Release Notes for RICOH InfoPrint Manager™ for Windows 4.12.1

Release Notes for RICOH InfoPrint Manager for Windows 4.12.1

This edition applies to InfoPrint Manager for Windows, Version 4 Release 12.1. 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.

⬇ **Note**

- 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.

Starting with Release 4.12, you must agree to the terms of the Software Maintenance Agreement (SWMA) prior to installing the InfoPrint Manager software.

What's new in Release 4.12?

- **You can now use print rules on inbound jobs in InfoPrint Manager to create complex and customized workflows that can automate preprocessing of jobs. Conditional logic can be used to make decisions and apply a workflow to jobs based on customer specific criteria. Print rules can be combined to run in various sequences to create multiple workflows based on job properties.**

  For more information, see *RICOH InfoPrint Manager for Windows: Procedures*, the *Using print rules* section and *RICOH InfoPrint Manager: Reference*, the *Attributes for print rules* section.

- **A specific hierarchy was added to Access Control Lists. If you restrict access to a server or queue, access to all objects contained by that server or queue is automatically restricted, even if the objects are not explicitly protected.**

  For more information, see *RICOH InfoPrint Manager for Windows: Getting Started*, the *Understanding InfoPrint Manager Security (FST and LDAP)* topic.

- **Implemented support for IPDS ACR #516 - Setup Name and its MO:DCA companion ACR #191 - Setup Name in InfoPrint Manager. Several new attributes were added to list the setup names available on a printer.**

  For more information, see *RICOH InfoPrint Manager: Reference*, the *setup-name*, *default-setup-names-fidelity*, *enable-setup-names-ready*, and *setup-names-ready* topics.

- **New functionalities added in InfoPrint Manager Web Management Interface (WMI):**

  - **LPD support**
  - **Advanced destination tracing**
  - **The trash can icon instead of X as a Delete button for all instances.**

- **Added Artifex interpreter to the PS2AFP transform for PostScript and PDF files.**

  For more information, see *RICOH InfoPrint Manager: Reference*, the *agspdld utility* section.

- **Implemented Docker support for InfoPrint Manager.**

  For more information, see *RICOH InfoPrint Manager for Linux: Planning Guide*, the *Running InfoPrint Manager for Linux in a Docker container* section.

- **Implemented support for embedded PDF in AFP in Job Viewer.**

  For more information, see *RICOH InfoPrint Manager for Windows: Getting Started*, the *Viewing a Job in the InfoPrint Manager Web Interface* topic.

- **Added Segment Size to Input Manager configuration in Infoprint Manager Management Interface (MMI).**

- **Added color (FS45) support in the PCL2AFP transform.**

  For more information, see *RICOH InfoPrint Manager: Reference*, the *PCL2AFP command* section.

- **Added color (FS45) support for PCL inline transform functionality.**

- **QR code with image barcode support (MO:DCA ACR #185, IPDS ACR #511, and BCOCA ACR #76).**

- **New finishing options/operation (Crease Finishing/Fold-out - MO:DCA ACR #174 and IPDS ACR #492).**

- **New finishing operations (Generic Trim - MO:DCA ACR #186 and IPDS ACR #510).**

- **Updated Tomcat to version 10. This requires changes in how the HTTPS connector is defined.**

  For more information, see *RICOH InfoPrint Manager for Windows: Getting Started*, the *Enabling Secure Sockets Layer (SSL) in the Web Server for HTTPS protocol* topic.

- **Added new notification trigger when job-deadline-time is exceeded.**

  For more information, see *RICOH InfoPrint Manager: Reference*, the *Notification events and event classes* chapter.

- **Added backup capability to the server error.log when wrapping is disabled.**

  For more information, see *RICOH InfoPrint Manager for Windows: Procedures*, the *Customizing an InfoPrint Manager server error log* topic.

- **Enabled UTF-8 support for hot folder .att files.**

- For more information, see *RICOH InfoPrint Manager for Windows: Getting Started*, the *Specifying job attributes* topic.

- **Externalized the LDAP server 'Use case-sensitive search' setting in InfoPrint Manager Management Console (MMC) and InfoPrint Manger Web Management Interface (WMI).**

For more information, see *RICOH InfoPrint Manager for Windows: Procedures*, the *Managing LDAP security for InfoPrint Manager for Windows* section.

- **Enhanced accounting log with media information. You can now get more accurate default-media information in the additional-accounting-log-attributes.**

    For more information, see *RICOH InfoPrint Manager: Reference*, the *additional-accounting-log-attributes* topic.

