

## Overview

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## Input file formats

You can submit several types of input files to RICOH ProcessDirector to process and print.

The input file types that can be submitted to RICOH ProcessDirector are:

### ***Advanced Function Presentation (AFP)***

A composed format that can contain text, graphics, images, and barcodes. Composition instructions are in the form of Mixed Object Document Content Architecture (MO:DCA) structured fields. AFP resources, such as fonts, can either be stored externally or embedded in the AFP data stream. AFP is the file format RICOH ProcessDirector uses to print jobs on IPDS printers if the AFP Support feature is installed. Without the AFP Support feature, you can view AFP jobs and pass them to other programs.

### ***ABAP***

Contains data that is in the SAP Advanced Business Application Programming (ABAP) format.

### ***DBCS ASCII***

Contains data that is encoded in a double-byte character set (DBCS) ASCII code page.

### ***DBCS EUC***

Contains data that is encoded in a double-byte character set (DBCS) Extended UNIX Code (EUC) code page.

### ***ditroff***

Contains device-independent troff (ditroff) data preformatted for an AFP device.

### ***GIF***

Contains image data that is in the Graphics Interchange Format (GIF).

### ***Image data***

Contains image data that is in the Image Object Content Architecture (IOCA) format.

### ***JPEG***

Contains image data that is in the Joint Photographic Experts Group (JPEG) format.

### ***JSON***

Contains data that is in the JavaScript Object Notation (JSON) format.

### ***LCDS***

Contains data that is in the Xerox line-conditioned data stream (LCDS) format.

### ***Line data***

A combination of plain text and formatting controls, such as carriage controls and table reference characters (TRCs) for spacing and font selections. You can instruct RICOH ProcessDirector to use a composition product, such as the **line2afp** transform that it provides, to process line data input files.

### ***Metacode***

Contains data that is in the Xerox metacode format.

### ***Mixed mode***

Input files that contain combinations of line data and MO:DCA structured fields. Mixed mode input files can only be processed if the AFP Support feature is installed.

### ***OTF***

Contains data that is in the SAP Output Text Format (OTF).

### ***PCL***

Contains data that is in the Hewlett-Packard Printer Control Language (PCL) format.

### ***PDF***

Contains data that is in the Adobe Portable Document Format (PDF) format.

When RICOH ProcessDirector processes PDF 2.0 input files in a workflow, steps that modify PDF files convert the data to PDF 1.7 format. If no steps in the workflow modify the PDF, the input file passes through RICOH ProcessDirector in PDF 2.0 format. PDF 2.0 files that are sent to a Ricoh PDF, TASKalfa, or Ricoh TotalFlow printer with banner pages turned on are also converted to PDF 1.7 format.

### ***PostScript***

Contains data that is in the Adobe PostScript format.

### ***PPML***

Contains data that is in the Personalized Print Markup Language (PPML) format.

### ***TIFF***

Contains image data that is in the Tagged Image File Format (TIFF).

#### **XML**

Contains data that is in the Extended Markup Language (XML) format.

Depending on your printers, you may need to use data transforms to convert some of these formats into a format that your printers support. Several products provide data transforms:

- The RICOH Transform features can convert these input file formats to AFP:
  - GIF, JPEG, and TIFF
  - PCL
  - PDF and PostScript
  - SAP OTF and ABAP
- It can convert the following input file format to PDF:
  - AFP
- You must install the AFP Support feature to use the RICOH Transform features.
- If you have RICOH InfoPrint XT installed on the RICOH ProcessDirector primary computer, secondary computer, or on the same computer as an application server, you can also use it to convert Xerox metacode and LCDS data to AFP. To use InfoPrint XT, include a step that runs the transform program in the appropriate workflow and configure the step to run on the computer where InfoPrint XT is installed.

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