input device with supplied examples
- Two new types of printer devices
- New scheduling properties
- New step templates
- New workflows
- Resources
- Document processing functions

Download input device type

You can send jobs to download input devices from a z/OS host using Download for z/OS or AFP Download Plus. The **DownloadAFP** input device accepts AFP data sets. The **DownloadLineData** input device accepts line data or mixed-mode data.

AFP and PCLOut printer device types

AFP printer devices represent Intelligent Printer Data Stream (IPDS) printers. They print jobs in AFP format, including jobs that have been converted to AFP format by Transform features. AFP printer devices include many additional printer properties that control data formatting, resource and color management, and communication between the RICOH ProcessDirector server and its printers.

PCLOut printer devices represent Printer Command Language (PCL) printers. They print jobs that are submitted in AFP format and automatically converted to PCL format by the AFP print driver component of RICOH ProcessDirector. You specify the command that sends the jobs to the printer. PCLOut printer devices include some of the additional printer properties provided with AFP printer devices.

New scheduling properties

The AFP Support feature adds these scheduling properties for jobs: **Job class**, **Job destination**, and **Job form**.

The feature adds these scheduling properties for printers: **Printer class**, **Printer destination**, and **Printer form**.

New step templates

The feature adds several step templates for processing AFP jobs within workflows. For example:

- A step based on the **ConvertLineDataJobIntoAFP** step template converts a line-data job into the AFP format and sets a variety of job properties that control the conversion process.
- A step based on the **EnableRepositioning** step template locates the beginning of each page in an AFP or PDF job for use with the RICOH ProcessDirector viewer component. The step lets you select individual documents to print again or jump to if a printer error occurs.
- A step based on the **InsertCMR** step template inserts an AFP color management resource (CMR) into a job.

New workflows

The feature supplies several workflows that you can use as templates for creating your own workflows. For example:

- The **AFP** workflow processes AFP input files that are submitted to a hot folder input device or with the LPD protocol.

- The **PreviewPrintWithColorManagement** workflow prints two samples of a job to an InfoPrint® 5000 using different AFP CMRs. You can then print the entire job using the CMRs you choose.
- The **OutputPDF** workflow uses Transform Features to convert jobs in different data streams (such as AFP, PCL, PostScript, and SAP) to PDF files. For example, you can use the workflow to copy PDF files into a hot folder that is associated with your printer. The AFP Support feature is a prerequisite for the Transform Features.
- The **Transform** workflow calls a RICOH ProcessDirector Transform or InfoPrint Transform Manager to convert the input files to the AFP format.

Resources

The feature supplies these resources:

- Form definitions that describe the characteristics of a form: overlays required (if any), the paper source (for cut-sheet printers), duplexed printing, text suppression, and the position of the composed-text data on the form.
- AFP color management resources (CMRs) that provide all the color management information, such as ICC profiles and halftones, that an AFP system needs to process a print job and maintain consistent color from one device to another.
- AFP Compatibility Fonts, including both uniformly spaced and mixed-pitch type families.
- AFP page definition resources that contain a set of formatting controls, including: the number of lines per sheet, font selection, print direction, and mappings for individual data fields to positions on the composed page.
- Configuration files for banner pages to print on AFP printers, including the separator page that prints between copies of a multi-copy AFP job.

Document processing functions

To process individual documents within AFP jobs, the AFP Support feature adds:

- RICOH Visual Workbench
  The AFP Indexer mode of RICOH Visual Workbench lets you identify documents and create index tags in AFP files. When you view an AFP file that contains documents and index tags in RICOH ProcessDirector, you can navigate in the file to find pages containing specific values for the index tags. You can also reprint all the pages in one or more documents.
  The Document Property Designer mode lets you customize document and job properties for AFP files. A customized property can contain the value of any index tag in an AFP document.
  The AFP Enhancer mode lets you create barcodes and text, and hide areas that contain unwanted content, such as obsolete barcodes.
- New step templates
  Steps based on the **IdentifyDocuments** and **BuildAFPFromDocuments** step templates identify documents, extract document data values for index tags, and apply document changes made with RICOH Visual Workbench to AFP jobs.
  Steps based on the **SortDocuments**, **SplitDocuments**, and **GroupDocuments** step templates let you manipulate documents within a single file and output the documents as one or more new jobs.
  A step based on the **SetDocPropsFromList** step template lets you set the value of a document property from a list file that is external to RICOH ProcessDirector. You can use the value of the document property to group documents in a job for common processing.
  If you convert AFP documents to PDF, a step based on the **EmailDocuments** step template lets you email each PDF document in a job as an attachment to an individual email address.

Parent topic: [AFP datastream support](#)