- **If a destination is in shutdown state, this state is preserved during a server restart.**

- **Enhanced Windows services to respond to pre-shutdown.**

- **Enhanced InfoPrint Manager for Windows to remove the need for a default server.**

- **Enhanced InfoPrint Manager Administration and Operations GUI (Java GUI) DMG to support Single sign-on authentication.**

- **New 64-bit AFP Workbench 3.08.04.01.**

- **Added support for AlmaLinux 8.6 or later and AlmaLinux 9.**

- **Added support for RedHat Enterprise Linux 9.**

- **Added new and improved help systems for InfoPrint Manager Administration and Operations GUI (Java GUI), InfoPrint Manager Management Console (MMC), InfoPrint Manager Management Interface (MMI), InfoPrint Manager Web Administration Interface (Web GUI), InfoPrint Manger Web Management Interface (WMI), and InfoPrint Select.**

- **Dropped the PPML2AFP transform support.**

- **Removed the LDAP-enabled Linux and MacOS Command Line Client.**

- **Dropped support for AIX 7.1.**

- **Dropped support for CentOS 8.**

- **Dropped support for Windows Server 2012 R2.**

- **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:**

  - – *RICOH InfoPrint Manager for Windows: Planning Guide*, G550-1071
  - – *RICOH InfoPrint Manager for Windows: Getting Started*, G550-1072
  - – *RICOH InfoPrint Manager for Windows: Procedures*, G550-1073
  - – *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

Limitations

Accounting information when printing PJL nested jobs to Ricoh controller devices reports 0 (zero) pages completed

Accounting information when printing PJL nested jobs to Ricoh controller devices reports 0 (zero) pages completed when InfoPrint Manager is configured to report job completed when printed (wait-for-job-completion is enabled) and when using InfoPrint TCP/IP Network Port Monitor. If you encounter this problem, contact your local Ricoh printer representative.

Single Cell Halftone

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.

Make sure that all x64 kernel-mode software is signed

Previous x64 versions of Microsoft Windows Server did not require drivers to be signed. However, in the x64 version of Windows Server, all kernel-mode software (including drivers) that runs on the computer must have a signature.

Indexed Multiple Data Sets

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

InfoPrint Manager for Windows and RICOH ProcessDirector™ for Windows limitation

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

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.

Capitalization of object names

InfoPrint Manager object names are case-sensitive. However, Windows API is not case-sensitive. Because of this limitation, you cannot have two objects with the same name, even if one of the names has uppercase letters.

When you use Microsoft V4 printer drivers, all InfoPrint Manager port monitors (InfoPrint Select, InfoPrint TCP/IP Port Monitor, InfoPrint Port Monitor) are not supported

Use V3 print drivers either shipped with the Windows installation base or downloaded from the manufacturer's website.

InfoPrint Transform Manager feature limitations

- InfoPrint Manager for Windows and InfoPrint Transform Manager feature for Windows cannot coexist on the same Windows machine.
- On the Linux platform, the PDF to AFP transform is only supported on SLES12 and later versions or RedHat 7.1 and later versions.
- 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 **ipm_submit**, **ipm_dev_query**, **ipm_job_query**, and **ipm_job_cancel** commands by removing all trailing **.linux** options from the OMS commands. For more information on modifying the OMS commands, see *RICOH InfoPrint Manager: SAP R/3 Planning and Configuring Guide*.

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 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.

Security fixes included in Release 4.12

Release 4.12.0 includes fixes for these CVEs:

Apache Tomcat 10.0.27	Apache Tomcat request smuggling
	CVE-2022-42252
IBM Semeru Runtime Open Edition for Java - OpenJ9 0.35.0	CVE-2022-3676
IBM Semeru Runtime Open Edition for Java - OpenJDK 11.0.17	CVE-2022-21618
	CVE-2022-21619
	CVE-2022-21624
	CVE-2022-21626
	CVE-2022-21628
	CVE-2022-39399
OpenSSL 3.0.7	X.509 Policy Constraints Double Locking
	CVE-2022-3996
	X.509 Email Address Variable Length Buffer Overflow
	CVE-2022-3786
	X.509 Email Address 4-byte Buffer Overflow
	CVE-2022-3602

Release 4.12.1 includes fixes for these CVEs:

Apache Tomcat 10.1.7	Apache Tomcat JsonErrorReportValve injection
	CVE-2022-45143
	Apache Tomcat denial of service
	CVE-2023-24998
	Apache Tomcat information disclosure
	CVE-2023-28708
Artifex GhostPDL 10	Buffer overflow in base/sbcp.c leading to potential data corruption
	CVE-2023-28879
IBM Semeru Runtime Open Edition for Java - OpenJDK 11.0.18	CVE-2023-21835
	CVE-2023-21843
OpenSSL 3.0.8	NULL dereference during PKCS7 data verification

