

1. Release Notes for RICOH ProcessDirector™ for AIX

3.11.1 (January 2023)

- Installation alerts
- Security Vulnerabilities
- Known limitations, problems, and workarounds
- Product documentation
- Customer support
- Trademarks

These release notes provide information about RICOH ProcessDirector for AIX, Version 3 Release 11 Modification 1 (3.11.1) (Program Number 5765-H30).

New functions and updates in Version 3.11.1

These new functions and updates are included in RICOH ProcessDirector Version 3, Release 11, Modification 1.

- **Updated translations**

The content of the Version 3.11 product interface and the help system has been translated into these languages:

- Brazilian Portuguese
- French
- German
- Italian
- Japanese
- Spanish

To see the translated user interface and help content, download and install the Language Pack for your language.

- **Choose paper for banner pages using media settings**

If you're printing PDF jobs, you can now specify which paper to print banner pages on by media, instead of by specifying a paper tray. Your banner pages print on the correct paper, regardless of where that paper is loaded. This function is available for Ricoh PDF, Kodak PDF, and Xerox PDF printers.

- **User interface updates**

The user interface has been enhanced to adjust the size of your portlets to fit inside your browser window. When you change the size of the window (by changing the dimensions of the browser or by moving it to a different screen), the portlets shrink or expand to fill the space available.

- **Data capture improvements**

With this update, you can download a data capture file to your system directly from the data capture page, so you don't have to access the primary server to retrieve the file. You can also stop a capture that is already in progress.

- **Operating system support changes**

In this release, we increased the minimum level of CentOS required to install RICOH ProcessDirector to version 7.9.

New functions and updates in Version 3.11

These new functions and updates are included in RICOH ProcessDirector Version 3, Release 11.

- **Ability to restore to a previous installation of RICOH ProcessDirector**

With this version of RICOH ProcessDirector, you can restore a previous installation using Feature Manager. With this new function, you install a new feature and then effectively back it out if you decide that it does not meet your needs. Or, if you apply an update but something goes wrong during the install process, you can restore the installation from before the update to get back to a stable state before you try to update again.

- **New data collector to collect information about processing durations**

Now, you can use the **Job Step Duration** data collector to collect information about how long each step was in the **queued** and **processing** states, as well as the total length of time it takes for each step in a workflow to complete processing. You can also select job properties to capture at the end of each step.

- **Operating system support changes**

In this release, we have removed support for installing RICOH ProcessDirector application servers on Windows Server 2016.

- **Include the Preset name in AFP print jobs**

If you send AFP print jobs to a printer that uses TotalFlow Print Server, you can now include the name of the printer preset to use for the job as a job property.

- **Security vulnerabilities addressed**

Ricoh is committed to responding to results of vulnerability scans and will continue to include those fixes in each release that we deliver. In this release, various components were updated to address these vulnerabilities, including:

- AFP Support
- Avanti Slingshot Connect
- Reports
- Printer Connector
- Ricoh PDF Printer
- DB2
- Product Update

New functions and updates in Version 3.10.2

These new functions and updates are included in RICOH ProcessDirector Version 3, Release 10, Modification 2.

- **Configure HTTPS connections from the user interface**

In previous releases, the process for configuring secure network connections required you to manually move and edit configuration files, a process that could be error-prone and daunting. Now, you can complete all of these configuration tasks from the RICOH ProcessDirector Administration page, for a streamlined experience.

- **New custom properties for numeric values**

In this version, RICOH ProcessDirector provides 10 new custom properties that can hold numeric values. Five of the properties can hold integers and the other five can hold numbers with decimal values. With these properties, you can store numbers in custom properties and use them to perform calculations as needed.

To use these properties, install the updated Common Properties feature.

- **Support for SNMP version 3**

Support for SNMP version 3 is now available for most printer types. Now you can configure those printers to use the enhanced security available with this updated protocol.

- **Performance improvements in job logs**

The internal processes used to create job logs have been improved to reduce the search time required and improve the performance of your workflows.

- **Security vulnerabilities addressed**

Ricoh is committed to responding to results of vulnerability scans and will continue to include those fixes in each release that we deliver. In this release, various components were updated to address these vulnerabilities, including:

- IBM DB2 11.5.7 Special Edition
- Ricoh PDF Printer Support
- Apache Tomcat
- OpenJDK

New functions and updates in Version 3.10.1

These new functions and updates are included in RICOH ProcessDirector Version 3, Release 10, Modification 1.

- **Updated translations**

The content of the Version 3.10.1 product interface and the help system has been translated into these languages:

- Brazilian Portuguese
- French
- German
- Italian
- Japanese
- Spanish

To see the translated user interface and help content, download and install the Language Pack for your language.

- **A new type of custom portlets**

We know that you want to highlight different information on your Main page to satisfy different user groups. In Version 3.9.0, we added the ability for you to create your own portlets using either a matrix or tree layout. In Version 3.10.1, we now have a third type of custom portlet – the numeric portlet.

A numeric portlet can act as a “scoreboard” to display key indicators that you want to watch in real time. The portlet can contain multiple indicators counting the number of jobs, printers, or input devices with the same set of property values (such as “printers that are disabled” or “jobs that use the same finishing requirements”).

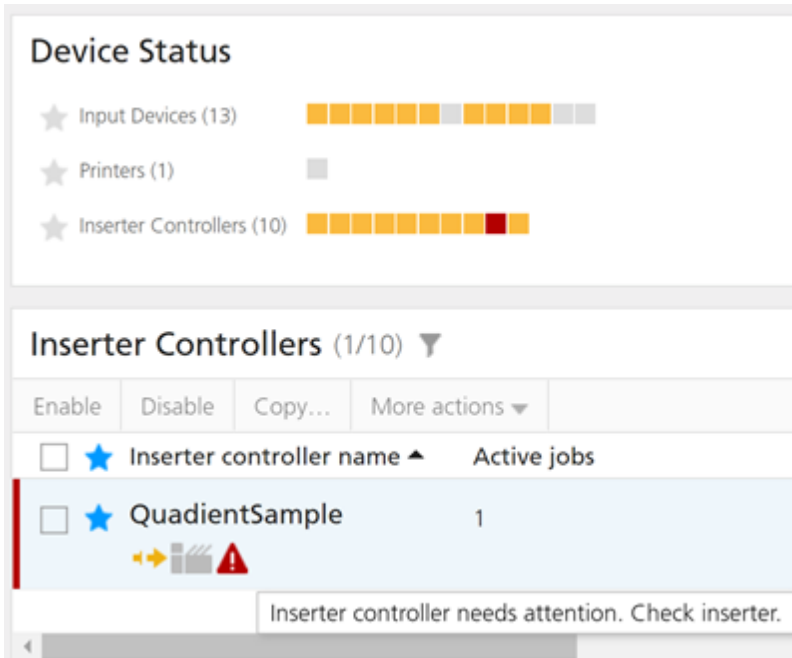
Here is an example of a custom numeric portlet showing the number of jobs requesting two kinds of binding and the number of printers available with those binding capabilities.



