RICOH

RICOH InfoPrint Manager™

Secure Print: Installing and Configuring

Version 4.15.0

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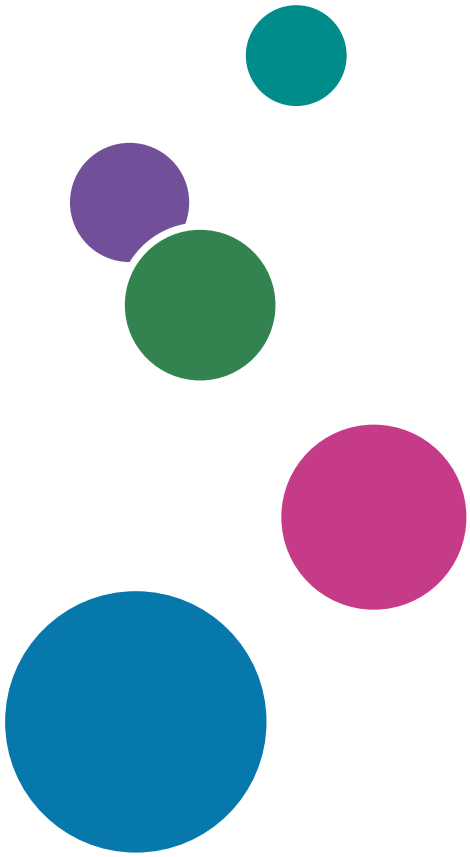
For information not in this manual, refer to the Help System in your product.



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Important

To the maximum extent permitted by applicable laws, in no event will the manufacturer be liable for any damages whatsoever arising out of failures of this product, losses of documents or data, or the use or non-use of this product and operation manuals provided with it.

Make sure that you always copy or have backups of important documents or data. Documents or data might be erased due to your operational errors or malfunctions of the software. Also, you are responsible for taking protective measures against computer viruses, worms, and other harmful software.

In no event will the manufacturer be responsible for any documents created by you using this product or any results from the data executed by you.

Cautions regarding this guide

- Some illustrations or explanations in this guide could differ from your product due to improvement or change in the product.
- The contents of this document are subject to change without notice.
- No part of this document may be duplicated, replicated, reproduced in any form, modified, or quoted without prior consent of the supplier.
- Throughout this publication, references to directory paths indicate the default paths only. If you install RICOH InfoPrint Manager™ or any of its components in a different location, including a different drive, you must adjust the paths accordingly.

  For example, if you install InfoPrint Manager on the `D:` drive of a computer running a Windows® operating system, replace `C:` with `D:` in the directory paths.

Guides for this application

This publication provides information about RICOH InfoPrint Manager™ for AIX, Linux, and Windows, Version 4.15 (Program Number 5648-F40).

This publication includes an overview of InfoPrint Manager and installation and configuration information about the product.

Instruction manuals

These instruction manuals are included:

For information about InfoPrint Manager, see these documents:

- *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 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 for AIX: Planning Guide*, G550-1060
- *RICOH InfoPrint Manager for AIX: Getting Started*, G550-1061
- *RICOH InfoPrint Manager for AIX: Procedures*, G550-1066
- *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 Planning and Configuring Guide*, S550-1051
- *RICOH InfoPrint Manager: Dictionary of Keywords*, S550-1188
- *AFP Conversion and Indexing Facility: User's Guide*, G550-1342
- *Page Printer Formatting Aid for Windows: User's Guide and Reference*, S550-0801
- *RICOH InfoPrint Manager AFP2PDF Transform Feature: Installing and Using*, G550-1057
- *RICOH InfoPrint Manager: Installing InfoPrint Manager Transform Feature*, G550-20160

Help

Property help is available on many screens to provide information for specific tasks and settings.

In addition, the **Help** menu provides access to the HTML version of the instruction manual directly from the user interface.

Note

- A PDF reader, such as Adobe® Acrobat® Reader®, must be installed to view the PDF documentation.

For more information about RICOH printing products, see:

RICOH Commercial and Industrial Printing website at https://www.ricoh-usa.com/en/products/commercial-industrial-printing.

RICOH Software Information Center at https://help.ricohsoftware.com/swinfocenter.

How to read the documentation

Displaying the instruction manual

Use this procedure to view the instruction manuals.

Displaying the instruction manual in PDF format

- InfoPrint Manager includes publications in PDF format on the DVD-ROM supplied with the product.

Displaying the instruction manual in HTML format

- The HTML version of the instruction manual is available directly from the user interface. Start the application, and then click button at the right of the banner and select **Help**.

Displaying property help

Click the ? button next to a property on the user interface to display the property help for that item.

Symbols

The following symbols are used in this manual to help you to identify content quickly.

- This symbol indicates points to pay attention to when using the product. Be sure to read these explanations.

- This symbol indicates helpful supplementary information that is not essential to completing a task.

Bold

Bold type indicates the names of dialogs, menus, menu items, settings, field labels, buttons, and keys.

Italic

Italic type indicates the titles of manuals and variables that you must replace with your own information.

`Monospace`

`Monospace type` indicates computer input and output.

Abbreviations

ACIF

AFP Conversion and Indexing Facility

AFP

Advanced Function Presentation

AIX®

Advanced Interactive Executive

ANSI®

American National Standards Institute

ASCII

American Standard Code for Information Interchange

BCOCA

Bar Code Object Content Architecture

CCSID

coded character set identifier

CMR

color management resource

EBCDIC

Extended Binary Coded Decimal Interchange Code

FOCA

Font Object Content Architecture

GIF

Graphical Interchange Format

GOCA

Graphics Object Content Architecture

IOCA

Image Object Content Architecture

IP

Internet Protocol

IPDS

Intelligent Printer Data Stream

JCL

job control language

JES

Job Entry Subsystem

JPEG

Joint Photographic Experts Group

MO:DCA

Mixed Object Document Content Architecture

MO:DCA-P

Mixed Object Document Content Architecture for Presentation

MVS™

Multiple Virtual Storage

PCL

Printer Command Language

PDF

Portable Document Format

PTOCA

Presentation Text Object Content Architecture

RAT

resource access table

TIFF

Tagged Image File Format

XML

Extensible Markup Language

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- IBM®
- MVS™
- OS/390®
- POWER®
- PowerHA®
- PowerVM®
- S/390®
- Semeru Runtime®
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1. Overview

• **Introducing the Pull Print Feature**

Introducing the Pull Print Feature

InfoPrint Manager Pull Print Feature is an advanced method of printing which works with your existing InfoPrint Manager server to increase control and confidentiality in your printing environment. This feature schedules the jobs to print only when you, as the authenticated owner, pull them on the device. So, it works in contrast with the conventional printing process of pushing jobs. There is no submission binding of the printing job to a certain printer, the printing document follows you across your enterprise to be printed on the next available printer. You can use this to reduce unwanted print, and therefore, save money. You can further save paper by turning off header sheets. By not printing the job until the owner requests it from the printer console, this feature also provides a secure printing environment.

Key benefits of using the Pull Print Feature

- Flexibility in setting up the printing environment
- Control over print jobs
- Increased confidentiality and data protection
- Advocates for user responsibility
- Provides a reliable printing experience
- Reduces unwanted printing and operating costs

How the Pull Print Feature works

With the components installed and configured, you can easily turn an InfoPrint Manager actual destination for a supported printer into a Pull Print actual destination. Pull Print actual destinations do not schedule authenticated jobs to print until the owner logs on to the printer and requests them. You can also create Anyplace queues that serve as shared print queues for authenticated jobs.

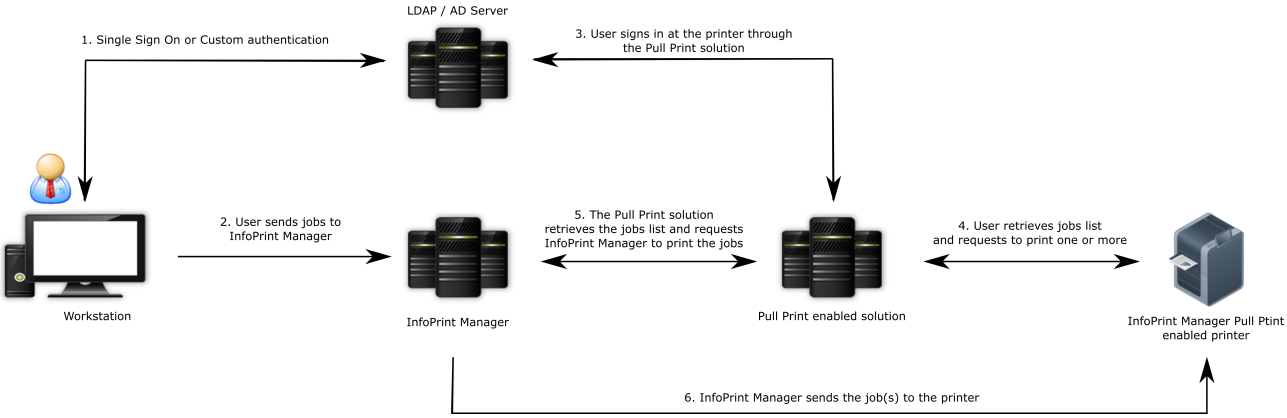
When you use InfoPrint Manager, you have access to these functions:

- initiate printing by using one of the supported InfoPrint Manager clients
- jobs are not scheduled to output until you trigger the printing
- only authenticated LDAP users are allowed to operate on the job
- while being physically present in front of the printer, you can modify, print, retain or delete your own jobs
- reprint retained jobs as if they were residing in an Anyplace queue
- save paper by turning off unnecessary header sheets
- handle confidential printing without worrying about security issues

How Pull Print works

The InfoPrint Manager Pull Print Feature can be used with various Ricoh StreamlineNX or Nuance Equitrac supported printers through a Ricoh StreamlineNX or Equitrac server. To use the Pull Print Feature through an Equitrac server, you must have Equitrac Office/Express version 4.2.6 or higher installed. To use the Pull Print Feature through a Ricoh StreamlineNX server, you must have Ricoh StreamlineNX version 3.1 installed. For more detailed information about Ricoh StreamlineNX or Nuance Equitrac, consult the Ricoh StreamlineNX or Nuance Equitrac documentation.

Secure Print using the Pull Print Feature



InfoPrint Manager clients

To use the InfoPrint Manager Pull Print Feature, you must have an InfoPrint Manager client able to send the information on which user can release the job installed on your computer. The InfoPrint Manager clients that can do this are:

- InfoPrint Select for Windows and Linux
- The Linux Command-Line Client
- InfoPrint Manager SAP Client
- MVS Download Iprafp
- Web Interface when running in LDAP mode

By configuring the InfoPrint Manager clients, you can submit authenticated jobs. By configuring SLNX, or Equitrac to use your LDAP server, you can display your jobs on the printer console, modify and release them for printing, or delete them.

InfoPrint Manager Pull Print Feature can identify Anyplace jobs from Anyplace queues of additional secondary InfoPrint Manager systems and can also transfer and print the selected jobs between different InfoPrint Manager systems. Authenticated LDAP users (at one of the supported printers being driven by an actual destination in one InfoPrint Manager system) can locate the Anyplace job that they submitted to a logical destination associated with a Anyplace queue in a different InfoPrint Manager system.

Note

- For information about installing and configuring the LDAP support for InfoPrint Manager Select client, for InfoPrint Manager Linux Command-Line Client, and for InfoPrint Manager SAP Client, see the appropriate *RICOH InfoPrint Manager: Getting Started* for your operating system and *RICOH InfoPrint Manager: SAP Planning and Configuring Guide*.
- For information about the Pull Print Feature specific attributes, see *RICOH InfoPrint Manager: Reference*.

2. Installing the Pull Print Feature

- **Installing the Pull Print Feature on a Linux System**
- **Installing the Pull Print Feature on an AIX System**
- **Installing the Pull Print Feature Locally on a Windows System Using the Installer**

This section describes how to complete the installation of the Pull Print Feature. It contains information on how to install the software on Linux, AIX, and Windows systems.

Installing the Pull Print Feature on a Linux System

Installing the Pull Print Feature Locally Using the Installer

To install the InfoPrint Manager Pull Print Feature on your InfoPrint Manager for Linux system using the InfoPrint Manager Installer:

1. Log into the Linux system as `root`.
2. Mount the InfoPrint Manager ISO file to a location of your choice.
3. Enter this command:

```
/path/to/mount/point/install.sh
```

   Change `/path/to/mount/point` accordingly and follow the prompts on the screen.

4. On your keyboard, press **Enter** to read the terms of the **RICOH InfoPrint Manager Software License Agreement**. Then enter **yes** or press **Enter** to accept the terms of the license agreement and proceed with the installation.
5. On your keyboard, press **Enter** to read the terms of the **RICOH Software Maintenance Agreement**. Then enter **yes** or press **Enter** to accept the terms of the maintenance agreement and proceed with the installation.
6. Choose the InfoPrint Manager license that you want to install (trial or product). If you choose the product version, specify the actual complete path to the license file:

```
/path/to/license.key
```

   Note

   - You can use tab completion to enter the path.

