

Release Notes for RICOH InfoPrint Manager for Linux 4.13.1

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This edition applies to InfoPrint Manager for Linux, Version 4 Release 13.1. It is available in the RICOH Software Information Center at https://help.ricohsoftware.com/swinfocenter.

We encourage you to become part of the InfoPrint Manager community by visiting our forum at http://rpp.ricoh-ipm.forums.net, where you can engage in InfoPrint Manager related discussions. Register your account and start participating in the InfoPrint Manager forum threads.

InfoPrint Manager provides an Ideas portal for InfoPrint Manager users to submit feedback to the product management team directly from the product interface. The Ideas portal link is https://ipm-ideas.ricohsoftware.com/.

A new online platform has been rolled out for InfoPrint Manager customers to engage the support team. It is available at https://support.ricohsoftware.com and allows customers to open and manage support tickets across their organization. For more information about registering and working with support tickets using the new online platform, visit https://help.ricohsoftware.com/swinfocenter/ricoh-software-support/support_project.ditamap/\$/support_using_support_site.



• To find out if your country supports opening and managing support tickets directly by customers, contact your local Ricoh representative.

All InfoPrint Manager servers and clients must be upgraded to the same version. Do not forget to upgrade any secondary InfoPrint Manager servers.

If you are upgrading multiple servers, keep all clients at the older (4.9.1 or earlier) level until all servers are upgraded to 4.9.2 or later. Then upgrade the clients.

You must agree to the terms of the Software Maintenance Agreement (SWMA) prior to installing the InfoPrint Manager software.

What's new in Release 4.13.1?

• Added the new DFE DSS to InfoPrint Manager. The DFE DSS lets InfoPrint Manager send jobs to Ricoh color engines through a DFE (Digital FrontEnd) print server, using its added performance and advanced workflow tools. With the DFE DSS, users submit jobs to an InfoPrint Manager logical destination or queue, and InfoPrint Manager sends the job to the DFE print server. The DFE processes the data, optimizing it for the capabilities of the specific printer. The DFE communicates with the printer, providing instructions on how to execute the optimized print job. Then the printer, driven by the DFE print server, produces the document according to the optimized instructions.

For more information, see RICOH InfoPrint Manager: Reference, the DFE actual destination attributes topics and RICOH InfoPrint Manager for Linux: Getting Started, the "Understanding Destination Support Systems (DSS)" section.

 Added an interactive command line method to install or update the InfoPrint Manager server on Linux using dnf or zypper. For more information, see RICOH InfoPrint Manager for Linux: Getting Started the "Installation options" topics and RICOH InfoPrint Manager: Reference, the "install.sh" and "allocfs.sh" utilities sections.

• Added DPF support on Linux for job submission in InfoPrint Manager.

For more information, see *RICOH InfoPrint Manager: Reference*, the "dpfcmd command" topic and the InfoPrint Manager Web Management Interface (WMI) Help.

 Added JPEG compression for Artifex (ps/pcl) and page size control -psc for PDF files via Artifex.

For more information, see RICOH InfoPrint Manager: Reference, the "pdf2afp and ps2afp commands: transform PDF or PostScript data to AFP" section.

• Enhanced the ismu utility to support short parameters.

For more information, see RICOH InfoPrint Manager: Reference, the "ismu utility" section.

- InfoPrint Manager Web Management Interface (WMI) enhancements:
 - DPF receiver operations on Windows
 - Print test job function

For more information, see the InfoPrint Manager Web Management Interface Help.

• Updated InfoPrint Select to use the Windows notifications area and added a printer selection dialog.

For more information, see RICOH InfoPrint Manager for Linux: Getting Started, the "Working with InfoPrint Select notifications" topic.

Added color (FS45) PCL support to PSF Other and PSF Command DSS.

For more information, see *RICOH InfoPrint Manager: Reference*, the "color-bits-per-plane" and "color-bits-per-plane-supported" attribute topics.

 Added the default-input-tray and media-requested attributes to Print Rules to allow for greater flexibility in creating workflows with InfoPrint Manager.

For more information, see the InfoPrint Manager Web Administration Interface (Web GUI) Help.