- **Improved reporting of errors with inserter controllers**

Sometimes when a job is being inserted, RICOH ProcessDirector loses connection with the database that stores the results or encounters an error reading the results file. In those cases, the inserter controller is disabled. In the past, no messages were logged to describe the reason for the problem. In addition, the state change was not very visible on the Device Status and Inserter controllers portlets.

A new property, **Inserter controller state**, was added to reflect the error condition on both portlets, and a **Clear alert** action was added to the Inserter controller object to be used when the error has been corrected. In the image below, the QuadientSample inserter controller needs attention.



- **Miscellaneous user interface improvements**

- In the legacy user interface, we included the hostname of the system on the browser tab but accidentally removed it when we moved to the updated user interface. It's back!
- Users told us they configured what columns were shown on the tables on the **Schedule Jobs** and **Reconcile** dialogs to include only those properties that operators needed to do those

critical tasks. Those column configurations were not saved in a saved view so often had to be recreated. The column configurations on those two dialogs are now preserved in saved views.

- **Operating system support changes**

For RICOH ProcessDirector for Linux or AIX, Windows application servers can now be installed on Windows 11 Pro and Windows Server 2022 Standard. The RICOH ProcessDirector Plug-in for Adobe Acrobat and AFP Visual Workbench can be used on Windows 11 Pro and Windows Server 2022 Standard.

- **Updated features and components**

Newer versions of these features are provided:

- Ricoh PDF Printer
- Ricoh AFP2PDF Transform
- Ricoh PSPDF2AFP Transform
- Ricoh PCL2AFP Transform
- Ricoh SAP2AFP Transform
- Advanced Transform (all inputs and outputs)

- **Security vulnerabilities addressed**

Ricoh is committed to responding to results of vulnerability scans and will continue to include those fixes in each release that we deliver. In this release, the versions of the following components were updated:

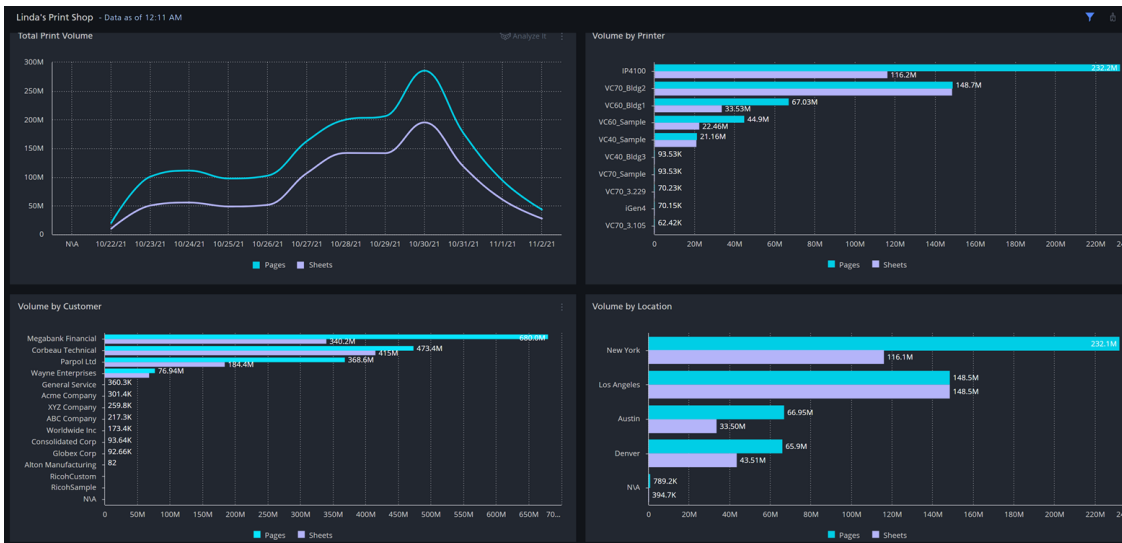
- IBM DB2 11.5.7 Special Edition
- Apache Tomcat
- OpenJDK Java

New functions and updates in Version 3.10.0

These new functions and updates are included in RICOH ProcessDirector Version 3, Release 10, Modification 0. Three versions of RICOH ProcessDirector were released since Version 3.9 so be sure to read all of the sections for the complete list of enhancements since last year at this time.

- **Visualizing your data**

The Reports feature of RICOH ProcessDirector can now deliver the historical data you collect to RICOH Supervisor, a cloud-hosted subscription offering with powerful business intelligence capabilities. A new feature, RICOH Supervisor Connect, coupled with a RICOH ProcessDirector add-on to RICOH Supervisor lets you design charts to track the areas of your business that concern you the most. Out of the box, metrics such as volume by printer and by printer operator let you identify bottlenecks and trends so you can act to address them. You choose what data matters to you, including custom job and document properties that our Advanced Solution Practice can help you define. Here's a small sample of what you can see with this solution:



- **Enhanced interface to Ultimate Impostrip®**

Ultimate Impostrip® is a powerful impositioning program that rearranges the pages in PDF jobs into layouts for applications such as books or business cards. The Ultimate Impostrip® Connect feature of RICOH ProcessDirector has been enhanced to take advantage of a new method to exchange files. New settings allow you to choose the legacy or new interface to connect the two products.

- **New InputImage Advanced Transform feature**

The new InputImage feature allows you to transform raster image formats such as JPEG, TIFF, or PNG into other data streams such as PDF or AFP. This is useful if you want to be able to view or print images without adding them into a print file. In addition, if you process AFP files that contain object containers with raster images included, this feature is needed to transform those embedded images into whatever output data stream you choose.

- **Other feature changes**

- The Designer feature that integrates the Quadiant Inspire Designer composition program has been renamed the Quadiant Inspire Connect feature.
- The Ink Savvy feature has been withdrawn from marketing.

- **Which GUI is which?**

Do you have multiple RICOH ProcessDirector systems, such as a Development or Test system and Production? Do you have both GUIs open on different tabs in your browser? If you find yourself in this situation and want to be sure you know which GUI you are using at any time, you will appreciate the capability we added to allow you to select a background color you can apply to the GUI to rapidly identify the two systems. The color can also be added to a label in the banner area where you can specify a system identifier too.