7. Press **Enter** to select the default user and group to run InfoPrint Manager. The default user is **ipm1** and the default group is **sys**.
8. If you want to create the user and the group yourself, use the format `ipmuser:ipmgroup`.
9. Enter the digit preceding the language that you want to use with InfoPrint Manager server and features. Press **Enter** to use English. For more information about how to add languages for your operating system, see the "Adding or removing languages" topic in the *RICOH InfoPrint Manager for Linux: Getting Started*.
10. When presented with the prompt `Install RICOH InfoPrint Manager Pull Print Feature?`, enter `Yes`.
11. Enter the host name or IP address and port of the primary InfoPrint Manager server to be used by the Pull Print Feature. Press **Enter** to proceed. If not known at the installation time, these values can be configured later.

Note

- You can use an IPv4 or IPv6 address. If you enter an IPv6 address, make sure that you include it within square brackets. For example:

```
[2001:0ce8:58a3:0000:0000:6a2e:0370:3734]
```

12. Enter the host name or IP address and port of the backup InfoPrint Manager server to be used by the Pull Print Feature and press **Enter**. If not known at the installation time, these values can be configured later.
13. Choose if you want to create an **ipin_response** file for an unattended installation. If you enter **yes**, the installation stops after the file is created and you will be asked for the name of the remote system. Leave blank for the name of the local system.

Note

- The **ipin_response** file is saved in the home directory of the user running the installer. If an **ipin_response** file already exists, you will be asked to overwrite the file or choose another name. Only the file name can be changed as the file is always saved in the home directory.

Note

- All the steps so far do not require that the `install.sh` utility is run by the **root** user.

14. Enter the full path to the directory containing the InfoPrint Manager installation files, namely the path to the mount point or to a different directory containing the full directory structure of the ISO media.

Note

- You can use tab completion to enter the path.

The InfoPrint Manager installation begins. After the installation is complete, log off and log in again for each logged in user.

Installing InfoPrint Manager on Remote Systems

You can configure a server to support remote and unattended installations of the InfoPrint Manager software. Follow the instructions from the *RICOH InfoPrint Manager for Linux: Getting Started* guide.

For the unattended installation of InfoPrint Manager using the "pull" and "push" methods, you need to edit the **`ipin_response`** file. The **`ipin_response`** file contains all of the potential input variables.

Here is an example of the **`ipin_response`** file:

```
////////////////////////////////////////////////////////////////////////////
//
//  RICOH InfoPrint Manager™ License
//
////////////////////////////////////////////////////////////////////////////

// The following setting is used to determine whether you accept the
// license agreement of either Trial or Register license type and the
// software maintenance agreement. Read the license and software
// maintenance agreements, from Ricoh Company, Ltd. and other companies,
// carefully. To review the licenses in other languages, refer to the
// Publications CD or the webpage available at
```

```
// https://help.ricohsoftware.com/swinfocenter/ricoh-software-licenses/
swlicenses.ditamap/$/license_infoprintmanager.
// The value of 1 indicates "Accept" and 0 indicates "Decline".
// Declining the license and software maintenance agreements will cause
// the product not to install.
acceptLicense=0

// The following setting is used to determine whether you intend to
// install InfoPrint Manager using Trial or Register license type, where 1
// indicates "Trial" and 0 indicates "Register".
// The trial licenses are always installed during installation of RICOH
// InfoPrint Manager.
trialLicense=1

// The following setting is used only when a Register license type is
// selected and it is used to determine the location of the license file
// used for registration of the InfoPrint Manager product. Make sure your
// license file is available on the specified location during the
// installation process.
// Example: licenseKey=/path/to/license.key
#licenseKey=

////////////////////////////////////////////////////////////////////////////
//
// RICOH InfoPrint Manager user and group
//
////////////////////////////////////////////////////////////////////////////

// Choose under which user and group (optional) InfoPrint Manager will
// run. Default user is ipm1, but it can be root or other system user or
// network user. If no group is specified, the default is group sys. The
// format for a different user and group is:
//     ipm_user=ipmuser:ipmgroup
ipm_user=ipm1

// Create the user at install, default true.
create_user=true

////////////////////////////////////////////////////////////////////////////
//
// RICOH InfoPrint Manager Language
//
////////////////////////////////////////////////////////////////////////////

// Set the language, by default is en_US
iprLocale=en_US
#iprLocale=fr_FR
#iprLocale=es_ES
#iprLocale=de_DE
#iprLocale=it_IT
#iprLocale=Ja_JP

////////////////////////////////////////////////////////////////////////////
//
// RICOH InfoPrint Manager Features
//
////////////////////////////////////////////////////////////////////////////

// The following variables define the InfoPrint Manager components or
// features you want to install. 1 indicates "yes" and 0 indicates
// "no".
wantSAP=0
```

```
wantJPSF=0
wantPullPrint=1
wantAFP2PDF=0

// The following parameters define the host and the port of the InfoPrint
// Manager command processor server (and its backup) that the Pull Print
// Feature is using to communicate with the InfoPrint Manager servers.
// Example: PRIMARY_HOST_PORT=localhost:6874
PRIMARY_HOST_PORT=example.domain.name:6874
PRIMARY_BACKUP_HOST_PORT=example-backup.domain.name:6974

////////////////////////////////////////////////////////////////////////////
//
// RICOH InfoPrint Manager Remote Installation
//
////////////////////////////////////////////////////////////////////////////

// Make sure that remote host name matches the current host name setting if you
// are performing an unattended REMOTE install.
#hostname=

////////////////////////////////////////////////////////////////////////////
//
// RICOH InfoPrint Manager re-install
//
////////////////////////////////////////////////////////////////////////////

// If you are running a reinstall of InfoPrint Manager, you will probably
// want to retain your previously defined configuration objects. To do
// this, set wantKeepObjects to 1. If you want to have a new minimal
// configuration, set to 0.
wantKeepObjects=1
```

Installing the Pull Print Feature on an AIX System

Installing the Pull Print Feature Locally Using the Installer

To install the InfoPrint Manager Pull Print Feature on your InfoPrint Manager for AIX system:

1. Log into the AIX system as **root**.
2. Insert the *InfoPrint Manager DVD*, into your DVD-ROM drive.
3. Open a terminal window.
4. Follow these steps:
    1) Type this on the AIX command line: **smit cdrfs** or **smitty cdrfs** (for the ASCII version).
    2) Select **Add a CDROM File System** from the list of choices presented.
    3) Click **List** and select your DVD-ROM device name (**cd0**, for example).
    4) Type this in the **MOUNT POINT** field: **/cdrom**.
    5) Click **OK**. If you see **crfs: 0506-909 /cdrom file system already exists**, do not interpret this as a failure. The existing **/cdrom** file system should be usable.
    6) Press the **F12** key to exit SMIT.

5. To install InfoPrint Manager server software or optional InfoPrint Manager for AIX features using the InfoPrint Manager for AIX Installer on the local AIX server, enter this command:

```
./cdrom/setup
```

   The InfoPrint Installer begins by checking your configuration and might display some messages regarding system checks and verifications.

6. The Installer's first screen advises you to back up the system.
7. In the Splash screen, select the language from the drop-down list and click OK.
8. Press Next in the Welcome screen displayed.
9. The **License Agreement** dialog is displayed on the screen. Read the license agreement and then click **I accept the terms of the license agreement**. Click **Next** to proceed.
10. The **Software Maintenance Agreement** dialog is displayed on the screen. Read the software maintenance agreement and then click **I accept the terms of the license agreement**. Click **Next** to proceed.
11. The installation type screen is displayed. Select InfoPrint Manager.
12. Select **Add a Feature** and click **Next**.
13. Select the**Pull Print** checkboxes in the next screen. Be sure to make selections even if you are upgrading or reinstalling InfoPrint Manager. Click **Next** to proceed and insert the appropriate DVD when required.
14. In the next screen, enter the host name or IP address and port of the primary InfoPrint Manager server to be used by the Pull Print Feature. Click **Next** to proceed. If not known at the installation time, these values can be configured later.

    Note

    - You can use an IPv4 or IPv6 address. If you enter an IPv6 address, make sure that you include it within square brackets. For example:

```
[2001:0ce8:58a3:0000:0000:6a2e:0370:3734]
```

15. Enter the host name or IP address and port of the backup InfoPrint Manager server to be used by the Pull Print Feature and click **Next**. If not known at the installation time, these values can be configured later.
16. You see a summary of your installation selections. If any of this information is incorrect, you can click the **Back** button to return to the appropriate screen and correct the problem. When you click the **Install** button, the Installer displays the message **Installing InfoPrint Manager. Please wait...** and the progress bar is displayed.
17. Click **Finish** to exit the InfoPrint Installer. The system must be restarted before the installation is complete. If you click **Yes**, restart my computer, the AIX system shuts down immediately without any message to other users that a shutdown will occur.
18. Regardless of your selection, the InfoPrint Installer unmounts the DVD, which you can then remove from the DVD-ROM drive.

Installing InfoPrint Manager on Remote Systems

You can configure a server to support remote and unattended installations of the InfoPrint Manager software.

For the unattended installation of InfoPrint Manager using the "pull" and "push" methods, you need to edit the **ipin_response** file. The **ipin_response** file contains all of the potential input variables.

Here is an example of the **ipin_response** file:

```
////////////////////////////////////////////////////////////////////
//
// File: ipin_response
// Project: InfoPrint Manager Installer
// Purpose: Contains all settable variables for an unattended
//          run of the InfoPrint Manager Installer.
//
////////////////////////////////////////////////////////////////////


// It is crucial that host name match the current host name setting
// if you are performing an unattended REMOTE install.
hostname=target_server

// Choose under which user InfoPrint Manager will run.
// Default is ipm1, but it can be root or other system user
// or network user.
ipm_user=ipm1

// Create the user at install, default true.
create_user=true

////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////////
//
//  License Type Options
//
////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////////

// The following setting is used to determine whether you intend to
// install InfoPrint Manager using Trial or Register license type,
// where 1 indicates "Trial" and 0 indicates "Register".
trialLicense=1

// The following setting is used to determine whether you accept the license
// agreement of either Trial or Register license type and the software
// maintenance agreement. Read the license and software maintenance agreements,
// from Ricoh Company, Ltd. and other companies, carefully.
// To review the licenses in other languages, refer to the Publications CD or the
// webpage available at
// https://help.ricohsoftware.com/swinfocenter/ricoh-software-licenses/
swlicenses.ditamap/$/license_infoprintmanager.
// The value of 1 indicates "Accept" and 0 indicates "Decline". Declining the
// license and software maintenance agreements will cause the product not to
// install.
acceptLicense=0
// The following setting is used only when a Register license type is selected
// and it is used to determine the location of the license file used for
```

```
// registration of the InfoPrint Manager product. Make sure your license file is
// available on the specified location during the installation process.
licenseKey=/tmp/license.key

// The following variables define the InfoPrint Manager components or features
// you want to install. 1 indicates "yes" and 0 indicates "no".
wantServer=1
wantSAP=0
wantJPSF=0
wantPullPrint=0
wantAFP2PDF=0

// Pull Print settings
// The following parameters define the host and the port of the InfoPrint Manager
// command processor server (and its backup) that the Pull Print Feature is using
// to communicate with the InfoPrint Manager servers.
// Example: PRIMARY_HOST_PORT=localhost:6874
PRIMARY_HOST_PORT=
PRIMARY_BACKUP_HOST_PORT=

// If you are running a reinstall or an upgrade from a previous
// release of InfoPrint Manager, you will probably want to retain
// your previously defined configuration objects. To do this,
// set wantKeepObjects to 1. If you want to have a new minimal
// configuration, set to 0.
wantKeepObjects=1

// Set PrimaryServer to 1 if this is on the primary server otherwise
// set PrimaryServer to 0 and SecondaryServer to 1.
PrimaryServer=1
SecondaryServer=0

// If installing InfoPrint Manager on
// a secondary server, you must specify the IP address (or resolvable
// host name) of the primary system in the primSrvrAddr variable.
primSrvrAddr=dotted_decimal_address

// Set the language, by default is en_US
iprLocale=en_US
// iprLocale=fr_FR
// iprLocale=es_ES
// iprLocale=de_DE
// iprLocale=it_IT
// iprLocale=Ja_JP


////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////////////
//
//  File System Allocation Options (in Megabytes)
//
////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////////////

/var/psfAllocationSize=512
/var/pdAllocationSize=2048
/var/psf/segmentsAllocationSize=2048
/var/psfVolumeGroup=rootvg
/var/pdVolumeGroup=rootvg
/var/psf/segmentsVolumeGroup=rootvg

// Paging space should be 512 Megabytes or twice physical memory,
```

```
// whichever is larger.
wantIncreasePagingSpace=1
pagingSpaceAmount=512

// You should elect to exit if the code installation fails.
// Details of the failure will be in /var/log/pd/install/ipiinstallp.wlog.
wantExitOnInstallpFail=1

// Logging off when installing a remote system can cause
// crashes. Leave this variable set to 0 when running remotely.
wantLogoff=0
```


Installing the Pull Print Feature Locally on a Windows System Using the Installer

To install the InfoPrint Manager Pull Print Feature on your InfoPrint Manager for Windows system:

1. Log in as Administrator.

   Note

   You must have Administrator Privileges to install or uninstall the Pull Print Feature.
2. Insert the InfoPrint Manager DVD into your DVD-ROM drive and start the installation.
3. Click **Next** in the Welcome screen.
4. Select **Standard**, and click **Next**.
5. Depending on your needs, select the type of installation that best suits you. If you select **I want to try this product.**, you have the possibility to use InfoPrint Manager in trial mode for the next 60 days.
6. Create a program folder or select an existing one, and click **Next**.
7. Select the **PullPrint Feature** label, and click **Next**.
8. Enter the host name or IP address and port of the primary InfoPrint Manager server to be used by the Pull Print Feature. Click **Next** to proceed.