	CVE-2023-0401
	X.400 address type confusion in X.509 GeneralName
	CVE-2023-0286
	NULL dereference validating DSA public key
	CVE-2023-0217
	Invalid pointer dereference in d2i_PKCS7 functions
	CVE-2023-0216
	Use-after-free following BIO_new_NDEF
	CVE-2023-0215
	Double free after calling PEM_read_bio_ex
	CVE-2022-4450
	Timing Oracle in RSA Decryption
	CVE-2022-4304
	X.509 Name Constraints Read Buffer Overflow
	CVE-2022-4203

CCRs included in Release 4.12

Release 4.12.0 includes resolution for these CCRs:

IPM3-1128	A problem occurs when processing mixed mode line data with CC=TRUE has a missing carriage control that follows a MODCA Structured Field. The line data is invalid, but ACIF attempts to correct this problem. When APAR PH01275 (Feb 2019) was added, warning message 511 was introduced to identify this problem. Unfortunately, a logical error was also introduced with this code change. A MODCA Structured Field flag was not getting reset between records, thus causing the next record to be identified as MODCA even if it was not.
IPM3-1132	Disabling a logical destination that has a defined hot folder containing files or changing the attribute values on the logical destination causes pdserver to hang.
IPM3-1137	Having a printer that responds with an exception to an SNMP query could cause pdserver to crash in certain conditions.
IPM3-1145	AFP2PDF output missing image due to a variable not being initialized when processing.
IPM3-1154	Incorrect text processing in the AFP2PDF transform for cases where both "Set Text Color" and "Set Extended Text Color" PTOCA control sequences were used in the same text object.
IPM3-1151	The pdserver crashes during final shutdown operation without impacting objects database.
IPM3-1158	Running port scanning application against InfoPrint Manager server could cause hangs or miscommunication between server instances.
IPM3-1116	If the printer does not support PDF files in the AFP inline object containers, some content is not printed when there are multiple AFP files specified in the printing command line and the inline object containers (including the PDFs) have the same name but different content across the input AFP files.
IPM3-1149	TIFF2AFP transformer generates incorrect output while the input file is bilevel (Black & White) and rotation parameter is used (-rot 90i, -rot 270i).
IPM3-1160	Additional enhancement for MVS Download Receiver to allow multidata sets line data jobs to use custom resource paths.
RPD3-5270	Unnecessary blank pages added when using constant forms on the back side of the sheet with N-up default page placement.
IPM3-1162	Enhancement to protect a server from becoming unavailable (hang after several retries) when running a port scanner on internal communication port (without sending any data) and immediately disconnecting.

IPM3-1165	Enhance sendmemo email submitter to work with non-RFC standard behavior of Symantec email server (sendmemo will also retrieve the error code returned by nonstandard email servers in particular cases).
IPM3-1141	Interserver communication generates memory leak in case an error occurs on a request.

Release 4.12.1 includes resolution for these CCRs:

RPD3-5334	The check if an inline font resource from a previous job is found as loaded in the current job should not be performed if the font resource was activated as resident printer font. This happens on the printers (6400/6500 line matrix printers in either native or 4234 emulation mode) supporting only XOH-OPC Symbol-Set Support Self-Defining Field X'00002' (no LF1/LF3 loaded font ipds command subset).
IPM-24924	Print rules run script value is truncated to the first quotation mark in the provided string value in WebGUI.
RPD3-5320	ACIF errors message: 425-117 DATA IN AN INPUT RECORD OR RESOURCE IS NOT VALID: LENGTH INDICATED IN THE STRUCTURED FIELD INTRODUCER IS INCORRECT FOR FNI STRUCTURED FIELD. This occurs because the font in question defines only one character and is an outline font. Thus, the FNI (Font Index) structured field length is 18 and not 37.
IPM-25091	Memory leak in notification daemon/service as notifications are accumulating without being delivered or dismissed in timely fashion.
PSFC-8618	Afpsplit missing pages for input file with no BDT/EDT pair.
IPM-25110	Upgrading InfoPrint Manager to 4.12.0 version causes JobViewer function to stop working because files under web server work directory (..\var\pd\ipmws\work) are not cleared. Update InfoPrint Manager to 4.12.1 version to resolve this issue.

Trademarks

RICOH InfoPrint Manager™ and RICOH ProcessDirector™ are trademarks of Ricoh Company, Ltd. In the United States, other countries, or both.

These terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

- AIX
- MVS
- Print Services Facility

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

CUPS is a trademark of Apple Inc. in the United States, other countries, or both

Linux is the registered trademark of Linus Torvalds in the U.S. and other countries.

Microsoft, Windows, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Thales Group code: The license management portion of this Licensee Application is based upon one or more of the following copyrights:

```
Sentinel RMS
Copyright 1989-2023 Thales Group
All rights reserved.

Sentinel EMS
Copyright 2008-2023 Thales Group
All rights reserved.
```

Sentinel is a registered trademark of Thales Group.

Other company, product, or service names may be trademarks or service marks of others.