- Replaced slick-grid with ag-grid as a performance enhancement for Web GUI.
- The AFP Workbench Viewer now processes Metadata Object Content Architecture. If the
 opened AFP document contains metadata, the new menu option Metadata/View Metadata
 will open a new window to display metadata content and allow users to navigate. The
 Viewer also allows the metadata to be extracted into an XML file, by selecting Metadata/
 Export Metadata.
- Added support for RICOH Pro VC80000.
- Dropped support for Oracle 7, RHEL 7, and SLES 12.
- The following printer models are deprecated and will be removed in the next release. They will still be supported as generic printers:
 - InfoPrint 75
 - InfoPrint 100
 - InfoPrint Color 130 Plus
 - InfoPrint EMP156

- InfoPrint PRO C900AFP
- InfoPrint PRO C901
- InfoPrint PRO C901S
- InfoPrint Pro 907
- InfoPrint Pro 907EX
- InfoPrint Pro 1107
- InfoPrint Pro 1107EX
- InfoPrint Pro 1357
- InfoPrint Pro 1357EX
- InfoPrint 1145 (no MFP support)
- InfoPrint 1422
- InfoPrint 1532
- InfoPrint 1540 MFP
- InfoPrint 1552
- InfoPrint 1560 MFP
- InfoPrint Color 1567
- InfoPrint 1570 MFP
- InfoPrint 1572
- InfoPrint 1572 MFP
- InfoPrint 1580 MFP
- InfoPrint 1585
- InfoPrint Color 1654
- InfoPrint Color 1664
- InfoPrint Color 1754 Express
- InfoPrint Color 1759 MFP
- InfoPrint Color 1764
- InfoPrint Color 1764 MFP
- InfoPrint Color 1767
- InfoPrint Color 1769 MFP
- InfoPrint 1823
- InfoPrint 1832
- InfoPrint 1834
- InfoPrint 1846 MFP
- InfoPrint 1850 MFP
- InfoPrint 1852
- InfoPrint 1854

- InfoPrint 1856 MFP
- InfoPrint 1860 MFP
- InfoPrint 1866 MFP
- InfoPrint 1870 MFP
- InfoPrint 1872
- InfoPrint 1880 MFP
- InfoPrint 1892
- InfoPrint 1930 MFP
- InfoPrint 1940 MFP
- InfoPrint 1948 MFP
- InfoPrint 1968 MFP
- InfoPrint 1985 MFP
- InfoPrint 1988 MFP
- InfoPrint Color 2047
- InfoPrint Color 2057 MFP
- InfoPrint 2060ES
- InfoPrint Color 2065
- InfoPrint 2075ES
- InfoPrint Color 2075 MFP
- InfoPrint 2085
- InfoPrint 2090ES
- InfoPrint 2105
- InfoPrint 2105ES
- InfoPrint 2190
- InfoPrint 2210
- InfoPrint 2235
- InfoPrint 3000
- 3160 Advanced Function Printer with Feature 4120, 4161, 4162, or 4163
- 3900 Advanced Function Printer Models 001, D01, D02, 0W1, 0W3, DW1, and DW2 (including support for the MICR Post-Processing Interface Feature, the Set Media Modifications command to drive post-processing devices, such as Beste Bunch spot color printers, and the Interface Feature 4720)
- 3930 Page Printer Models 03D and 03S
- 3935 Advanced Function Printer with Feature 4020, 4121, or 4161
- 4312 Network Printer 12. OS Code Release Level 2.23 or later is required. For IPDS printing, the IPDS feature with IPDS Code Level 1.25 or later is required.

- 4317 Network Printer 17. OS Code Release Level 2.23 or later is required. For IPDS printing, the IPDS feature with IPDS Code Level 1.25 or later is required.
- 4324 Network Printer 24. OS Code Release Level 2.35 or later is required. For IPDS printing, the IPDS feature with IPDS Code Level 1.25 or later is required.
- InfoPrint SP 8200 DN1

• Revised publications:

English

- ♦ RICOH InfoPrint Manager for Linux: Planning Guide, G550-20262
- ♦ RICOH InfoPrint Manager for Linux: Getting Started, G550-20263
- ♦ RICOH InfoPrint Manager for Linux: Procedures, G550-20264
- RICOH InfoPrint Manager for AIX and Linux: Configuring and Tuning Guide, S550-1062
- RICOH InfoPrint Manager: High Availability Guidelines, G550-20261
- ♦ RICOH InfoPrint Manager: Reference, S550-1052
- ♦ RICOH InfoPrint Manager: PSF, Server, and Transform Messages, G550-1053
- ♦ RICOH InfoPrint Manager: Secure Print: Installing and Configuring, G550-20129
- ♦ RICOH InfoPrint Manager: SAP R/3 Planning and Configuring Guide, S550-1051
- ♦ AFP Conversion and Indexing Facility: User's Guide, G550-1342
- ♦ RICOH InfoPrint Manager: Dictionary of Keywords, S550-1188
- RICOH InfoPrint Manager AFP2PDF Transform Feature: Installing and Using, G550-1057
- Page Printer Formatting Aid for Windows: User's Guide and Reference, S550-0801
- ♦ RICOH InfoPrint Manager: Installing InfoPrint Manager Transform Feature, G550-20160