   Note

   - You can use an IPv4 or IPv6 address. If you enter an IPv6 address, make sure that you include it within square brackets. For example:

```
[2001:0ce8:58a3:0000:0000:6a2e:0370:3734]
```

9. Click **Install** to start the installation process.

3. Configuring InfoPrint Manager Server Software

- **Configuring Pull Print Actual Destinations**
- **Configuring Anyplace Print Queues**
- **Managing InfoPrint Manager Security for the Pull Print Feature**

To configure your InfoPrint Manager server to support Pull Print jobs, you need to create AIX, CUPS, Passthrough, or PSF Other actual destinations for each printer you want to pull jobs.

Configuring Pull Print Actual Destinations

To set an AIX, CUPS, Passthrough, or PSF Other actual destination as a Pull Print actual destination, you must set the **pull-print-printer** attribute to `true`. You cannot set the **pull-print-printer** attribute to `true` unless:

- The **logical-destinations-assigned** attribute is set to the logical destination through which submissions to this actual destination are made.
- The **printer-tcpip-internet-address** attribute is set to the address of one of the supported printers. This should be the same printer identified in the **printer-command** or the **device-name** attributes.

  Note

  Setting the **printer-tcpip-internet-address** attribute turns on the SNMP monitoring for the actual destination. If you do not want to use the SNMP function, then set the **use-snmp** attribute to `false`.
- The **force-destination-setup** attribute is set to `false`.

When an actual destination is identified as a Pull Print printer, jobs that have the **authenticated-login** attribute set are held for pull-print reason in the queue until they are requested by the authenticated user at the printer.

Since the owner has to be at the printer to request the job print, you may choose to turn off banner pages for your Pull Print actual destinations. To turn off the banner pages, use the **auxiliary-sheets-selection-supported**, **printer-start-sheet**, **printer-separator-sheet**, and **printer-end-sheet** actual destination attributes.

Configuration considerations for Pull Print actual destinations

Jobs submitted with the LDAP-enabled clients are authenticated jobs. Authenticated jobs that can be scheduled only to an actual destination with the **pull-print-printer** attribute set to `true` require that the jobs be pulled from the printer. These jobs are held for Pull Print on the queue and you must pull them from the printer console. If the **pull-print-printer** attribute is set to `false`, the authenticated jobs sent to that actual destination are printed without being pulled from the printer.

Your logical destinations to queue to actual destinations configuration is very important when using Pull Print. For example, you can pool your Pull Print printer actual destinations to allow users to pull their jobs to any of those printers. It is important to understand that authenticated jobs can be printed on a non-Pull Print printer actual destination, including a non-Pull Print printer actual destination in a pool with Pull Print printer actual destinations could empty your queue of Pull Print jobs. If you want to require that jobs be pulled from a printer, you must make sure that your configuration does not allow for authenticated jobs to be scheduled to a non-Pull Print printer actual destination.

Since it is also possible to create more than one actual destination for sending jobs to the same printer, you can create separate logical destination to queue to actual destination configurations allowing the jobs to be sent to the printer as normal with one actual destination, while requiring them to be pulled from the printer with the other actual destination. By controlling which users are allowed to submit jobs

to the different logical destinations, you can control which users have to pull their jobs from the printer and which users do not.

Note

When creating multiple actual destinations for the same printer on an InfoPrint Manager for AIX server, make sure that you set the same value in the **device-name** attribute of each actual destination.

Configuring Anyplace Print Queues

In addition to creating Pull Print actual destinations, you can create special queues to hold jobs that you want your LDAP authenticated users to be able to pull to any Pull Print printer or Anyplace printer. These Anyplace queues have no actual destinations associated with them and can only accept LDAP authenticated jobs. Authenticated user's jobs in Anyplace queues appear on all Pull Print and Anyplace printers.

To create an Anyplace queue, set the initially settable **queue-type** attribute to **anyplace-queue** when you create it. The **queue-type** attribute cannot be changed once a queue is created.

Note

An Anyplace queue and an Anyplace logical destination can be created from the command line or from the Administration GUI.

Anyplace queues support a subset of the standard queue attributes and queue operations. For more information, see the RICOH InfoPrint Manager: Reference publication.

Configuration considerations for Anyplace Print queues

Like standard queues, logical destinations can be created and associated with Anyplace queues. This allows job and document defaults to be applied to Anyplace jobs just like other jobs. These are the only job and document attribute defaults that are applied to the job.

Whether a particular Pull Print actual destination can support the job and document attributes of a job cannot be determined until a print request is made from the printer. This means Anyplace jobs can appear on the Anyplace tab on the printer console that cannot be printed on that printer. An error is returned when the attempt to print the job is made at the console. If an error is returned, the job remains in the Anyplace queue. If the print request is successful, the job is moved to the Pull Print actual destination's queue and behaves like a released Pull Print job. It cannot be pulled to another Pull Print printer even if it does not print for a while.

Required logical destination configuration for Anyplace queues when printing to a StreamlineNX server (Anyplace printer)

When jobs are submitted to a logical destination that routes into an Anyplace queue, InfoPrint Manager must be able to determine which logical destination is allowed to process the job after it is released at an Anyplace printer. To enable this routing, the logical destination must specify a processing logical destination that is associated with an Anyplace actual destination.

Setting the `processing-logical-destination-requested` attribute

In the `initial-value-job` configuration of the logical destination that receives submissions from the Anyplace queue, you must set `processing-logical-destination-requested` to a logical destination that is assigned to an actual destination configured as an Anyplace printer. You must

configure this attribute when a logical destination is used as the submission point for Anyplace jobs, and when jobs are expected to be released at StreamlineNX printers.

This attribute ensures that InfoPrint Manager can:

- Identify which logical destinations are eligible to process the job after the Pull Print release
- Map the job to the correct Anyplace actual destination
- Make the job available for authenticated retrieval at StreamlineNX printers

Without this setting, jobs submitted to the logical destination may:

- Remain in the Anyplace queue without routing
- Be rejected at release time

From an operational viewpoint, a correct configuration ensures that:

- Jobs submitted from desktops or applications into an Anyplace workflow are properly routed
- StreamlineNX printers can retrieve and print the job after user authentication
- Pull Print behavior is consistent across all StreamlineNX devices

Configuring additional Anyplace InfoPrint Manager systems

To configure additional Anyplace InfoPrint Manager systems:

1. Identify the additional Anyplace InfoPrint Manager systems to the Pull Print Web application and make sure these are not command processors in the primary system.

   Add the additional Anyplace InfoPrint Manager systems by using the InfoPrint Manager SMIT (AIX), IPMMI (Linux), or IPMMC (Windows) interface.

   To configure the Pull Print Feature setting with additional Anyplace command processors of remote InfoPrint Manager systems, you must set the **Additional Anyplace systems** field.

   This field specifies the list of the IP addresses and ports of the Anyplace systems that the Web application can use in order to pull jobs.

   Note

   The InfoPrint Manager SMIT (AIX) interface allows you to add only two additional Anyplace InfoPrint Manager systems. If you need to add more additional Anyplace InfoPrint Manager systems, call support for assistance on how to do this.

   See Configuring the Pull Print Feature Web Application to Work with the InfoPrint Manager System, p. 25, for more information about how to use these interfaces.

2. On the additional servers, if you do not have the Pull Print Feature installed on the remote InfoPrint Manager systems, you must set the proper InfoPrint Manager Security that allows the Web application to perform the required operations.

   Use the instructions from Managing InfoPrint Manager Security for the Pull Print Feature, p. 24 to set the InfoPrint Manager Security for the Anyplace InfoPrint Manager systems.

3. On each additional system, you must create Anyplace queues.

   Use the InfoPrint Manager Java GUI or the command line, to create the Anyplace queues.

Managing InfoPrint Manager Security for the Pull Print Feature

The operations taken to display, release, and delete jobs to print are carried out by the **wsClient@|nfoPrintManager** user on behalf of the user at the printer console. This user must be a member of the **WebServices** group. The InfoPrint Management installer automatically creates the **WebServices** group and assigns the default FST ACL permissions for the **wsClient@|nfoPrintManager** user.

Note

For more information on InfoPrint Manager Security, see the appropriate *RICOH InfoPrint Manager: Procedures* publication for your operating system.

Spool management

If the Pull Print and the Anyplace Print jobs have not been printed in a defined time frame (the default time period is 24 hours), these jobs are discarded. You can change the default time period for discarding the jobs by using the **pull-print-job-timeout** server attribute. When the jobs are discarded, a notification message is sent if **past-discard-time** notifications are requested. This notification event is a default job notification.

To change the default time out interval:

1. Open the **InfoPrint Manager Administration GUI**.
2. Go to **Server** → **Properties**.
3. In the **General** tab, click **Show more**.
4. Set the **Pull Print Job timeout** to the interval you need.

Since Pull Print and Anyplace Print jobs are held until the owner requests them at the printer or they are deleted when the time period elapses, you could see more jobs than before in your InfoPrint Manager server. You can control this build-up of jobs with the value you specify on the **pull-print-job-timeout** server attribute, but you might require extra spooling space. If you are using multiple InfoPrint Manager servers, you must remember that the print files are not necessarily stored on the computer where the job resides. They are stored on the computer where the command processor of the InfoPrint Manager server that the job submitter is using resides. In most distributed systems, separate InfoPrint Manager servers are configured to behave just as command processors, which means they contain no logical destination queues or actual destinations. They just service job submission clients and graphical user interfaces.

Accounting considerations

The **additional-accounting-log-attributes** actual destinations or server attribute contains the additional job and document attributes that you define to record in the accounting log of each actual destination for each job printed. If you plan to use the **authenticated-login** attribute for accounting purposes, use the server or actual destination **additional-accounting-log-attributes** attribute to add the **authenticated-login** information to the server accounting logs. For more information, see the appropriate *RICOH InfoPrint Manager: Procedures* publication for your operating system.

4. InfoPrint ManagerPull Print Feature

- **Configuring the Pull Print Feature Web Application to Work with the InfoPrint Manager System**
- **Modifying the Pull Print Feature Settings**
- **Configuration Settings when Using the Pull Print Feature with a Ricoh StreamlineNX Server**
- **Configuration Settings when Using the Pull Print Feature with an Equitrac Server**
- **Using the Pull Print or Anyplace Functions with a Ricoh StreamlineNX or Equitrac Server**

Configuring the Pull Print Feature Web Application to Work with the InfoPrint Manager System

The Pull Print Feature Web application connects to the InfoPrint Manager system the same way as an InfoPrint Manager GUI or client. The Web application looks for the Pull Print actual destinations feeding a printer in that system. You might want to connect the Pull Print Web application to the same command processor that you use for your InfoPrint Manager Administration GUI.

If you have not configured the host name or the IP address and the port number of the InfoPrint Manager server for the Pull Print Web application to connect to at the InfoPrint ManagerPull Print Feature installation time, or you need to change these values, you need to use the IPMMI (Linux), SMIT (AIX), or MMC (Windows) interface to set the IP addresses and ports of the primary and backup servers.

To change the Pull Print Feature settings on an AIX system:

1. Stop the Web server first. To stop the Web server go to **SMIT** → **InfoPrint Printing System** → **InfoPrint Utilities** → **Web Server** → **Stop Web Server**. Stopping the InfoPrint Manager Web Server causes all the Web applications to stop.
2. Add or change the Pull Print Feature settings. To add or change the Pull Print Feature settings go to **SMIT** → **InfoPrint Printing System** → **InfoPrint Utilities** → **Pull Print Feature Settings**.
3. To configure the Pull Print Feature settings, you can set these fields:
   - **Primary server IP and port**: Indicates the command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This parameter uses the format with the address, a : (colon), and the port number. For example:

     Hostname (recommended):

```
example.domain.com:6874
```

     IPv4:

```
192.168.1.32:6874
```

     IPv6:

```
[2001:0ce8:58a3:0000:0000:6a2e:0370:3734]:6874
```

   - **Backup server IP and port**: Indicates a backup command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This command processor must be in the same system as the command processor identified by the primary IP address and port. This parameter uses the format with the address, a : (colon), and the port number. For example: 192.168.1.32:6876.
4. Press **Enter**.
5. Start the Web server. To start the Web server: go to **SMIT** → **InfoPrint Printing System** → **InfoPrint Utilities** → **Web Server** → **Start Web Server**.