- **Help with importing workflows from one system to another**

In Version 3.9.3, we added some prechecking functions to the import utility to identify possible problems in the export file so you could decide whether to proceed with the import action or not. In Version 3.10, we enhanced the import function for workflows to allow you to safely bring in workflows that contain steps or properties that are not present on the system. Missing steps are replaced and properties set to null so that you can add the features or extensions that add them later without leaving workflows in error.

- **Relief when jobs clog your system waiting to be removed**

A job is marked for deletion from the RICOH ProcessDirector system when it reaches a RemoveJobs step in its workflow. When multiple jobs are deleted at once, many updates to the database can slow the system down. That cleanup process usually runs when the system is not busy. But sometimes it's hard to find a slow period to perform that work. A new system setting, Clean up timing, lets you choose when you want the removal done. You can choose to have job files deleted as soon as they arrive in the step or wait until a time when the system is not as busy processing jobs.

- **Easier trace collection for Ricoh PDF printer data**

Sometimes when a problem occurs when sending jobs to Ricoh PDF printers, our Support team needs to see the data files involved. To make it easier to collect that data, a new tracing setting was added to the System Trace page. The Capture job data from Ricoh PDF printers option should be used with caution since it might use a large amount of disk space and could include sensitive data that is usually not kept after printing.

- **Operating system support changes**

The RICOH ProcessDirector Plug-in for Adobe Acrobat is now supported on Adobe Acrobat Pro 2020.

- **New Supported Printers**

These new models of Ricoh printers are supported as Ricoh PDF printers:

- Ricoh IM C6500
- Ricoh IM C8000

In addition, the Kyocera TASKalfa v Pro 15000c printer is supported as a Custom PDF printer and as an AFP printer in the United States.

- **Updated features and components**

Newer versions of these features are provided:

- Ricoh PDF Printer
- Ricoh AFP2PDF Transform
- Ricoh PSPDF2AFP Transform
- Ricoh PCL2AFP Transform
- Ricoh SAP2AFP Transform
- Advanced Transform (all inputs and outputs)

- **Security vulnerabilities addressed**

Ricoh is committed to responding to results of vulnerability scans and will continue to include those fixes in each release that we deliver. In this release, the versions of the following components were updated:

- IBM DB2 11.5.6
- Apache Tomcat
- OpenJDK Java

New functions and updates in Version 3.9.3

These new functions and updates are included in RICOH ProcessDirector Version 3, Release 9, Modification 3.

- **Highlighting what's new**

Discovering new function in a release is now easier than ever! We added blue highlight dots to the user interface to call attention to where you can find and try out the new function. The first time each user logs in to RICOH ProcessDirector after a release is installed, available dots appear where we added new function that the user has access to. Each user can choose to dismiss one or all of the dots. To see them again, select the **View new-function tips** option on the **Help** menu.

- **Submitting jobs on the Main page**

Drag and drop files into the new **Submit Jobs** portlet to avoid the need to access the server. You can send multiple files related to a single job to a hot folder input device or a single file directly to a workflow so it starts processing immediately. Although this function might not be appropriate for all production environments or users, it can be very helpful for onboarding new applications and debugging workflows.

- **Downloading the print file from the Main page**

Downloading the print file for a job at any point in its workflow can also be useful when debugging a new workflow. As a result, a new action has been added to the **Jobs** portlet. This function is also useful in some customer service settings where server access is limited by security (for example, a cloud instance) or skills (a Windows client of a Linux server). As with all actions in RICOH ProcessDirector, administrators can control who is allowed to use this action.

- **Time-saver for busy users**

Operators will appreciate a new function that lets them do other tasks on the Main page while long-running actions continue to run in the background. If an operator selects multiple jobs or input devices and starts a process that usually takes a long time to complete, they can now continue working on other tasks. When the long-running action completes, a status message appears. Users debugging workflows using the **Process again** action on many jobs at once will also find this function valuable.

- **Click-saver for administrators**

Several objects in RICOH ProcessDirector reference other types of objects in their properties:

- Step templates can name step resources, credentials, or property mappings (from the Preference Management feature).
- Workflows can name service policies if the Deadline Tracker feature is installed.

In the past, if you were editing a workflow and realized you forgot to create the required step resource, you had to save the workflow, go to the **Step Resources** page and add the step resource. Then you could return to the **Workflow Editor** and add the step resource reference— if you could remember which step needed it!

Now, the process is simplified. If you realize that you need a new step resource, just click the add button next to the property where you need the step resource. A dialog opens so you can create the step resource without leaving the **Workflow Editor**! You can edit a step resource from the same place by clicking the pencil icon next to the step resource name in the list.

The same functions are provided for credential, property mapping, and service policy objects inside the objects that reference them.

- **Videos to give administrators some basic training on the RICOH ProcessDirector system**

Learn about the basic objects in RICOH ProcessDirector: printers, input devices, groups, locations, and users. And follow step-by-step instructions on how to install and license the product. Use the **View How-to videos** link from the **Help** menu to access our video training library.

- **Help with importing your objects from one system to another**

RICOH ProcessDirector has had an export function for many years to help you move objects from one system to another. Whether you are taking a workflow and its associated objects from a test system to production or upgrading from one version of the product to another, smoothly importing onto the target system is essential! With this release, we added prechecking functions, to alert you to any potential problems before the import begins. When you select the export file, RICOH ProcessDirector flags the objects that might need your attention before you start the import.

- **Enhanced job logging**

We made two improvements to our job logs. We now record the user ID who performed the **Schedule** action on a job in its job log. And, if you are using the Advanced Transform features, we now include the log files generated by those transforms when you export the job log.

- **Ink usage tracking for a job**

For PDF jobs printed on RICOH TotalFlow printers, ink usage data has been reported in job properties before. But in Version 3.9.3, if you are also using the Avanti Slingshot Connect feature to send job information to Avanti Slingshot, the ink usage data for each job can also be sent. If you set up Avanti Slingshot to include cost data for each type of ink, you can use the ink usage data to estimate your cost to produce those jobs.

- **Enhancements to the Reports feature**

- At the top of the **Data Collector** page, a new status message lets you know if the connection to the PostgreSQL data base is active or not.
- Data transmitters can be configured to execute on a Linux secondary or Windows application server, offloading the overhead of this processing from the primary server.
- A new type of data collector, the Workflow Step Collector, can be used to manage the data written to the Reports database by steps in workflows.

- **CentOS support limitations**

You can install a Linux secondary server on CentOS Linux 7.7 for x86_64 and higher versions. However, you cannot install it on CentOS 8.