Japanese

- ♦ RICOH InfoPrint Manager for Linux: Planning Guide, G550–20268
- ♦ RICOH InfoPrint Manager for Linux: Getting Started, G550–20265
- ♦ RICOH InfoPrint Manager for Linux: Procedures, G550–20266

Function not supported on InfoPrint Manager for Linux

- IPP DSS (available on Windows only)
- Passthrough DSS (available on Windows only)

Limitations

InfoPrint Manager for Linux and RICOH ProcessDirector™ for Linux limitation

InfoPrint Manager for Linux and RICOH ProcessDirector for Linux cannot coexist on the same Linux machine.

Single Cell Halftone

Single Cell Halftone support has a limitation with the provided transparency support. The small (one bit monochrome) images that are transformed with transparency enabled are not transformed with the Single Cell algorithms. The native PostScript data streams that use the imagemask operator are transformed using the original halftone algorithms. The PDF data streams that process small (one bit monochrome) images with transparency enabled also use the original algorithms.

Indexed Multiple Data Sets

MVS Download Receiver cannot be used with multiple data sets that have already been indexed (contain AFP TLEs).

Interchanging set version attribute

The sap2afp transform command does not create IS/3 compliant AFP output when converting an ABAP file by specifying 3 as a value for the **-is** flag. The sap2afp transform command creates IS/3 compliant AFP output only when the input file is an OTF file.

InfoPrint Transform Manager feature limitations

- InfoPrint Manager for Linux and InfoPrint Transform Manager feature for Linux cannot coexist on the same Linux machine.
- SAP2AFP transformer does not support SAP ABAP document format.

Job Viewer limitations

- When viewing an AFP Job that uses a form-definition with an n-up value set, the n-up value will be ignored.
- Embedded PDF files can be viewed only when the job is viewed page by page. When viewing the full document, the embedded PDF files are not supported.

Known problems and workarounds

Longer processing for color text that uses embedded fonts

When transforming PDF with color text that uses embedded font subsets to black and white or color AFP output, the rip processing can take longer. If you use **savevm=false**, this performance will improve. However, we recommend using the current default of **savevm=true** because, in some cases, PDF input files with many embedded font subsets might fail to transform. The **savevm** option appears on the **ps2afp/pdf2afp** command line as: -pragma pdf2psoptions=savevm=true.

Upgrading SAP Clients on Linux

If you are upgrading your SAP clients, update the LOMS definitions for all your InfoPrint Manager printers to point to the updated <code>ipm_submit</code>, <code>ipm_dev_query</code>, <code>ipm_job_query</code>, and <code>ipm_job_cancel</code> commands by removing all trailing <code>.linux</code> options from the OMS commands. For more information on modifying the OMS commands, see <code>RICOH InfoPrint Manager: SAP R/3 Planning and Configuring Guide</code>.

License clock tampering problem

If the InfoPrint Manager is installed on a machine with the system date and time older than the current date, the InfoPrint Manager server starts issuing the error: "5010-901 InfoPrint Manager detected a time tampering problem".

Contact your support personnel and ask them to make sure that the system time is synchronized with the Internet time server. Remove the license that caused the problem and reinstall it.

Job status and accounting for nested PJL jobs

Accounting information reports 0 (zero) pages completed when InfoPrint Manager prints nested PJL jobs to RICOH controller devices and InfoPrint Manager is configured to wait for the job to print completely (wait-for-job-completion is enabled).

To avoid this situation, use the InfoPrint Manager provided **pioinfo** backend and enable the PJL JOB counting function using the **enable-ustat-count** option with the printer command, for example: pioinfo://ricohdevice.yourcompany.com enable-ustat-count.

Job status and device timeout setting

The device timeout setting can cause the jobs to be reported as failed and the actual destination state to be changed to **needs key operator** when InfoPrint Manager is configured to provide accurate job status (by enabling the **wait-for-job-completion** attribute), which requires the backend program to wait for the jobs to print completely.