To change the Pull Print Feature settings on an Linux system:

1. Stop the Web server first. To stop the Web server:
   - Go to **Applications** → **InfoPrint Manager** → **Management Interface**.
   - Expand the **Objects** group.
   - Select the **Web Server** object.
   - In the right pane, right click on **InfoPrint Manager Web Server**.
   - From the drop list select **Stop**.

   Stopping the InfoPrint Manager Web Server causes all the Web applications to stop.
2. Add or change the Pull Print Feature settings. To add or change the Pull Print Feature settings:
   - Go to **Applications** → **InfoPrint Manager** → **Management Interface**.
   - Expand the **Objects** group.
   - Select the **Web Server** object.
   - In the right pane, right click on **InfoPrint Manager Web Server**.
   - From the drop list select **Applications...**.
   - In the **Applications Settings** window select the **Pull Print Feature** tab.
3. To configure the Pull Print Feature settings, you can set these fields:
   - **Primary server IP and port**: Indicates the command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This parameter uses the format with the address, a : (colon), and the port number. For example: 192.168.1.32:6874.
   - **Backup server IP and port**: Indicates a backup command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This command processor must be in the same system as the command processor identified by the primary IP address and port. This parameter uses the format with the address, a : (colon), and the port number. For example: 192.168.1.32:6876.
4. Press **Enter**.
5. Start the Web server. To start the Web server:
   - Go to **Applications** → **InfoPrint Manager** → **Management Interface**.
   - Expand the **Objects** group.
   - Select the **Web Server** object.
   - In the right pane, right click on **InfoPrint Manager Web Server**.
   - From the drop list select **Start**.

To change the Pull Print Feature settings on a Windows system:

1. Stop the Web server first. To stop the Web server run the **Stop** command from the Management Console interface. Stopping the InfoPrint Manager Web Server causes all the Web applications to stop.
2. Add or change the Pull Print Feature settings. To add or change the Pull Print Feature settings right click on the **WebServer** icon and choose the **Configure** option.

3. To configure the Pull Print Feature settings, you can set these fields:
   - **Primary server IP and port**: Indicates the command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This parameter uses the format with the address, a : (colon), and the port number. For example: 192.168.1.32:6874.
   - **Backup server IP and port**: Indicates a backup command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This command processor must be in the same system as the command processor identified by the primary IP address and port. This parameter uses the format with the address, a : (colon), and the port number. For example: 192.168.1.32:6876.
4. Click **OK**.
5. Start the Web server. To start the Web server run the **Start** command from the Management Console interface.

For more information, see Modifying the Pull Print Feature Settings, p. 27.

Modifying the Pull Print Feature Settings

This section describes how to modify the Pull Print Feature Web application settings.

There are two groups of values that you can set for the Pull Print Feature Web application to work with an InfoPrint Manager system: the connection to InfoPrint Manager systems settings (**Primary server IP and port**, **Backup server IP and port**, **Reconnection timeout**, **Job processing timeout**, **Job completion timeout**, and **Additional Anyplace systems**) and other settings (**Cache expiration**, **Job List sort criteria**, **Job List sort order**, and **Upper/Lower case**).

To change the Pull Print Feature settings on an AIX system:

1. Stop the Web server first. To stop the Web server go to **SMIT** → **InfoPrint Printing System** → **InfoPrint Utilities** → **Web Server** → **Stop Web Server**. Stopping the InfoPrint Manager Web Server causes all the Web applications to stop.
2. Add or change the Pull Print Feature settings. To add or change the Pull Print Feature settings go to **SMIT** → **InfoPrint Printing System** → **InfoPrint Utilities** → **Pull Print Feature Settings**.
3. To configure the Pull Print Feature settings, you can set these fields:
   - **Primary server IP and port**: Indicates the command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This parameter uses the format with the address, a : (colon), and the port number. For example: 192.168.1.32:6874.
   - **Backup server IP and port**: Indicates a backup command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This command processor must be in the same system as the command processor identified by the primary IP address and port. This parameter uses the format with the address, a : (colon), and the port number. For example: 192.168.1.32:6876.
   - **Reconnection timeout**: Specifies the amount of time the application should wait after losing contact and before attempting to reconnect to the command processor of the InfoPrint Manager server of an InfoPrint Manager system. The value is in seconds. The default value is 300 seconds. You can specify a range of seconds from 5 to 3600 seconds.

- **Job processing timeout**: Specifies the amount of time the application should wait to reprocess the job. The value is in seconds. The default value is 60 seconds. You can specify a range of seconds from 15 to 300 seconds.
- **Job completion timeout**: Specifies the amount of time the application should wait to complete the job. The value is in seconds. The default value is 60 seconds. You can specify a range of seconds from 15 to 300 seconds.
- **Additional Anyplace systems**: Specifies the list of the IP addresses and ports of the Anyplace systems that the Web application can use in order to pull jobs.

  Note

  The InfoPrint Manager SMIT (AIX) interface allows you to add only two additional Anyplace InfoPrint Manager systems. If you need to add more additional Anyplace InfoPrint Manager systems, call support for assistance on how to do this.
- **Cache expiration**: Specifies the amount of time until the list of jobs received from InfoPrint Manager system or systems is considered expired and needs to be retrieved again. The default value for this parameter is 10 seconds, and acceptable ranges are from 0 – no caching and up to 3600 seconds.
- **Job List sort criteria**: Specifies the sorting key for the jobs displayed on the printer console. There are two possible values for this parameter: JOBNAME or DATE. The default value is DATE.
- **Job List sort order**: Specifies the sorting order for the jobs displayed on the printer console. There are two possible values for this parameter: ASCENDING or DESCENDING. The default value is DESCENDING.
- **Upper/Lower case**: Specifies the letter case of the login attribute. You can select one of these values: CASE SENSITIVE, CONVERT TO LOWER CASE, and CONVERT TO UPPER CASE. The default value is CASE SENSITIVE.

4. Press **Enter**.
5. Start the Web server. To start the Web server go to **SMIT** → **InfoPrint Printing System** → **InfoPrint Utilities** → **Web Server** → **Start Web Server**.

To change the Pull Print Feature settings on an Linux system:

1. Stop the Web server first. To stop the Web server:
   - Go to **Applications** → **InfoPrint Manager** → **Management Interface**.
   - Expand the **Objects** group.
   - Select the **Web Server** object.
   - In the right pane, right click on **InfoPrint Manager Web Server**.
   - From the drop list select **Stop**.

   Stopping the InfoPrint Manager Web Server causes all the Web applications to stop.
2. Add or change the Pull Print Feature settings. To add or change the Pull Print Feature settings:
   - Go to **Applications** → **InfoPrint Manager** → **Management Interface**.
   - Expand the **Objects** group.
   - Select the **Web Server** object.

- In the right pane, right click on **InfoPrint Manager Web Server**.
- From the drop list select **Applications...**.
- In the **Applications Settings** window select the **Pull Print Feature** tab.

3. To configure the Pull Print Feature settings, you can set these fields:
   - **Primary server IP and port**: Indicates the command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This parameter uses the format with the address, a : (colon), and the port number. For example: 192.168.1.32:6874.
   - **Backup server IP and port**: Indicates a backup command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This command processor must be in the same system as the command processor identified by the primary IP address and port. This parameter uses the format with the address, a : (colon), and the port number. For example: 192.168.1.32:6876.
   - **Cache expiration (seconds)**: Specifies the amount of time until the list of jobs received from InfoPrint Manager system or systems is considered expired and needs to be retrieved again. The default value for this parameter is 10 seconds, and acceptable ranges are from 0 – no caching and up to 3600 seconds.
   - **Reconnection timeout (seconds)**: Specifies the amount of time the application should wait after losing contact and before attempting to reconnect to the command processor of the InfoPrint Manager server of an InfoPrint Manager system. The value is in seconds. The default value is 300 seconds. You can specify a range of seconds from 5 to 3600 seconds.
   - **Job processing timeout**: Specifies the amount of time the application should wait to reprocess the job. The value is in seconds. The default value is 60 seconds. You can specify a range of seconds from 15 to 300 seconds.
   - **Job completion timeout**: Specifies the amount of time the application should wait to complete the job. The value is in seconds. The default value is 60 seconds. You can specify a range of seconds from 15 to 300 seconds.
   - **Sort jobs by**: Specifies the sorting key for the jobs displayed on the printer console. There are two possible values for this parameter: **Date** or **Job name**. The default value is **Date**.
   - **Order jobs**: Specifies the sorting order for the jobs displayed on the printer console. There are two possible values for this parameter: **Ascending** or **Descending**. The default value is **Descending**.
   - **Upper/Lower case**: Specifies the letter case of the login attribute. You can select one of these values: **Case sensitive**, **Convert to lower case**, and **Convert to upper case**. The default value is **Case sensitive**.
   - **Additional Systems**: Specifies the list of the IP addresses and ports of the Anyplace systems that the Web application can use in order to pull jobs.
4. Press **Enter**.
5. Start the Web server. To start the Web server:
   - Go to **Applications** → **InfoPrint Manager** → **Management Interface**.
   - Expand the **Objects** group.
   - Select the **Web Server** object.

- In the right pane, right click on **InfoPrint Manager Web Server**.
- From the drop list select **Start**.

To change the Pull Print Feature settings on a Windows system:

1. Stop the Web server first. To stop the Web server run the **Stop** command from the Management Console interface. Stopping the InfoPrint Manager Web Server causes all the Web applications to stop.

   Important

   To start and stop the server, run the InfoPrint Manager Management Console interface using the **"Run as Administrator"** command.

2. Add or change the Pull Print Feature settings. To add or change the Pull Print Feature settings right click on the **WebServer** icon and choose the **Configure** option.
3. To configure the Pull Print Feature settings, you can set these fields:

   - **Primary server IP and port**: Indicates the command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This parameter uses the format with the address, a : (colon), and the port number. For example:

     Hostname (recommended):

```
example.domain.com:6874
```

     IPv4:

```
192.168.1.32:6874
```

     IPv6:

```
[2001:0ce8:58a3:0000:0000:6a2e:0370:3734]:6874
```

   - **Backup server IP and port**: Indicates a backup command processor of the InfoPrint Manager server for the Web application to use for the primary InfoPrint Manager system. This command processor must be in the same system as the command processor identified by the primary IP address and port. This parameter uses the format with the address, a : (colon), and the port number. For example: 192.168.1.32:6876.
   - **Reconnection timeout**: Specifies the amount of time the application should wait after losing contact and before attempting to reconnect to the command processor of the InfoPrint Manager server of an InfoPrint Manager system. The value is in seconds. The default value is 300 seconds. You can specify a range of seconds from 5 to 3600 seconds.
   - **Job processing timeout**: Specifies the amount of time the application should wait to reprocess the job. The value is in seconds. The default value is 60 seconds. You can specify a range of seconds from 15 to 300 seconds.
   - **Job completion timeout**: Specifies the amount of time the application should wait to complete the job. The value is in seconds. The default value is 60 seconds. You can specify a range of seconds from 15 to 300 seconds.
   - **Additional Anyplace systems**: Specifies the list of the IP addresses and ports of the Anyplace systems that the Web application can use in order to pull jobs.
   - **Cache expiration**: Specifies the amount of time until the list of jobs received from InfoPrint Manager system or systems is considered expired and needs to be retrieved again. The default value for this parameter is 10 seconds, and acceptable ranges are from 0 – no caching and up to 3600 seconds.

- **Job List Sort criteria**: Specifies the sorting key for the jobs displayed on the printer console. There are two possible values for this parameter: JOBNAME or DATE. The default value is DATE.
- **Job List Sort order**: Specifies the sorting order for the jobs displayed on the printer console. There are two possible values for this parameter: ASCENDING or DESCENDING. The default value is DESCENDING.
- **Upper/Lower case**: Specifies the letter case of the login attribute. You can select one of these values: CASE SENSITIVE, CONVERT TO LOWER CASE, and CONVERT TO UPPER CASE. The default value is CASE SENSITIVE.

4. Click **OK**.
5. Start the Web server. To start the Web server run the **Start** command from the Management Console interface.

Configuration Settings when Using the Pull Print Feature with a Ricoh StreamlineNX Server

This section describes how to configure your Ricoh StreamlineNX server to work with the InfoPrint Manager Pull Print Feature. For more detailed information on how to configure and use Ricoh StreamlineNX, consult the Ricoh StreamlineNX documentation.