- **Updated features and components**

Newer versions of these features are provided:

- Ricoh PDF Printer
- Ricoh AFP2PDF Transform
- Ricoh PSPDF2AFP Transform
- Ricoh PCL2AFP Transform
- Ricoh SAP2AFP Transform
- Advanced Transform (all inputs and outputs)

Newer versions of these components are included:

- IBM DB2 11.5.6
- Apache Tomcat
- OpenJDK Hotspot Java

New functions and updates in Version 3.9.2

These new functions and updates are included in RICOH ProcessDirector Version 3, Release 9, Modification 2.

- **Updated translations**

The content of the Version 3.9 product interface and the help system has been translated into these languages:

- Brazilian Portuguese
- French
- German
- Italian
- Japanese
- Spanish

In Version 3.9.2, language support is provided in a separate ISO file containing six packages. As a result, you can choose which languages to install for your installation.

To install language packages:

1. Download the Language Pack ISO file from the RICOH Software Downloads website (<http://dl.ricohsoftware.com>).
2. Mount the ISO file and copy the EPK files that you want to install into the `/opt/infoprint/ippd/available` directory on the primary computer.
3. Log in to RICOH ProcessDirector.
4. Click **Administration** → **Utilities** → **Features**
5. Select the Language Packages that you want to install and click **Install**.

When the installation completes, use the language setting in your browser to control the language that the RICOH ProcessDirector user interface and help system display.

- **Enhancements to the Reports feature**

- Updates to data collector objects

In Version 3.9, we added data collector objects to the user interface and added the ability to collect data on user actions on several object types. In Version 3.9.2, we expanded the set of user actions that can be collected on printers, barcode readers, and inserter controllers.

To help you set up and check your reports configuration without needing to access the system console and run PostgreSQL commands, we added a new **Download data** action to the data collector objects. The action exports a CSV file from the data stored by each selected data collector and downloads it to your computer.

If the connection between RICOH ProcessDirector and the PostgreSQL database drops during data collection, we added an automated cleanup of the dump files left behind when the connection was lost. The data from the dump file is automatically written to the database when the connection is restored.

- A new data transmitter object

To help you make your PostgreSQL reports data available to other applications that can accept data using a REST web service, we added a new object called a Data transmitter. Data transmitters let you select tables from the Reports database to send on a schedule that you specify.

You can also use a one-time transmission function while you are testing the setup of the transmitter or to resend data that did not get sent correctly in the scheduled transmission. Two new credential object types, static and session, were added for use with this function.

- **Operating system support changes**

With Version 3.9.2, you can install a Linux secondary server on:

- CentOS Linux 7.7 for x86_64
- SUSE Linux Enterprise Server (SLES) 15.0 with Service Pack 1 or above for x86_64

- **Preview function added to custom portlets**

In Version 3.9, we added the ability to build your own custom portlet on the **Main** page containing a matrix or tree view summarizing jobs or other objects.

In Version 3.9.2, we added a **Preview** function you can use while you are defining your portlet so you can see the result before you add the portlet to your **Main** page.

- **Maxuproc setting recommendation on AIX primary server**

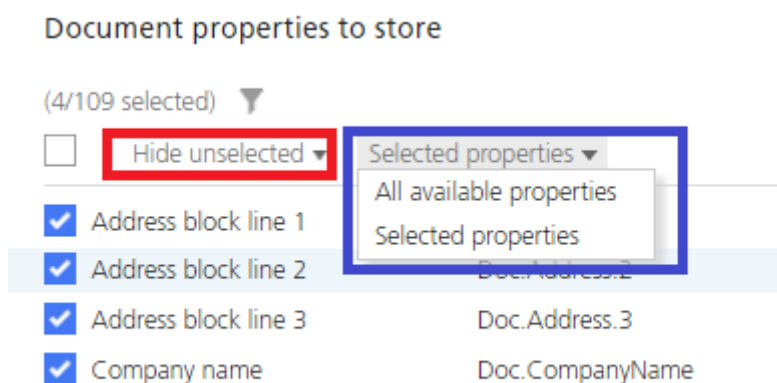
On AIX primary servers, the default value of the maxuproc property could need to be increased if you run additional programs on the server or execute many steps that start other programs.

Make sure the maxuproc value is set to at least 4096. This value is adequate for most installations, but requirements vary based on the number of programs running on your system. After the system is installed and running, work with your AIX system administrator to verify that the setting is appropriate for your environment.

- **Improvements to the user interface for selecting values from multi-select lists**

Several step templates and a few objects have properties that allow selection of multiple values, often from very long lists of choices. Recognizing this is a difficult task for our users, we added some additional functions to make selection easier.

For property selection lists in three step templates – SetDocPropsFromList, BuildExternalDocPropsFile and MapExternalResultsFiletoDocProps – the ability to reorder the selections in the list was added. To select document properties from lists in the StoreinRepository or WritePropsToReportsDatabase steps, a new selection allows you to shrink the list to only show your selections as shown below in the red box.

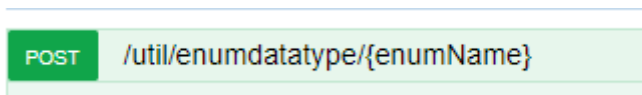


And because both of these document property lists also include the ability to select all document properties, there is a convenient way to specify that you want to select individual properties or select all of the properties in the document properties file shown in the blue box.

- **An API to add new values to the Output format and Media type details properties**

The **Output format** properties of printers and jobs are used by the **Make job like printer** action that is helpful when scheduling jobs. A fixed set of values are provided with RICOH ProcessDirector. An API has been added to allow you to add values that you find more useful to your operators. To learn how to use this API:

1. Open a Web browser and enter your RICOH ProcessDirector hostname or IP address into the address bar. Add `/restapi/` to the end of your hostname or IP address to access the REST API documentation. For example, `http://hostname:15080/restapi/`
2. Open the util section and select



This API can also be used to add new values for the **Media type details** property on **System** and **Printer media** objects, which is useful when you have defined non-standard media in your printers.

- **Enhancement to command to start and stop Container secondary servers**

- In version 3.9, we added the Secondary Docker feature, which can be installed on a Linux primary or secondary server. After following the instructions to install the Secondary Docker feature, you can define multiple container secondaries on the primary or a secondary computer. Commands were provided to stop and start the secondary servers that acted on all secondaries on the same computer.

With Version 3.9.2, the commands were simplified and consolidated into one.

- **Updated features and components**

Newer versions of these features are provided:

- Ricoh PDF Printer
- Ricoh AFP2PDF Transform
- Ricoh PSPDF2AFP Transform
- Ricoh PCL2AFP Transform
- Ricoh SAP2AFP Transform
- Advanced Transform (all inputs and outputs)

New functions and updates in Version 3.9.1





These new functions and updates are included in RICOH ProcessDirector Version 3, Release 9, Modification 1.