If your physical printer has a timeout setting, make sure it is disabled or the timeout value is higher than the necessary time to print your largest possible job when you enable the **wait-for-job-completion** attribute. For Ricoh printers, you can use Remote Maintenance by telnet to make the necessary changes to the direct printing port settings (diprint command).

The Submit Express client must be set up at the same level as the InfoPrint Manager server

To upgrade the Submit Express client to version 4.12 on macOS, you must first remove any older versions installed on the system.

AFP files with inline resources might not print correctly when submitted as a multi-document job via pdpr command or Web GUI

Specific AFP documents containing inline resources might be misprinted if the AFP files are send as multiple documents of the same job. To avoid this situation, submit each file separately.

RICOH Cloud Connector and RedHat Enterprise Linux Server version 7.1

Running InfoPrint Manager for Linux on RedHat Enterprise Linux Server version 7.1 will cause the RICOH Cloud Connector not to start due to a known bug in Linux systemd (https://github.com/systemd/systemd/issues/2132). Thus you might encounter problems running the product when using a subscription license. To avoid this situation, in the /usr/lib/systemd/system/rcc.service file, replace the line

ExecStart="/opt/RICOH/RCC/ricoh-cloud-connector-linux" -s

with the line

ExecStart=/usr/bin/env "/opt/RICOH/RCC/ricoh-cloud-connector-linux" -s

Security fixes included in Release 4.13

Release 4.13.0 includes fixes for these CVEs:

IBM Semeru Runtime Open Edition for Java – OpenJDK 17.0.9	CVE-2024-20918
	CVE-2024-20919
	CVE-2024-20921
	CVE-2024-20932
	CVE-2024-20945
	CVE-2024-20952
IBM Semeru Runtime Open Edition for Java – OpenJ9 0.41.0	Eclipse OpenJ9 possible infinite busy hang
	CVE-2023-5676
OpenSSL 3.1.5	Excessive time spent in DH check / generation with large Q parameter value
	CVE-2023-5678
	POLY1305 MAC implementation corrupts vector registers on PowerPC
	CVE-2023-6129
	Excessive time spent checking invalid RSA public keys
	CVE-2023-6237
	PKCS12 Decoding crashes
	CVE-2024-0727

Release 4.13.1 includes fixes for these CVEs:

IBM Semeru Runtime Open Edition for Java – OpenJ9 0.43.0	CVE-2024-20918
	CVE-2024-20921
Apache Tomcat 10.1.20	WebSocket DoS with incomplete closing handshake
	CVE-2024-23672
	HTTP/2 header handling DoS
	CVE-2024-24549

CCRs included in Release 4.13

Release 4.13.0 includes resolution for these CCRs:

IPM3-1222	afpReorder issue caused by the combination of using multiple-file job, duplex printing, and usage of the medium overlay.
IPM3-1240	Syntax error in Tomcat server.xml causes weak ciphers to be accepted.
IPM3-1235	WebGUI crashed with URuntimeException: provided value is not an Ooid due to multiline notification coming from server.
IPM3-1237	Add UEL (Universal Exit Command: "\x1B%-12345X") at the beginning of a printing session of a PCL6 document on a PSF Other destination to reset the previous stream sent to the printer.
IPM3-1248	pdpr submission command hangs due to infinite loop in the document format detection mechanism.
IPM3-1218	Having SSL security turned on might cause random corruption of server files (error messages in the error.log such as: 5010-018 Cannot restore a directory entry).

Release 4.13.1 includes resolution for these CCRs:

RPD3-5807	AFP2PDF fix for crash when 2 BIM images are in a Pagesegment invoked with IOB
RPD3-5817	FP2PDF issue when parsing Object Class triplet (0x10) on both IOB and BOC. Increased maximum port number from 64 to 128.
IPM3-1271	Add logic to PCL secondary process for the decompressor to handle bit aligned image definition if input file contains an image data being compressed on a bit alignment, not byte.
IPM-26788	Issues with server to server or server to InfoPrint Select client communication surfacing with error messages like: 5010-651 Cannot communicate with the server or 5010-191 Cannot send electronic-mail notification message.
IPM3-1225A	Enhancement in the server code that tunes down the CUPS query interval for non-pioinfo backend defined destination commands (e.g. lpd) and allows customization of the query interval via environment variable (PD_CUPS_QUERY_INTERVAL, in milliseconds, default value 1000, min value 150, max value 15000).
IPM3-1225B	Optimization in the InfoPrint Manager LPD to accommodate a large number of parallel jobs throughout the service.

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