Adding a new InfoPrint Manager server in StreamlineNX

To add a new InfoPrint Manager server in StreamlineNX:

1. Log into the Ricoh StreamlineNX application with an user account that has Customer Engineer role.
2. Select **System** → **Advanced System Settings Editor**. This editor is only available for the user defined above.
3. In the **Advanced System Settings Editor**, click **View** → **Delegation Server Settings**.
4. For each of the delegation servers on which a connector is installed:
   1) Select the delegation server.
   2) To create optional configuration keys, click the (**Add**) button in the **Configuration keys** table and name the key `ds.print.xsc.activate`.
   3) Enter `Text` for **Type** and **1** for **Value**.
   4) To enable pull job printing, click the (**Add**) button in the **Configuration keys** table and name the key `ds.print.xsc.pull`.
   5) Enter `Boolean` for **Type** and **true** for **Value**.
5. Go to **System** → **External Print Systems** → **IPM**.
6. Click the (**Add**) button.
7. In the **Settings** panel, add a source server URL:
   - For Anyplace queues, enter: `http://`*`IPMServerName_or_IPAddress`*`:14080/ipmnx` or `https://`*`IPMServerName_or_IPAddress`*`:14443/ipmnx` for secure connections.

- For Anyplace and Pull Print queues, enter: `http://IPMServerName_or_IPAddress:14080/ipmnx:all` or `https://IPMServerName_or_IPAddress:14443/ipmnx:all` for secure connections.

8. Do not change the default settings for the **Input Queue Type** and **Output Queue Mapping** options.
9. To save your settings, click the (**Save**) button.

Configuration Settings when Using the Pull Print Feature with an Equitrac Server

This section describes how to configure your Equitrac server to work with the InfoPrint Manager Pull Print Feature and with the LDAP server. For more detailed information on how to configure and use Equitrac, consult the Equitrac documentation.

Equitrac server configuration

If you want to use the InfoPrint Manager Pull Print Feature through an Equitrac server, make sure that you have Equitrac Office\Express version 4.2.6 installed on your computer. You must configure the Equitrac server to work with InfoPrint Manager:

1. Go to **Start** → **Equitrac Office\Express** → **System Manager**. Select accounting server and click **Connect**.
2. Go to **Devices** and select **Add external print queue device** from the left pane under **Current tasks**, or right-click on the **Physical Device** and select **Add external print queue device** from the menu.
3. Enter the required information in the **External print queue** window:
   - **Name**: Enter a name for your print queue.
   - **Server**: Select an Equitrac server from the drop-down list.
   - **Type**: Select **InfoPrint** from the drop-down list.
4. Click the **Add** button to add a source server URI. In the pop-up window enter your IPM host name and port: `http://IPMServerName_or_IPAddress:14080/ipmnx` and click **OK**.
5. Click **OK** to save the created **External print queue**.

Configuring user authentication

To configure your user authentication settings:

1. Go to **Start** → **Equitrac Office\Express** → **System Manager**. Select accounting server and click **Connect**.
2. Go to **Configuration** and from **Security and authentication** click **User authentication**.
3. In the **User authentication** window:
   - In the **Authentication mechanisms** section check the **External user ID and password** option.
   - In the **Authentication options** section check the **Auto-register primary PINs** option.
4. Click **OK** to save the settings.

Configuring LDAP user authentication

To configure your LDAP user authentication:

1. Go to **Start** → **Equitrac Office\Express** → **System Manager**. Select accounting server and click **Connect**.
2. Go to **Configuration** and from **Security and authentication** click **External authentication**.
3. In the **External authentication** window make sure the **LDAP** section is enabled and enter the required information:
   - **Server name**: Enter the server host name or IP Address.
   - **Port**: Enter port number.
   - **Type**: Select the authentication type from the drop-down list.

     Note

     – Check **Force SSL** option if you want to use the Security Layer.
     – Make sure that the **Use LDAP version 3** option is checked.

   In the **Authentication method** area select the **Lookup then bind** method and enter the required information:

   - **Search filter**: Add this: `(|(uid=%value%)(mail=%value%))` in the textbox. This way you can authenticate on the printer (PCC) using either the `uid` or the email address. For example you can add `cn` (Common name) as another login key by adding this in the **Search filter** field: `(|(uid=%value%)(mail=%value%)(cn=%value%))`.
   - **Scope**: Set the scope by selecting **One level** from the drop-down list.
   - **Base DN**: Enter the path where the users are located: `ou=EquitacUsers,o=DOMAIN,c=COM`.
   - **User ID field for match**: Enter the attribute you want to use as the authenticated login. For example, if jobs are sent from an InfoPrint Manager client using `mail` as the authenticated login, you must enter `mail` in the required field. If you send jobs from an InfoPrint Manager client using `uid` as authenticated login and `mail` is set on **User ID field for match**, when you authenticate on the PCC, you can't see the jobs on the printer.

   Note

   Make sure that the **Anonymous login/As service login** option is checked.
4. Click **Test** button to verify if the LDAP authentication succeeded. Add one of the LDAP attributes for which the LDAP login was configured, enter the password and press the **Lookup** button. If authentication is successful, you should see a message similar to `ldap_simple_bind_sW succeeded`.
5. Click **OK** to save the settings.

Using the Pull Print or Anyplace Functions with a Ricoh StreamlineNX or Equitrac Server

To submit a Pull Print or Anyplace job, you can use the LDAP-enabled InfoPrint clients. Make sure that one of the InfoPrint Manager LDAP-enabled clients is installed on your computer. For installation instructions and LDAP configuration, see the appropriate *InfoPrint Manager: Getting Started* for your operating system.

When you send jobs to a Pull Print actual destination, you must access the printer's panel to display the jobs.

To print or delete the jobs submitted to InfoPrint Manager:

1. Go to the printer and authenticate in the Login screen with the same user id that you use with the Info- Print LDAP-enabled client.
2. Select the jobs you want to print or delete.

   Note

   Depending on the printer model, you can select individual jobs or all the listed jobs.
3. Press **Print** or **Delete**.

If the printer is idle when you request your job to print, it should start printing. If the printer is busy printing other jobs, then it won't print until those jobs are finished. Until they are scheduled to print, they still appear in the job list. If selected again, no further actions are taken by the server.

When requested to print, the Anyplace job is moved from its Anyplace queue to the Pull Print actual destination's queue, and is just like a released Pull Print job. If the printer is idle when you request your job to print, it should start printing. If the printer is busy printing other jobs, then it does not print your job until those jobs are finished. Until it is scheduled to print, it appears in the Pull Print job list. If selected again, no further actions are taken by the server.

Important

Depending on the printer model, the printer console and behavior might vary. For more information about the printer models supporting this function, see the Ricoh StreamlineNX or Nuance Equitrac documentation depending on the Pull Print solution that you are using.

The pre-released or post-released jobs are subject to the InfoPrint Manager job commands. These jobs can be deleted, modified, paused, resubmitted, and so on. The post-released Anyplace Print jobs are no longer considered Anyplace jobs but are treated just like post-released Pull Print jobs. Depending on actions or modifications made, the job might never print on the printer it was released to.

Important

Limitation

The **Set** button on the Printer application is not functional.

5. Pull Print Feature Error Codes

Job list error messages

Job list error messages show that a problem has been detected when the jobs are displayed.

Error number	Possible Meanings or Solutions
206 Partial Content	The list of jobs may not be complete due to the unavailability of some of the InfoPrint Manager servers. Make sure all the InfoPrint Manager servers are running.
400 Bad Request	This error might never appear.
404 Not found	The InfoPrint Manager Web server is running but the Pull Print Feature is not installed.
406 Not Acceptable	The jobs cannot be obtained since the InfoPrint Manager servers are at a lower level than required. Update the InfoPrint Manager servers to the required levels.
452 Web Server down	The printer cannot communicate with the InfoPrint Manager Web server. Make sure the InfoPrint Manager Web server is not down and the InfoPrint Manager is installed.
461 No AD Pull Print Destination Defined	No actual destination for this printer's tcp/ip address is configured as a pull print printer in the InfoPrint Manager system. Make sure you have at least one actual destination for this device with the pull-print-printer attribute set to true.
500 Internal Server Error	An internal error has occurred. InfoPrint Manager support should be contacted.
503 Service Unavailable	The Pull Print web application cannot connect with the designated primary or backup InfoPrint Manager pdserver. Make sure the values for the primary and primary-backup in the web application configuration file are correct and that at least one of those pdservers is running.

Print request error messages

Print request error messages show that a hardware, microcode, or host interface problem has been detected in a printer. An operator can sometimes, but not always, recover from these types of problems.

Error number	Possible Meanings or Solutions
400 Bad Request	This error might never appear.
404 Not Found	The job is no longer in the InfoPrint Manager queue for this printer. It might have timed out and been deleted or moved to another queue.
406 Not Acceptable	The job cannot be printed since the InfoPrint Manager servers required are at a lower level than required. Update the InfoPrint Manager servers to the required levels.
460 Job or Destination Not Ready	Either the InfoPrint Manager actual destination or the job is not in an acceptable state to print the job. The actual destination must be

Error number	Possible Meanings or Solutions
	printing or idle, and the job must be pending or held only for pull-print and must still reside in the actual destination's queue. Correct the problem with the printer, actual destination, or job, and try again.
461 No AD Pull Print Destination Defined	There is no longer an actual destination for this printer's tcp/ip address configured as a pull print printer in the InfoPrint Manager system. Make sure you have at least one actual destination for this device with the pull-print-printer attribute set to true.
462 No AD Suitable for Print	The Anyplace job attributes requested are not supported by the actual destination for this printer. Try printing the job from another printer or modify the job attributes so it can print on this printer.
463 Destination Not Found	The logical destination associated with the actual destination for this printer cannot be found. Make sure the logical destination listed on the actual destination's logical-destinations-assigned attribute is correct and on the same queue as the actual destination.
464 Unknown Error	An unexpected error has occurred. Contact InfoPrint Manager support.
465 Destination Moved	The logical destination associated with the actual destination for this printer has been changed. Try the request again.
466 Not Authorized	The InfoPrint Manager Pull Print web application is not authorized to move the Anyplace job to the logical destination for this printer. Add the wsClient@InfoPrintManager user to the ACL for the logical destination listed on the actual destination's logical-destinations-assigned attribute if you want to be able to print Anyplace jobs on this printer.
467 Destination not ready	The InfoPrint Manager actual destination for this printer are not in an acceptable state to print the job. The actual destination must be printing or idle. The actual destination might be paused or the printer might have a paper jam. Correct the problem with the printer or actual destination, and try again.
500 Internal Server Error	An internal error has occurred. InfoPrint Manager support should be contacted.
503 Service Unavailable	The Pull Print web application cannot connect with the designated primary or backup InfoPrint Manager pdserver. Make sure the values for the primary and primary-backup in the web application configuration file are correct and that at least one of those pdservers is running.

Delete request errors

The delete job error codes table shows the code returned by InfoPrint Manager after processing the delete job request.

Error number	Possible Meanings or Solutions
200 OK	The printer client is receiving this return code when the call is successful and everything went just fine.
400 Bad Request	When the required parameters are not specified in the request, the caller is going to receive this response. This is an error code received when the printer client is not passing the necessary required parameters.
404 Not Found	This code is returned when the specified job could not be found any more on the InfoPrint Manager server. The job requested for printing was valid when the GetJobList request was made, but when the Print request comes, the job is no longer into the system.
406 Not Acceptable	When the specified request is not allowed by the running mode since the servers involved in processing the request are down level than they were suppose to.
464 Unknown Error	Any InfoPrint Manager error returned we haven't planned for.
466 Not Authorized	This error code will be returned when the web app is not authorized to move Anyplace jobs to the target LD.
500 Internal Server Error	A generic error code, when the request couldn’t be solved due to an internal web services implementation issue.
503 Service Unavailable	This error code will be returned by the web services application when there is no proper connection with the “Primary” InfoPrint Manager system. In this case, users should check the state of the “Primary” command processor server and the configuration file of the web services application.

Note

For more information on the messages displayed on the printer console, contact your Ricoh or Nuance representatives.

Accessibility

Ricoh strives to provide products with usable access for everyone, regardless of age or ability. For more information about the commitment that we have made to accessibility, see: https://www.ricoh-usa.com/en/about-us/corporate-responsibility-and-environmental-sustainability/accessibility.

Accessibility features

Accessibility features help users who have disabilities, such as restricted mobility or limited vision, use information technology products successfully.

The major accessibility features in this product let you:

- Use screen readers, screen magnifiers, and other assistive technologies.
- Use a keyboard instead of a mouse.
- Change attributes such as volume, color, contrast, and font size.

In addition, the information center and the publications for the product are in an accessible format.

Keyboard navigation

This product uses standard Microsoft Windows navigation keys.

Glossary

This glossary defines technical terms and abbreviations used in InfoPrint Manager.

Special Characters

.Guidefaults file

A file created by InfoPrint Manager in the home directory of a person using the InfoPrint Manager GUI. InfoPrint Manager uses this file to save and reference information about the servers you are monitoring and the windows you are working in.

A

Access Control List (ACL)

In computer security, a collection of all access rights for one object.