- **Shortcut to edit rules and conditions in Workflow Editor**

In the Workflow Editor, you can now double-click a connector to open the Connector property notebook. This function also works to view the Connector properties in the View job in workflow dialog.

- **Color-coded dots added to the System Summary portlet**

The colors match the phase colors shown at the top of the Workflow Editor and the top row of the Job Status portlet.

System Summary				
				
• Receive (0)	0	0	0	0
• Prepare (0)	0	0	0	0
• Assemble (1)	0	0	1	0
• Print (1)	0	1	0	0
• Insert (0)	0	0	0	0
• Complete (0)	0	0	0	0
All (2)	0	1	1	0

For example, all jobs here are in the Assemble and Print phases.

Job Status

Job state by phase | Legend

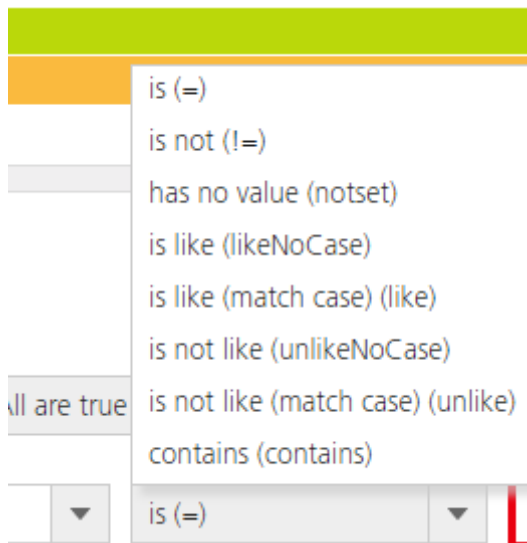


- **New function in the heading row of the Jobs table**

If you right-click on a column heading, you can select **Hide Column** to remove the column from the table. Instead of opening the Manage columns dialog and unchecking the property, this shortcut gets the job done faster.

- **Case-sensitive comparators in filters**

Several filter controls on our interface, such as the Advanced filter on the Jobs table, contain a comparator (such as **is**, **is not**, **greater than**, and **less than**). Two comparators are **Like** and **Not Like**. In the legacy user interface, the **Like** and **Not Like** comparators were not case-sensitive. In the updated user interface, they were accidentally made case-sensitive. We have added other choices to the comparator so you can choose whether you want the comparison to be case-sensitive as shown below.



- Resolved issues related to product EIDs and license installation

New functions and updates in Version 3.9.0

These new functions and updates are included in RICOH ProcessDirector Version 3, Release 9, Modification 0. Four versions of RICOH ProcessDirector were released since Version 3.8 so be sure to read all of the sections for the complete list of enhancements since last year at this time.

- **User actions added to the Reports feature**

In Version 3.8.4, a graphical user interface replaced the configuration file that was used in earlier releases to build the PostgreSQL database holding the reports data. In Version 3.9, we added data collectors for user actions taken on jobs, printers, input devices, users, barcode readers and inserters so that you can report on such things as the number of jobs scheduled by each operator.

- **Two updates to the AFP Support feature**

A new step template, StandardizeAFP, is included that can be used to ensure that each document in an AFP file uses the correct medium map. And the ReverseOutputOrder step has a new property that lets you preserve page groups and index tags when the pages are rearranged for Z-to-A print applications.

- **A no-code method to add custom portlets to the Main page**

Using the user interface, administrators can define a new portlet showing property combinations that are meaningful to their operators. Like the System Summary portlet for jobs, you can build a matrix portlet that summarizes jobs according to locations or forms – or whatever property you want!

You can also make a tree view portlet that includes rows with hierarchies. For example, you can use the tree to display a row for each customer. Under each customer, you can include a row for each form used by each customer and under that whether the job is simplex or duplex. As you expand the tree, each row shows the number of jobs that are in the system for that customer that use a specific form for simplex or duplex printing.

You can also design how a drill-down from your portlet works. For jobs you can either filter the main Jobs table or open a floating Jobs window. Portlets can be built for jobs, printers, input devices, and barcode readers or inserter controllers if you have the appropriate features installed. You can add as many custom portlets as you need.

- **New options to distribute your work across multiple servers**

For many years, you have had the ability to add secondary servers to your RICOH ProcessDirector environment, either by creating them on your primary server or by installing the Secondary Server feature on a different system. In both configurations, secondary servers share the processing burden with your primary server, most often by tuning resource-intensive steps to run on the secondary server.

New in Version 3.9 is the ability to define multiple secondary servers on secondary computers. For Linux computers, we are introducing a new packaging option: the Docker container secondary server. Container secondary servers are easier to install and maintain than conventional secondary servers. They can be installed on either the Linux primary computer or on a secondary computer with the Secondary Server feature installed on it.

- **Cloud-ready licensing**

IT systems are moving away from physical servers to virtualized environments, including cloud platforms. Our licensing system has relied on a physical server address, making support for virtual and cloud systems difficult. With Version 3.9, we have simplified our licensing to adapt to this changing configuration.

- **Improvements to the Workflow Editor**

You can copy and paste steps and step chains within a workflow. And you can replace one step or step chain with another by dropping the new one onto the old. We expanded the area in a step that you can use to attach a connector.

- **New document search function**

In addition to the property search and barcode scan, you can now enter a list of document property values in the Documents portlet or Reconcile dialog to get a list of documents to work with.

- **System prerequisites changed**

The minimum amount of memory required to install RICOH ProcessDirector on the primary server has been increased from 4 GB to 8 GB. If you are using document processing features, the minimum amount of memory required has been increased from 12 GB to 16 GB.

- **Operating System and Browser Support Changes**

With Version 3.9:

- Red Hat 6 is no longer supported environment for the secondary server.
- Red Hat 6 is no longer supported environment for the secondary server.
- Red Hat 7.1 through 7.5 are no longer supported environments for the secondary server.
- Red Hat 8.1 is added as supported environment for the secondary server
- The minimum level of AIX supported for the primary server or secondary server is increased to AIX Version 7.2, Technology Level 03 SP3 or later
- Microsoft Edge based on Chromium is added as a supported browser to use the RICOH ProcessDirector user interface

- **New Information Center with modern user interface and improved readability**

The information Center has a new modern appearance. To go along with our enhanced user interface, the Information Center has undergone a facelift too!

- **Updated features and components**

Newer versions of these features are provided:

- Ricoh PDF Printer
- Ricoh PSPDF2AFP Transform

- Ricoh AFP2PDF Transform
- Ricoh SAP2AFP Transform
- Advanced Transform (all inputs and output)

The version of IBM DB/2 installed with the product has been updated to 11.5

- **Security vulnerabilities addressed:**

Ricoh is committed to responding to results of vulnerability scans and will continue to include those fixes in each release that we deliver.

- In this release, the version of ApacheTomcat installed with RICOH ProcessDirector was updated, addressing vulnerabilities reported in that component.

- **Changes to Java**

The Oracle Java supplied with RICOH ProcessDirector has been removed and replaced with OpenJDK Hotspot Java.

Installation alerts

Ports needed for Transform features

If IBM System Director is already using port 6988, you do not need to open it when you install the AIX operating system. Just open ports 6984-6986 and 6989-6992.

Security Vulnerabilities

The following security vulnerabilities were addressed in this and previous RICOH ProcessDirector releases.

Security Vulnerabilities resolved in various releases

Release	Security Vulnerabilities resolved
Version 3.11.1	<ul style="list-style-type: none"> • CVE-2019-17571 • CVE-2020-9488 • CVE-2021-29425
Version 3.11	<ul style="list-style-type: none"> • CVE-2016-6814 • CVE-2019-12779 • CVE-2020-17521 • CVE-2021-28169 • CVE-2021-34428 • CVE-2021-42340 • CVE-2022-22970 • CVE-2022-23437
Version 3.10.2	<ul style="list-style-type: none"> • CVE-2018-11770 • CVE-2018-11804 • CVE-2020-11988 • CVE-2020-15250 • CVE-2021-41561 • CVE-2021-43090 • CVE-2022-23437

Known limitations, problems, and workarounds

Base product

Database errors when installing multiple features simultaneously

When you install multiple features at the same time, installation occasionally fails due to a database error. To avoid this error, install one feature at a time.

Additional libraries required for font support

RICOH ProcessDirector for AIX now uses OpenJDK instead of the IBM SDK for AIX. OpenJDK requires additional libraries to identify available fonts on the system.

To ensure that OpenJDK can find the fonts on your system, make sure the fontconfig and freetype2 libraries are installed.

To see if fontconfig is installed run this command: `rpm -qa | grep fontconfig`

If fontconfig is installed, you see results similar to: `fontconfig-2.11.95-4.ppc`

To see if freetype2 is installed run this command: `rpm -qa | grep freetype2`

If freetype2 is installed, you see results similar to: `freetype2-2.8-1.ppc`

Ricoh PDF Printer Limitation

You cannot define a Ricoh PDF Printer on a Linux secondary server connected to a RICOH ProcessDirector for AIX primary server.

Booklet processor tray option not supported

If you create a RICOH Totalflow printer object to represent a cut sheet printer that uses RICOH TotalFlow Print Server, the **Booklet processor tray** option for the **Output bin** property is not supported.

Searching in Viewer takes a long time

If you open a large file in the Viewer and use the text search function, it can take a long time to find results. For better responsiveness, search using document property values.

Legacy workflows and the updated Workflow editor

The Workflow editor in the updated user interface has many new functions that make it easier to use than the Workflow editor in the legacy user interface.

However, when you first open a workflow with multiple branches, you may see overlapping connectors and step names. Try moving steps around to reduce the overlap.

If you cannot get the connectors and rules to display in a suitable way, delete and redraw them. When you delete a connector, its rule remains available in the workflow until you save the workflow. You can redraw the connector and select the rule that was used on the deleted connector without redefining the rule.

Location filtering between legacy and updated user interfaces

In the legacy user interface, when a user sets preferences to show objects from a set of locations, the System Summary contains an **All** button. The button lets the user remove location filtering. If a user clicks the **All** button, the **Allowed locations** property for that user is modified to remove all the locations that were set. All objects with or without locations are displayed.

If the same user then logs in to the updated user interface, the user only sees objects that do not have the **Location** value set. To show the objects in other locations in the updated user interface, an administrator must update the **Allowed locations** property for that user to contain the locations that were removed using the legacy user interface.

You can use the **Update Multiple** action on the Users table accessed from the Administration page and change the Location or other user properties on all selected users at once.

Configuration updates for InfoPrint 5000 printers

If you use RICOH ProcessDirector to send jobs to an InfoPrint 5000 and turn SNMP on, the **Default bins** property is set incorrectly. The printer sends an incorrect bin name as the default, so print jobs cannot be sent to the printer.

To fix the problem, change the value for the **Output bins supported** property on the printer object to **All bins**.

Japanese PDF banner page causes error on InfoPrint 5000

To print double-byte characters on PDF banner pages, make sure that font substitution is enabled for the LPR printer attachment:

1. On the InfoPrint 5000 console, open **Printer Definitions** → **Network** → **Attachments** → **LPR**.
2. On the **Job** tab, select the option to enable font substitution and save the setting.

Rotating in the viewer component

When you rotate a page that shows a PDF object container in the AFP viewer, the PDF object container does not rotate. You are most likely to see this problem when you install the Preprinted Forms Replacement feature. When RICOH ProcessDirector combines data in an AFP file with an electronic form, it creates a PDF object container for the form.

Searching for double-byte character set data in the viewer component

The search function of the AFP viewer can only find double-byte text strings when they are represented using outline fonts. Text strings represented using raster fonts cannot be found.

RICOH ProcessDirector does not support file systems created with the 64-bit inode setting

Use the 32-bit inode setting when you create file systems for RICOH ProcessDirector. File systems created with the 64-bit inode setting are not supported.

Features

Enabling Reports on some SLES versions results in failure

On some versions of SLES, in a rare case, you might see PostgreSQL database fail to install on a new version due to a missing Libm.so.6 (GLIBC_2.29) (64bit) package. Even if this missing package does not cause any errors when installing, enabling the Reports feature for the first time fails.

Uninstalling Reports can result in errors

Uninstalling reports should only be done if assisted by Ricoh Software Support team. Attempting to uninstall reports could result in the inability to install some features afterwards.

Uninstall AFPSupport can affect the AFPSupport samples

If you want to uninstall AFPSupport, you must manually change the AFPSupport samples.

Restoring a previous installation of RICOH ProcessDirector

When you restore a previous installation of RICOH ProcessDirector to remove a feature, we recommend:

- If a feature was just installed and not used, restore to a point before that feature was installed.
- If the feature was used, request assistance from the Ricoh Software Support team.

Cannot import RICOH Supervisor data transmitter or Ricoh cloud credential

Because of the one-to-one relationship between a RICOH ProcessDirector system and RICOH Supervisor, the only way to create the RICOH Supervisor data transmitter is to use the **RICOH Supervisor Settings** page on the system that will transmit data to RICOH Supervisor. If you export all objects from one system to another, these objects are included in the export file but cause an error when you try to import them.