ACL

Access Control List.

acl editor

A command line interface that lets you view, add, update, and delete access authorization records in an ACL.

action

In the InfoPrint Manager GUI, an icon that represents an operation that you can perform on an InfoPrint Manager object. You drag and drop the action onto an object to initiate the operation for that object. For example, using the `Enable` action to enable a disabled actual destination.

actual destination

In InfoPrint Manager, an object that represents the output device that performs the printing or transmission function. See *email destination*; see also *physical printer*, *printer device*; contrast with *logical destination*.

additive color system

A system that reproduces an image by mixing (adding) appropriate quantities of red, green, and blue light (the additive primary colors) to create all other colors of light, either direct or transmitted. When the additive primaries are superimposed on one another, they create white light. Contrast with *subtractive color system*.

administrator

In InfoPrint Manager, the person who creates and manages one or more components of a printing system, such as servers and actual destinations. By default, InfoPrint Manager gives administrators authorization to perform some InfoPrint Manager operations and to access certain information that is not available to the operators or job submitters.

Adobe Acrobat

An Adobe software program that provides instant access to documents in their original format, independent of computer platform. With the Adobe Acrobat Reader, you can view, navigate, print, and present any Portable Document Format (.pdf) file.

Adobe PostScript Raster to Image Transform (RIP)

See *raster image processor (RIP)*.

ADSM/6000

Advanced Distributed Storage Manager.

Advanced Distributed Storage Manager (ADSM/6000)

A program that provides storage management for archived files.

Advanced Function Common Control Unit (AFCCU)

A RISC-based control unit with code common to all printers that use the AFCCU.

Advanced Function Presentation (AFP)

A set of licensed programs, together with user applications, that use the all-points-addressable concept to print data on a wide variety of printers or to display data on a wide variety of display devices. AFP includes creating, formatting, archiving, retrieving, viewing, distributing, and printing information.

Advanced Function Presentation data stream (AFP data stream)

The printer data stream used for printing AFP data. The AFP data stream includes composed text, page segments, electronic overlays, form definitions, and fonts downloaded from the operating system to the printer.

A presentation data stream that is processed in AFP environments. The AFP data stream includes MO:DCA-P-based data streams.

Advanced Interactive Executive (AIX)

An operating system used with pSeries computers. The AIX operating system is IBM's implementation of the UNIX operating system.

AFCCU

Advanced Function Common Control Unit.

AFP

Advanced Function Presentation.

AFP data stream

Advanced Function Presentation data stream.

ainbe

The printer input/output backend program used by the PSF DSS to send jobs to printer devices. Depending on the incoming data stream of the job, the PSF DSS might have transformed the data stream of the job before the backend program sending it to the printer device.

AIX

Advanced Interactive Executive.

AIX-attached printer

A printer device, attached to a pSeries computer through the network or through a serial or parallel port that receives jobs from an AIX print queue.

In InfoPrint Manager, a PSF physical printer that represents an AIX-attached printer device. See also *direct-attached printer*, *TCP/IP-attached printer*, *upload-TCP/IP-attached printer*.

AIX destination support system

In InfoPrint Manager, the destination support system that communicates with the standard AIX print backend (`piobe`), or with certain variations of the `rembak` print backend, to print jobs.

AIX physical printer

In InfoPrint Manager, the object representing a printer device that uses the AIX destination support system.

aliasing

In a digitized image, the creation of diagonal lines by combining short horizontal and vertical line segments that approximate the path of the desired line.

all-points-addressability (APA)

The capability to address, reference, and position text, overlays, and images at any defined point of the printable area of the paper or display medium.

alphameric

Synonym for *alphanumeric*.

alphanumeric

Pertaining to a character set containing letters, digits, and other symbols such as punctuation marks. Synonymous with *alphameric*.

AMPV

Average monthly print volume.

analog

Pertaining to a continuous variable sampling of information between two points that achieves an even, smooth transition of photographic material.

analog color proof

An off-press color proof made from separation films.

anti-aliasing

The rendering of hard-edged objects so that they blend smoothly into the background.

Removing the jagged "stairstep" quality in diagonal lines produced on a computer screen by aliasing. This removal is effected by creating less densely shaded fields parallel to the diagonal line.

APA

All-points-addressability.

API

Application Program Interface.

Application Program Interface (API)

The call interface between a client program and the procedures that implement the printing system, as defined by the specification. Clients use the API to access servers. (P)

architecture

The set of rules and conventions that govern the creation and control of data types such as text, image, graphics, font, color, audio, bar code, and multimedia.

archiving

The transfer of digital information from an online system onto various media for offline storage. The original copy is deleted from the online system. See also *retrieval*.

array inkjet

An ordered collection of multiple print heads used in an inkjet printer.

ASCII

American National Standard Code for Information Exchange. The standard code, using a coded character set consisting of 7–bit coded characters (8 bits including a parity check). The ASCII code is used for information exchange among data processing systems, data communications systems, and associated equipment. The ASCII character set includes control characters and graphic characters.

asynchronous

Pertaining to two or more processes that do not depend upon the occurrence of specific events, such as common timing signals. (T)

In InfoPrint Manager, occurring without a regular or predictable time relationship to a specified action. Contrast with *synchronous*.

attachment type

Defines the method by which a printer device is attached to the AIX system from which it receives data. See *AIX-attached printer*, *direct-attached printer*, *TCP/IP-attached printer*, and *upload-TCP/IP-attached printer*.

attribute

A defined characteristic of an object, such as the number of copies required of a job, or the document formats accepted by an actual destination.

attribute name

A string that identifies an attribute. Typically, in InfoPrint Manager attribute names consist of two or more words separated by hyphens.

attribute value

The element of an attribute that specifies the characteristics relating to the attribute.

authorization

In computer security, verification of the eligibility of a user to access an object.

authorized user

A person with the appropriate permissions to access an object or to issue a command.

automatic recovery

A function of printer logic that permits the printer to reprint a job if the job is misprinted or damaged or if a component has failed.

auxiliary sheet

In InfoPrint Manager, an object that represents a particular sheet of paper, blank or otherwise, that can precede a job, separate documents in a job, or follow a job.

auxiliary-sheet selections

A particular combination of start, separator, and end sheets that print with jobs on a particular printer device.

B

backend

In AIX or Linux, the program that is invoked by the `qdaemon` process (AIX) or CUPS printing system (Linux) to run a print or batch job. Synonymous with *backend program*.

backend program

Synonym for *backend*.

backlog

In InfoPrint Manager, the amount of time calculated by InfoPrint Manager that is required to print all of the jobs currently in a queue.

backspace

In InfoPrint Manager, the action used to back up and reprint pages in a job.

bar code

A code representing characters by sets of parallel bars of varying thickness and separation that are read optically by transverse scanning.

An array of parallel rectangular bars and spaces that together represent data elements or characters in a particular symbology. The bars and spaces are arranged in a predetermined pattern following unambiguous rules defined by the symbology.

BCOCA

Bar Code Object Content Architecture.

Bezier curves

A method of defining curves using anchor points, control handles, and tangent lines. The PostScript path passes through anchor points. Its approach direction is along the tangent lines that are controlled by the control handles. Many personal computer programs use this drawing method. Type 1 PostScript fonts are defined using Bezier curves.

binding

The cover and materials that hold a book together. See *edition binding*, *perfect binding*, *spiral binding*, *wire-o binding*.

The process of applying the binding to a book.

In InfoPrint Manager, assigning a job to an actual destination. See *early binding*, *late binding*.

bitmapped

Pertaining to an image formed by a rectangular grid of pixels. Each pixel is assigned a value to denote its color. One-bit images are black and white; 8–bit images have 256 colors (or grays); 24–bit images have full color. CMYK images have 32–bits per pixel to encode 256 levels in each of four channels. Bitmapped images are also called raster images.

bleed

An extra amount of printed image that extends beyond the trim edge of the sheet. Bleed ensures that no white gap appears at the edge of the sheet.

boot

To prepare a computer for operating by loading an operating system.

BSD

Berkeley Software Distribution.

BSD destination support system

In InfoPrint Manager, the destination support system that generates a print command string that the shell runs to print jobs.

BSD physical printer

In InfoPrint Manager, the object representing a printer device that uses the BSD destination support system.

burn

In platemaking, an exposure. Burn is named because of the extremely bright ultraviolet lamps used to transfer images from film to plate.

In photography, to lengthen the final exposure time to increase the final density of print.

C

CDE

Common Desktop Environment.

child

See *parent/child relationship*.

choke

In color printing, an area whose dimensions have been reduced to avoid overlapping another color. Contrast with *spread*.

class

Synonym for *object class*.

clean

In InfoPrint Manager, an action used to remove all the jobs from specified servers, actual destinations, or queues, or to remove all the jobs submitted to specified logical destinations.

CLI

Command Line Interface.

client

In InfoPrint Manager, the component of the print system that assembles a print request and submits the request to a server. The client generates the local ID numbers for each job, submits the jobs to the servers, and keeps track of where each user's jobs have been submitted.

CMR

Color Management Resource.

CMY

Cyan, magenta, yellow.

CMYK

Cyan, magenta, yellow, black.

collator

In some printers a special-purpose hard drive disk array used to store RIPped files and later transfer them to the LED print heads for imaging.

color balance

The relative levels of cyan, magenta, and yellow channels in an image to produce accurate color rendition of an original image.

color correction

The adjustment of the color balance in an image to produce accurate color rendition of an original image. Color correction is used for two- or three-spot-color jobs.

color key

A color proof similar to Cromalin, but typically not laminated and not necessarily accurate in color. Color keys are used to verify that breaks or color assignments and traps have been made accurately.

Color management resource

Color management resource (CMR) is an architected resource that is used to carry all of the color management information required to render a print file, document, group of pages or sheets, page, or data object with color fidelity.

Command Line Interface (CLI)

A type of user interface where commands are specified on the command line. Contrast with *Graphical User Interface*.

Common Desktop Environment (CDE)

A graphical user interface running on a UNIX operating system.

complex attribute

In InfoPrint Manager, an attribute that can have multiple values with each value containing multiple components.

constant data

Data that does not change between copies of a document and that is merged with variable data to produce personalized documents. For example, a form letter (constant data) can be merged with a customer's name and address (variable data).

contextual help

A type of online help that provides specific information about each selectable object, menu choice, notebook tab, field, control, and pushbutton in a window.

control strip

A strip of information that can be attached to a print job and used to measure registration and density.

Cromalin

The Dupont color proofing system. Four layers (CMYK) of light-sensitive material are exposed through final halftone negative films, then laminated together on an opaque backing to produce a color- and trap-accurate final proof showing actual halftone dot structure. Cromalin is sometimes called an analog proof.

crop

To remove unwanted areas of an image, usually indicated by crop marks on the original.

CTS

Cutter-trimmer-stacker.

CUPS

Common Unix Printing System is a modular printing system for Unix-like computer operating systems which allows a computer to act as a print server. A computer running CUPS is a host that can accept print jobs from client computers, process them, and send them to the appropriate printer.

CUPS destination support system

In InfoPrint Manager, the destination support system that communicates with the standard Linux print system (CUPS) and that uses InfoPrint Manager **pioinfo** backend, InfoPrint Manager **piorpdm** backend for Ricoh printers, or other print backends to print jobs.

cutter-trimmer-stacker (CTS)

A post-processing device attached to a printer device and used for paper handling.

cyan, magenta, yellow (CMY)

The subtractive primary colors.

cyan, magenta, yellow, black (CMYK)

The four basic colors used in offset printing, as opposed to the three basic colors of light: red, green, and blue. Magenta, yellow, and cyan are the subtractive primaries. Black is added to provide better density and to produce a true black.

D

daemon

A program that runs unattended to perform a standard service. Some daemons are triggered automatically to perform their tasks; others operate periodically. Daemon processes generally provide a service that must be available at all times to more than one task or user, such as sending data to a printer.

data stream

All information (data and control commands) sent over a data link.

A continuous stream of data that has a defined format.

In InfoPrint Manager, pertaining to the incoming format of the job and the output format required by the printer device. InfoPrint Manager transforms the incoming format into the output format, as required. See also *document format*.

deadline

In InfoPrint Manager, a queuing technique where the next job assigned to the first position in the queue is the one whose deadline is closest. Contrast with *FIFO (first-in-first-out)*, *job-priority*, *longest-job-first*, and *shortest-job-first*.

default document

In InfoPrint Manager, an object that represents default attribute values for a document in a job. Synonymous with *initial value document*.

default job

In InfoPrint Manager, an object that represents default attribute values for a job. Synonymous with *initial value job*.

default object

In InfoPrint Manager, a general term that refers either to a *default document* or a *default job*. Synonymous with *initial value object*.

default value

A value stored in the system that is used when no other value is specified.

delete

In InfoPrint Manager, an action used to delete default objects, jobs, logical destinations, actual destinations, or queues from the server.

desktop publishing

Performing print-related activities on a personal computer, including but not limited to layout, design, photo manipulation, creating fonts, editing text, color separation, scanning, and animation.

destination

See *actual destination*, *logical destination*.

destination support system (DSS)

In InfoPrint Manager, the programs that an actual destination uses to communicate with the output device. Synonymous with *device support system*. See *AIX destination support system*, *BSD destination support system*, *email destination support system*, and *PSF destination support system*.

device

An individual piece of equipment (hardware) that attaches to a computer, such as a printer device.

device address

The identification of an input or output device by its channel and unit number.

device driver

A file that communicates with a specific device such as a printer, disk drive, or display. An application that sends output to a device controls the actions of the device through the device driver. See *printer driver*.

device support system (DSS)

Synonym for *destination support system*.