Cannot export or import custom portlets from previous versions

If you created a tree or matrix custom portlet on a RICOH ProcessDirector system prior to version 3.10.1, you cannot import it to a 3.10.1 system. Create the custom portlet again.

Jobs are not processed correctly when sent to Ultimate Impostrip®

When sending jobs to Ultimate Impostrip®, we do not recommend using Multi-Byte Character Set (MBCS) characters in a job name, as it will not process correctly.

MBCS characters are not supported in RICOH Supervisor Settings

MBCS characters cannot be used in any of the fields on the **RICOH Supervisor Settings** page.

Exporting objects from systems with the Reports feature

Through version 3.6 of RICOH ProcessDirector, the Reports feature included a DB2 data base, a Reports tab in the user interface, and three step templates that could be added to workflows to write data into the reports data base. In version 3.7, those parts of the Reports feature were removed. If you

export workflows or groups from a system with the older Reports feature on it and attempt to import them onto a system at version 3.7 or above with the Reports feature on it, errors occur because of the actions defined in groups or the step templates referenced in workflows that are no longer provided with the newer Reports feature. You can overcome this problem with workflows if you remove the steps from the workflows before you export them. Steps based on the **WriteJobReport**, **ArchiveDocumentData**, and **ArchiveInserterData** step templates need to be deleted from workflows. Ricoh Software Support can help you import groups that have this error.

RICOH Visual Workbench data contained in NOP records might be garbled on a DBCS system

When you run the Visual Workbench product interface on a system that uses a double-byte character set (DBCS), the data contained in any No Operation (NOP) records might be garbled.

Text added using Whitespace Manager does not wrap

When you use Whitespace Manager to add text to print jobs, the text does not wrap to the next line at the edge of the white space boundary; the text prints on one line and can extend off the page. You cannot insert carriage returns or line feeds in the text. Whitespace Manager does not check the length of the text, so it does not display a warning that the text is longer than the defined white space.

To insert multiple lines of text in white space, we recommend that you either create a page segment or an image that includes the text and include it as an image rather than entering the text in Whitespace Manager.

Code change requests included in this release

Code change requests (CCRs), service requests (SRs), and other field issues are resolved in this release.

These issues were resolved in RICOH ProcessDirector 3.11.1:

Issue number	Description
RPD3-4471	AFP viewer barcode scans incorrectly.
RPD3-5200	A single file / application is failing in the IdentifyDocuments step.
RPD3-5184	The value at the top of the header page is null.
RPD3-5197	UAT server errors when assigning jobs to printers if users are in groups lacking edit permission for the Job or Job form.
RPD3-5204	Upgrading RPD from version 3.7 to 3.10.1, slowed down the printing process.
RPD3-5270	Using the PPF module when printing AFP files results in randomly added blank pages.
RPD3-5287	Upgrading Windows Application server to version 3.11 generates an error.
RPD3-5320	ACIF error on AFP job in EnableRepositioning step.
RPD3-5324	System.trace littered with "FINDSTR: Line n is too long." messages.

Issue number	Description
RPD3-5335	Import of object does not store data correctly.
RPD3-5033	Upgrading RPD from version 3.7 to 3.10.1 causes issues in viewing reprints.
RPD3-5332	Upgrade failed after upgrading RPD from version 3.9.3 to 3.10.1.

These issues were resolved in RICOH ProcessDirector 3.11:

Issue number	Description
RPD3-5117	Problems with display language in GUI.
RPD3-5109	Problems with the Report Collector download permission.
RPD3-5098	JDF errors.
RPD3-4935	Archive permission errors and slow processing for the archive statement view.
RPD3-5097	Job fails to print.
RPD3-5215	PDF2AFP transform producing valid but incomplete AFPs in certain scenarios caused by an error when counting pages of the output AFP.
RPD3-5166	Fixing issues with Cipher objects that can cause RPD GUI login and other functions to fail.
RPD3-5147	Resolved an issue with Job.CycleDate attribute that caused problems with the advanced filter in the jobs portlet.

These issues were resolved in RICOH ProcessDirector 3.10.2:

Issue number	Description
RPD3-4931	License key for the current step was not found or expired.
RPD3-4912	Cannot schedule print files.
RPD3-4868	Jobs in wait status.
RPD3-4863	The print command for a job failed: String index out of range: 8.
RPD3-4842	Step ReadBarcodes, Current job state details Duplicate detected.
RPD3-4754	RICOH ProcessDirector using incorrectly formed JobPartID in JMF message to Avanti.
RPD3-4746	Print banner and trailer get wrong media.
RPD3-4734	Can't open the Feature Manager tab.
RPD3-4725	'Unable to connect to server' until RICOH ProcessDirector restart.
RPD3-4687	Advent of DST requires resetting input device batching times.
RPD3-4675	Problems with Archive Index. After archive purge the current index is overwritten / deleted. Only new batches are then indexed.

Issue number	Description
RPD3-4661	JumpToTLE fails after product update.
RPD3-4652	Customer can select multiple files for delete from input directories, but not a single file.
RPD3-4589	Error message "pages to print again option is not working".
RPD3-4515	Ongoing issues with Wrapper errors on Child jobs after reboots of the RICOH ProcessDirector system.
RPD3-4077	About RICOH ProcessDirector's session error.

These issues were resolved in RICOH ProcessDirector 3.10.1:

Issue number	Description
IPPD3-4681	Transform service not starting upon reboot

These issues were resolved in RICOH ProcessDirector 3.10:

Issue number	Description
DE41740	Jobs scheduled to printer with EFI Fiery controller stay in Assigned state.
DE41455	At login, "Unable to connect to server" error.

These issues were resolved in RICOH ProcessDirector 3.9.3:

Issue number	Description
DE41464	Cannot set Batching method and Create .zip file at the same time.
DE41204	Having issue with reports when turning on data collection, the print again feature isn't working correctly.
DE41248	Jobs sent with Total Flow printer remain in Assigned state.
DE41319	CombineAFPWithForm fails with a 2-up AFP file.
DE40623	The loading icon does not disappear and remains to be displayed.
DE41220	Show Document List is Not Populating on New GUI for some jobs, Same Job in Old GUI shows Documents: POST 400 Error.
DE40735	Insert plan date changes.
DE41055	Users are unable to complete the password reset process in RICOH ProcessDirector v3.9 GUI
DE40730	Performance problem on RICOH ProcessDirector, actions perform slowly.
DE40406	Internal server error 500 after viewing AFP file.

Issue number	Description
DE40259	Unable to copy file error when trying to reprocess job
DE40741	Adobe plug-in does not read barcodes
DE40383	RICOH ProcessDirector viewer fails to show page 1.
DE40757	Can't print with media from Fiery.