DFE

Digital Front End

DFE destination support system

In InfoPrint Manager, the destination support system that communicates with a DFE print server driving a Ricoh printer.

DFE printer

In InfoPrint Manager, the object representing a DFE print server driving a Ricoh printer.

digital

Pertaining to data represented by digits, sometimes with special characters and the space character.

digital color proof

An off-press color proof made from a color printer attached to a computer.

digital printing

A filmless and plateless printing process in which digital data for each page is transferred directly to a light-sensitive drum and then to paper for a final image.

direct-attached printer

A printer device, attached to an pSeries computer through the network or through a serial or parallel port.

In InfoPrint Manager, a PSF physical printer that represents a direct-attached printer device. See also *AIX-attached printer*, *TCP/IP-attached printer*, and *upload-TCP/IP-attached printer*.

disable

In InfoPrint Manager, an action used to stop the acceptance of jobs on destinations, queues, or servers, or to stop writing information to logs.

distributed print system

A computer system with the ability to interchange print data and controls among different computing environments with the intent of printing the data on a different system from the one where the print request was generated. For example, in host-to-LAN distributed printing, data that is located on the host is printed on printers attached to a local area network.

dithering

A technique of filling the gap between two pixels with another pixel having an average value of the two to minimize the difference or to add detail to smooth the result.

document

In InfoPrint Manager, an object representing a grouping of data in a job. A job can contain one or more documents. The documents in a job can differ from each other in some ways. For example, they can contain different data and can have different document formats. A document in a job can contain printable data or a resource that is not printable by itself. See *file-reference document*, *printable document*, and *resource document*.

document element

A portion of a document at least a single page in size.

document format

In InfoPrint Manager, a document format describes the type of the data and control characters in the document, such as line data or PostScript. The format of the data determines which printer devices are capable of printing the document and whether InfoPrint Manager must transform the format.

document identifier

A string that identifies a document in a job. It consists of a job ID followed by a period (.) and a document sequence number. For example, `12.2`. Document sequence numbers are integers starting at `1`.

Document Printing Application (DPA)

An ISO/IEC 10175 standard that addresses those aspects of document processing that enable users in a distributed open systems environment to send electronic documents to shared, possibly geographically-dispersed printers. InfoPrint Manager supports the DPA standard.

document transfer method

In InfoPrint Manager, the transfer method describes how documents are transferred to, or acquired by, servers. See *pipe-pull* and *with-request*.

document type

In InfoPrint Manager, the document type describes the kind of data in the document. A *printable document* can only contain printable data. A *resource document* can only contain data such as fonts or form definitions that are not printable. A *file reference document* can only contain names of files entered on separate lines.

dot

The individual elements of a halftone.

dot gain

An increase in the size of a halftone dot during printing, caused by ink spreading. Generally, this value is known precisely, and the scanning and filming production process is calibrated to compensate for it. The Cromalin proofing system simulates this effect.

dots per inch (dpi)

A measure of data density per unit distance. Typical values for desktop publishing range from 200 to 300 dpi.

DPA

Document Printing Application.

DPF

Distributed Print Facility.

dpi

Dots per inch.

drag and drop

In graphical user interfaces, a procedure by which you perform actions and tasks. Using the mouse, you drag (move) an action or object icon to a new position where you want the action or task to occur.

DSS

Destination support system.

dummy

A rough paste-up or hand-drawn representation of the anticipated finished product. A dummy is used for basic design and pagination.

duplex printing

Printing on both sides of the paper. Contrast with *simplex printing (1)*.

Printing on both sides of the paper, placing output images on the media in a head-to-head format, so that the top of one image is at the same edge as the top of the next image. Contrast with *tumble duplex printing*; see also *simplex printing (2)*.

E

early binding

In InfoPrint Manager, assigning a job to an actual destination as soon as it is accepted. Early binding permits InfoPrint Manager to estimate the time when the job will be completed. Contrast with *late binding*.

edition binding

A type of book binding in which printed sheets are folded into 16- or 32-page signatures. Four-page endleaves are pasted on the outside of the first and last signature. The signatures are then collated by machine and sewn together using special sewing machines. Contrast with *perfect binding*, *spiral binding*, and *wire-o binding*.

electronic document

A document stored in a computer instead of printed on paper.

electronic mail

Correspondence in the form of messages sent between workstations over a network. Synonymous with *email*.

electrophotographic

Pertaining to a type of printer technology that creates an image on paper by uniformly charging the photoconductor, creating an electrostatic image on the photoconductor, attracting negatively charged toner to the discharged areas of the photoconductor, and transferring and fusing the toner to paper.

em

In composition, a unit of measurement exactly as wide and as high as the point size of the font being set. The name is derived from the fact that the letter M in early typefaces was usually cast on a square body.

email

Electronic mail.

email destination

In InfoPrint Manager, an actual destination representing an electronic mailing system.

email destination support system

In InfoPrint Manager, the destination support system that supports email destinations.

embellishments

Variable data added to all copies of assembled pages to make the unit appear like a whole; for example, headers, footers, a table of contents, and chapter separations.

en

In composition, exactly one-half an em.

enable

In InfoPrint Manager, the action that makes a destination, queue, or server able to accept jobs, or a log able to accept information.

end sheet

The sheet of paper, blank or otherwise, that can follow a job. See also *auxiliary sheet*.

Enhanced X-Windows

A tool designed to permit multiple application processes to operate in multiple windows displayed on a virtual terminal. See *X-Windows*.

environment variable

Any one of a number of variables that describe the way an operating system runs and the devices it recognizes.

error log

A data set or file in a product or system where error information is stored for later access.

estimate

The professional cost analysis made by a print shop in response to a customer's request for a price quotation on a print job.

event

In InfoPrint Manager, an occurrence in the printing system during an operation; for example, the completion of a command.

event log

In InfoPrint Manager, a collection of messages about events that have occurred.

event notification

The notification that is sent by InfoPrint Manager for an event.

F

Federated Authentication

A technology that grants users secure access to InfoPrint Manager relying on external identity providers (IdPs). Instead of managing separate user credentials within the InfoPrint Manager system, federated authentication allows users to log in using their existing accounts from trusted third-party services.

FIFO (first-in-first-out)

In InfoPrint Manager, a queuing technique where the next job assigned to the first position in the queue is the job that has been in the queue for the longest time. InfoPrint Manager processes jobs in the order in which they are received. Contrast with *deadline*, *job-priority*, *longest-job-first*, and *shortest-job-first*.

file-reference document

In InfoPrint Manager, a file containing the names of other files, each entered on a separate line. Job submitters can specify this file for printing when they specify a document type of `file-reference`; InfoPrint Manager prints each file listed in the reference document.

File Transfer Protocol (FTP)

In TCP/IP, the application protocol that makes it possible to transfer data to and from host computers and to use foreign hosts indirectly.

finisher

A hardware device attached to a printer that performs such operations as folding or stapling the printed pages.

finishing

In a print shop, the final operations on a printed product, such as stapling, trimming, drilling, folding, embossing, varnishing, gluing, shrink wrapping, perforating, laminating, collating, and so on.

flag

A modifier of a command that specifies the action of the command. A dash usually precedes a flag. Synonymous with *option*. See also *keyword*.

FOCA

Font object content architecture.

folder

In the InfoPrint Manager GUI, an object that represents a container for a collection of similar objects. For example, the Retained Jobs folder contains retained jobs.

font

A family of characters of a given size and style; for example, 9-point Helvetica.

One size and one typeface in a particular type family, including letters, numerals, punctuation marks, special characters, and ligatures.

A paired character set and code page that can be used together for printing a string of text characters. A double-byte font can consist of multiple pairs of character sets and code pages.

form definition

A resource object used by InfoPrint Manager that defines the characteristics of the form or printed media, which include: overlays to be used, the paper source (for cut-sheet printers), duplex printing, text suppression, and the position of composed-text data on the form.

forward space

In InfoPrint Manager, the action used to move ahead and skip the printing of a specified number of pages in a job.

FPO

Low-quality (sometimes photographic) images placed in a dummy to represent final images. Desktop publishing software produces images as display-screen resolution FPOs.

front panel

In the CDE, a workspace area containing controls that represent various tasks you can perform and workspace switches.

FST

Files and Sockets Transport is the local security implementation for InfoPrint Manager. It uses the local namespace for user credentials, and it is a lightweight security protocol.

FTP

File Transfer Protocol.

G

GCR

Gray component replacement.

GIF

Graphics Interchange Format.

global change

In the InfoPrint Manager GUI, an action used to make changes to one or more attributes of several objects at once. You can also perform the same action on several objects of the same object class at the same time; for example, disabling two or more actual destinations at the same time.

global character

A character or set of characters used to specify an unknown number or set of characters in a search string. In InfoPrint Manager, a global character is represented by an asterisk (*).

global ID

Global job identifier.

global job identifier

An unambiguous job identifier. In InfoPrint Manager, it is represented as the name of the server managing the job followed by a colon (:) and a generated integer. This ID uniquely identifies the job in the InfoPrint Manager server.

glyph

An image, usually of a character, in a font.

GOCA

Graphics object content architecture.

graphic character

A visual representation of a character, other than a control character, that is normally produced by writing, printing, or displaying.

Graphical User Interface (GUI)

A type of user interface that takes advantage of a high-resolution monitor and includes a combination of graphics to implement an object-action paradigm, the use of pointing devices, menu bars, overlapping windows, and icons. Contrast with *Command Line Interface*.

Graphics Interchange Format (GIF)

A compressed graphics format widely used on the Internet.

gray component replacement (GCR)

Synonym for *under color removal (UCR)*.

gray scale

A strip of standard gray tones, ranging from white to black, placed at the side of the original copy during photography to measure the tonal range and contrast obtained.

GUI

Graphical User Interface.

gutter

The blank area or inner margin from the printing area to the binding.

H

halftone

A printing method that simulates continuous-tone shading using dots of varying sizes laid out on a rectangular grid. Larger dots simulate darker tones and smaller dots simulate lighter tones. Typical grid spacings are 85 lines per inch (lpi) (newspaper), 133 lpi (low end), 150 lpi (midrange), and 175+ lpi (high quality).

help

In the InfoPrint Manager GUI, an action used to display the online help for a specific template, object, action, button, control, or area in an application window.

The name of a button used to access the online help.

hold

An indication determined by the **job-hold** attribute that is used to keep a job in the queue and prevent InfoPrint Manager from scheduling it.

host name

A unique label assigned to a device (such as a computer, server, or router) on a network, used to identify it. It can be a simple name (such as *laptop-01*) or part of a fully qualified domain name (FQDN) like *server.example.com*, allowing devices to locate and communicate with each other.

hot folder

A workstation directory where users copy jobs to submit them to print.

hypertext

A way of presenting information online with connections between one piece of information and another. These connections are called hypertext links. See also *hypertext link*.

hypertext link

A connection between one piece of information and another. Selecting a link displays the target piece of information.

I

icon

A graphic symbol displayed on a screen that a user can click to invoke a function or software application.

image

Toned and untoned pels arranged in a pattern.

image data

Rectangular arrays of raster information that define an image.

imagesetter

A high resolution (1270–3600+ dpi) printer that uses an Argon (green) laser to write to film using digital input. Imagesetting is the step before Cromalin proofing and platemaking.

imposition

The process of arranging pages on a press sheet to ensure the correct order during final cutting, folding, and binding. Electronic imposition builds press sheets automatically during the RIP and outputs film formatted for immediate use in platemaking.

InfoPrint

A solution of hardware products that can supplement or replace the offset presses and copiers in print shops with high-quality, non-impact, black and white or process color printers.

InfoPrint Manager

A print management product that runs on an AIX, Linux, or Windows operating system. InfoPrint Manager handles the scheduling, archiving, retrieving, and assembly of print jobs and their related resource files. It also tracks the finishing and packaging of the printed product.

InfoPrint Manager Select

Synonym for *InfoPrint Select*.

InfoPrint Manager Submit Express

Synonym for *InfoPrint Submit Express*.

InfoPrint Network

The local area network running TCP/IP protocol that InfoPrint Manager uses to communicate among servers, clients, and output devices.

InfoPrint Select

The component of InfoPrint Manager that lets you submit and track jobs from your system to a destination that is managed by InfoPrint Manager.

InfoPrint Submit Express

The component of InfoPrint Manager that lets you submit and track jobs with a job ticket from a Windows workstation.

InfoPrint 4000

A duplex, black and white, continuous-forms printer with 600-dpi resolution.

initial value document

Synonym for *default document*.

initial value job

Synonym for *default job*.

initial value object

Synonym for *default object*.

initially settable attribute

An attribute whose value can be established when an object is created but cannot be subsequently set or modified. See also *resettable attribute*; contrast with *non-settable attribute*.

input focus

The area of a window where user interaction is possible from either the keyboard or the mouse.

input tray

For a printer device, the container that holds the medium upon which the printer prints its output.