These issues were resolved in RICOH ProcessDirector 3.9.2:

Issue number	Description
DE40580	Unable to login to new RICOH ProcessDirector 3.9.1 System
DE40281	Jobs stay in Server unavailable state.
DE39888	Issue with the new GUI and job arrival time filter

These issues were resolved in RICOH ProcessDirector 3.9.1:

Issue number	Description
DE40137	Search criteria now have case sensitive and case insensitive comparators.
DE40179	Jobs running steps on Windows application or secondary servers get stuck in Server unavailable state.
DE39681	Internal server error when trying to view an AFP file.
DE36844	Java error in a PDF document filter.

These issues were resolved in RICOH ProcessDirector 3.9.0:

Issue number	Description
DE39215	IdentifyPDFDocuments fails on 3.8.3 with same file that worked on 3.6.1
DE38824	When importing a workflow that already exists, it does not get updated.
DE39140	RunHotFolderApplication step issue
DE39018	System Health shows high CPU usage incorrectly
DE38788	doc property incorrect after upgrade from 3.4 to 3.7

These issues were resolved in RICOH ProcessDirector 3.8.4:

Issue number	Description
DE38842	CallRETSservice step generates a leftover file.

DE38580	Steps in a workflow do not process correctly.
DE38489	Steps in a workflow do not process correctly.
DE38317	Filtering problems with Advance filter and filter contents.
DE38307	DB2 error when saving the workflow.
DE38327	Printing error when using a printer media.
DE37175	Incorrect characters appear when indexing using RICOH - PDF Plug-in.
DE38203	Parameters should be in metric system.

These issues were resolved in RICOH ProcessDirector 3.8.3:

Issue number	Description
DE35660	Entry too long in AFP resource path causes error in viewer.
DE36976	Problems with the MVS download.
DE37393	MVSPRSD download receivers fail.
DE37743	Media names from Ricoh TotalFlow printers are not shown correctly in the legacy user interface.
DE37754	Daily maintenance logs were not removed on Windows systems.
DE38033	Daily maintenance logs were not removed on Windows systems installed on drive other than C:\.

These issues were resolved in RICOH ProcessDirector 3.8.2:

Issue number	Description
DE35881	Steps in a workflow do not process correctly.
DE36566	Problems with the AFP output when using True Type font links.
DE37167	Updated user interface is slow when editing a workflow.

These issues were resolved in RICOH ProcessDirector 3.8.1:

Issue number	Description
DE36960	Connector rules for workflows created in the legacy user interface do not appear in the updated user interface.
DE37042	Alternate offset stacker not working for interrupt message pages.

These issues were resolved in RICOH ProcessDirector 3.8:

Issue number	Description
DE32981	Problems viewing files with older versions of Firefox.
DE35060	JAR file missing in the Adobe Acrobat plug-in build.
DE35097	PSF messages that get printed after a job do not get translated.
DE35850	Jobs that finish printing go into a Stopped phase.
DE35973	Restarting RICOH ProcessDirector fails.
DE36022	Text missing when the BuildPDFFromZIP or IdentifyPDFDocumentsFromZip steps in a workflow.
DE36193	License failed to install.
DE36202	extra blank spaces appear in the address block of a PDF.
DE36286	Job fails in the CombinePDFWithForm step.
DE36298	Could not install a license from the RICOH ProcessDirector user interface.
DE36362	Database connection failed because the startTask thread became blocked.
DE36383	Ricoh Pro 8310s PDF printer was not supported.
DE36430	Job slows down in ReorderPages step.
DE36431	Unexpected font in the output of a workflow.
DE36480	Not enough disk space causes PSF install to fail.
DE36882	Wrong output file created because of bad file path.
DE36894	Linked fonts resource missing.
DE36944	OUTGRP causes issues on RICOH ProcessDirector when written in lowercase letters.
DE37026	Input files are not removed.
DE37029	MVS Download problems with lower case outgrp values.

Product documentation

See *RICOH ProcessDirector for AIX: Planning and Installing, G550–1045*, for pre-installation planning, installation tasks, and post-installation tasks.

After it is installed, you can access the RICOH ProcessDirector user interface from a web browser on workstations in your network. The user interface contains field-level help and an information center for RICOH ProcessDirector. The information center contains administrative and operational topics that help users learn about RICOH ProcessDirector. It also includes procedures that describe how to use the product.

To use the online help:

1. Access the user interface at **http://hostname:15080/pd**. Replace *hostname* with the hostname or IP address of the primary computer.

2. To view the information center, click the **?** in the top task bar and select **Help**.
3. To access field or property help:
 - 1) Log in to the user interface:
 1. Type the default user name of **aiw** and the default password of **aiw** or another user name and password that have been created.
 2. Click **Log in**. The first time that you log in with a user name, you are prompted to change the password.
 - 2) Right-click any object on the **Main** or **Administration** page and select **Properties** to open a property notebook.
 - 3) Click any question mark icon in the property notebook for help about a field or property.

In the information center, you can see help about a field or property by typing its name in the **Search** box.

User documentation CD updated

The *RICOH ProcessDirector for AIX: User Documentation* CD, GK4T-4011, has been updated.

New and updated publications

In version 3.11.1, these publications were updated:

RICOH ProcessDirector for AIX: Planning and Installing has been updated in these languages:

- English, G550-1045
- French, G550-20328
- German, G550-20333
- Italian, G550-20338
- Japanese, GA88-4044
- Portuguese, G550-20355
- Spanish, G550-20343

Using RICOH ProcessDirector Plug-in for Adobe Acrobat has been updated in these languages:

- English, G550-20229
- French, G550-20250
- German, G550-20248
- Italian, G550-20251
- Japanese, G550-20252
- Portuguese, G550-20247
- Spanish, G550-20249

RICOH ProcessDirector: Installing Document Processing Features has been updated in these languages:

- English, G550-20312
- French, G550-20317
- German, G550-20318
- Italian, G550-20319
- Japanese, G550-20320
- Portuguese, G550-20358
- Spanish, G550-20321

RICOH ProcessDirector: Integrating with Other Applications has been updated in English, and new translated versions are now available:

- English, S550-1069
- French, S550-1089
- German, S550-1079
- Italian, S550-1099
- Japanese, S550-1119
- Portuguese, S550-1129
- Spanish, S550-1109

Customer support

For problems when installing or using RICOH ProcessDirector, contact Software Support:

- Web page: <http://www.rpp.rioh-usa.com/support>
- Outside the United States: open a call through your country's help line. Level 1 sends it to Level 2 for the Geography.

While using the RICOH ProcessDirector user interface, see the online help before contacting Software Support.

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