Intelligent Printer Data Stream (IPDS)

An all-points-addressable data stream that enables users to position text, images, and graphics at any defined point on a printed page.

Information that the host sends to IPDS printers. This information generally contains basic formatting, error recovery, and character data and enables the printers to make decisions.

An architected host-to-printer data stream that contains both data (text, image, graphics, and bar codes) and controls defining how the data is to be presented. IPDS provides a device-independent interface for controlling and managing all-points-addressable (APA) printers.

International Organization for Standardization (ISO)

An organization of national standards bodies from various countries established to promote development standards to facilitate international exchange of goods and services, and develop cooperation in intellectual, scientific, technological, and economic activity.

Internet

A wide area network connecting thousands of disparate networks in industry, education, government, and research. The Internet network uses TCP/IP as the protocol for sending information.

Internet Protocol

The set of rules that determines how to route data from its source to its destination in an internet environment.

intervening jobs

In InfoPrint Manager, the number of jobs in a queue that are scheduled to print before the job in question.

IOCA

Image object content architecture.

IP address

The IPv4 or IPv6 address.

IPDS

Intelligent Printer Data Stream.

ISO

International Organization for Standardization.

J

job

In InfoPrint Manager, an object that represents a request to print or send one or more documents together in a single session. A job includes the data to be printed or sent and resources such as fonts, images, and overlays. Depending on how it was submitted, it can also include a job ticket. Synonymous with *job bundle* and *print job*.

job bundle

Synonym for *job*.

job data

The page descriptions, merge data, and embellishments that compose a document in a job, either directly or by reference.

job ID

A local or a global identifier that identifies a job to a job submitter, administrator, operator, or InfoPrint Manager. See *local job identifier*, *global job identifier*.

job-priority

In InfoPrint Manager, a queuing technique where the next job assigned to the first position in the queue is the one with the highest priority. Contrast with *deadline*, *FIFO (first-in-first-out)*, *longest-job-first*, and *shortest-job-first*.

job submitter

In InfoPrint Manager, the person who submits jobs for printing. Often, this person is an application programmer who maintains applications that generate data to be printed.

job ticket

The customer's hardcopy or electronic instructions listing all the variables describing a print job, either directly or by reference. The print shop can add specifications to the job ticket and can print the job ticket.

Joint Photographic Experts Group (JPEG)

A compressed graphics format widely used on the Internet.

JPEG

Joint Photographic Experts Group.

K

kerning

In typesetting, adjusting the relative spacing of two characters to improve their appearance and readability. Kerning pairs are specific sets of characters with built-in relative spacing. Some typefaces have as many as 100 kerning pairs.

keyword

A name or symbol that identifies a parameter.

Part of a command operand that consists of a specific character string, such as `DSNAME=`.

kitting

In a print shop, packaging the completed published work with attendant binders, tabs, diskettes, and other equipment or information, before shipping the finished product.

L

LAN

Local Area Network.

laser (light amplification by stimulated emission of radiation)

In InfoPrint printers, a device that emits a beam of coherent light that forms the image on the photoconductor that is subsequently transferred to the paper.

late binding

In InfoPrint Manager, waiting to assign a job to an actual destination until it is about to be processed. Late binding permits InfoPrint Manager to route a job to the first suitable actual destination that becomes available. Contrast with *early binding*.

LDAP

Lightweight Directory Access Protocol is the network security implementation for InfoPrint Manager. It uses an LDAP or Active Directory server for user credentials, and it offers a unified security implementation in a customer environment.

LED

Light-emitting diode.

light-emitting diode (LED)

The imaging device element for electrophotographic print units.

lines per inch (lpi)

A measure of the density of the grid used to space halftone dots. Typical grid spacings are 85 lpi (newspaper), 133 lpi (low end), 150 lpi (midrange), and 175+ lpi (high quality).

Linux

Linux is an open-source operating system modeled on UNIX. There are multiple distributions available, InfoPrint Manager is supported on AlmaLinux, Red Hat Enterprise Linux (RHEL), Rocky Linux, and SUSE Linux Enterprise Server (SLES).

Local Area Network (LAN)

A computer network at one location that consisting of devices connected to one another and communicating. This network can also be connected to a larger network.

local ID

Local job identifier.

local job identifier

In InfoPrint Manager, a job identifier automatically generated by the server, identifying the job to the person who submitted it. InfoPrint Manager maps a local job ID to a global job ID.

locale

The human language and character set of information presented to a user.

In InfoPrint Manager, the language InfoPrint Manager uses when sending notification and error messages or displaying the InfoPrint Manager graphical user interfaces.

log

A collection of messages or message segments added to a file for accounting or data collection purposes.

To record messages in a file.

logical destination

In InfoPrint Manager, an object to which users submit their jobs. The logical destination routes jobs to one or more actual destinations representing output devices such as printers, or electronic mail systems. See also *logical printer*; contrast with *actual destination*.

logical printer

In InfoPrint Manager, a type of logical destination. The logical printer routes jobs to one or more physical printers representing printing devices.

logical unit (LU)

A type of network accessible unit that enables end users to gain access to network resources and communicate with each other.

logical unit (LU) 6.2

A type of logical unit that supports general communication between programs in a distributed processing environment. LU 6.2 is characterized by (a) a peer relationship between session partners, (b) efficient utilization of a session for multiple transactions, (c) comprehensive end-to-end error processing, and (d) a generic application program interface (API) consisting of structured verbs that are mapped into a product implementation.

longest-job-first

In InfoPrint Manager, a queuing technique where the next job assigned to the first position in the queue is the longest job in the queue. Contrast with *deadline*, *FIFO (first-in-first-out)*, *job-priority*, and *shortest-job-first*.

lpi

Lines per inch.

LU

Logical unit.

M

magnetic ink character recognition (MICR)

Identification of characters printed with ink that contains particles of magnetic material.

mainframe processor

A functional unit that interprets and executes instructions in a large computer to which other computers are connected so that they can share the facilities the mainframe provides.

makeready

All the setup work involved in preparing a press for a print run.

manage

In the InfoPrint Manager GUI, the action used to put an object into a mode where its icon reflects changes of status.

mechanical

A camera-ready layout. The mechanical can consist of multiple sheets or overlays for each spot or process color used. Final images, if not stripped in later, should be at final size, cropped and screened to the correct line frequency.

medium

In InfoPrint Manager, an object representing the physical material upon which a job is printed.

merge data

Data that is unique to each copy of a document and that customizes the document; for example, serial numbers or mailing information. Merge data is typically a small percentage of the total data in the document.

message catalog

A file of all the possible messages than can display during the processing of an application.

MICR

Magnetic ink character recognition.

Mixed Object Document Content Architecture (MO:DCA)

An architected, device-independent data stream for interchanging documents.

MO:DCA-P

Mixed Object Document Content Architecture Presentation.

modify

In InfoPrint Manager, an action used to modify the values of attributes in the object attributes notebook.

moire

Undesirable interference patterns caused by two overprinting halftone screens with incorrect halftone dot angles.

monospaced

In typesetting, pertaining to a typeface in which all the characters have equal widths. Monospaced typefaces are useful for tabulating figures.

Multiple Virtual Storage (MVS)

An operating system developed by IBM. The design of MVS incorporates an addressing architecture that provides a unique address space to each job in the system.

MVS

Multiple Virtual Storage.

N

N_UP

Pertaining to the number of forms placed together in a layout. Typical layouts are 2_UP, 4_UP, 8_UP, 16_UP, and so on. N_UP printing is done to use the maximum area of the print sheet.

namespace

A global name repository available to all utilities and API procedures. The namespace contains mappings of object names to other related objects. For example, the namespace provides the mapping of a logical destination to the server in which it is located.

Network File System (NFS)

A protocol that uses Internet Protocol to allow a set of cooperating computers to access each other's file systems as if they were local.

newline options

The different ways in which the printer determines how lines are delimited in a document data stream.

NFS

Network File System.

non-process-runout (NPRO)

A printer function that moves the last printed sheet to the stacker of the printer device.

non-settable attribute

An attribute that is neither initially settable nor resettable. The values for these attributes are controlled by InfoPrint Manager. Contrast with *initially settable attribute* and *resettable attribute*.

notification

The act of reporting the occurrence of events.

In InfoPrint Manager, notification of events appears as messages in event logs or messages sent to administrators, operators, and job submitters. In the InfoPrint Manager GUI, notification of events also appears as changes to the appearance of icons.

notification-profile

In InfoPrint Manager, an attribute associated with an object that contains information designating the people to whom InfoPrint Manager sends notification about events for that object, which event information it sends, and how it sends the information.

NPRO

Non-process-runout.

O

object

A collection of attributes that represent a physical or logical entity in the print system. For example, a specific printer device is represented by an actual destination (physical printer) object. An object is identified by its object name. Objects are grouped into classes. See also *object class*.

object class

A group of objects that share a common definition and therefore share common properties, operations, and behavior as defined by their attributes. For example, all InfoPrint Manager queue objects are in the same object class and each queue has the same set of queue attributes. However, the values for those attributes can differ for each queue in the queue object class.

Object Identifier (OID)

In architecture, a notation that assigns a globally unambiguous identifier to an object or a document component. The notation is defined in international standard ISO.IEC 8824(E).

object name

The alphanumeric term that identifies an object.

object state

The state of an object indicates its availability and readiness for performing its functions. An object can be in one of a number of states such as ready, busy, or unknown.

OCR

Optical character recognition.

octet

A byte that consists of eight binary digits (bits).

offset stacking

In certain printer devices, a function that allows the printer to offset the printed output pages for easy separation of the jobs.

OID

Object Identifier.

open destinations window

In the InfoPrint Manager GUI, the action used to open a new application window displaying the logical and actual destinations associated with a queue.

Open Prepress Interface (OPI)

An industry standard for replacing low-resolution images in review documents with high-resolution images needed for high-quality final output.

Open Software Foundation (OSF)

A nonprofit research and development organization created by a consortium of companies that work together to develop software in the open systems market.

OpenType font (OTF)

An extension of the TrueType font format that adds:

- Support for PostScript outlines
- Better support for international character sets
- Broader support for advanced typographic control

open window

In the InfoPrint Manager GUI, the action used to open a new application window representing one or more objects displayed in the currently open application window.

operation

An action performed on one or more data items.

operator

In InfoPrint Manager, the person responsible for printer devices. Also, this person performs a subset of tasks for InfoPrint Manager queues and actual destinations and performs some job-related tasks.

OPI

Open Prepress Interface.

optical character recognition (OCR)

Conversion of scanned text to editable ASCII characters.

option

A modifier of a command that specifies the action of the command. A dash usually precedes an option. Synonymous with *flag*. See also *keyword*.

orphan logical destination

In the InfoPrint Manager GUI, an object that represents a logical destination that is not associated with an existing queue.

orphan logical printer

In the InfoPrint Manager GUI, an object that represents a logical printer that is not associated with an existing queue.

OSF

Open Software Foundation.

overlay

A collection of constant data, such as lines, shading, text, boxes, or logos, that is electronically composed in the host processor and stored in a library, and that can be merged with variable data during printing.

OTF

OpenType font.

P

PAC

Privilege Attribute Certificate.

page definition

A resource that contains the formatting controls for line data.

In InfoPrint Manager, a resource that defines the rules of transforming line data into composed pages and text controls.

page segment

A resource that contains composed text and images, which are prepared before formatting and included during printing.

pane

In the Work Area of the InfoPrint Manager Administration GUI, an area containing a group of objects of a specific type, such as an actual destinations pane.

parent/child relationship

In InfoPrint Manager, servers, queues, and destinations are related to one another in a parent/child relationship. For example, a server is the parent of all the queues that reside in that server, and these queues are its children.

pass through

In InfoPrint Manager, referring to options submitted with a job that are used by the device driver, but not InfoPrint Manager. InfoPrint Manager does not process or validate this information; it passes it along to the device driver. See *printer driver*.

path

The route used to locate files; the storage location of a file. A fully qualified path lists the drive identifier (if any), directory name, subdirectory name (if any), and file name with the associated extension.

pause

In InfoPrint Manager, the action used to temporarily halt the printing or transmission of jobs on actual destinations or the distribution of jobs from servers or queues.

pdcreate

In InfoPrint Manager, the command used to create a new object and set its attributes to specified values.

PDF

Portable Document Format.

Printer description file.

pdmsg

In InfoPrint Manager, a utility used to display information about a message.

pdpr

In InfoPrint Manager, the command used to create and submit a job, consisting of one or more documents, to a server for printing or transmission.

perfect binding

A type of book binding in which the pages are held together with flexible adhesive. Contrast with *edition binding*, *spiral binding*, and *wire-o binding*.

permissions

In AIX, codes that determine who can access a file and what operations they can perform on the file.

physical printer

In InfoPrint Manager, a type of actual destination that represents a printer device. See also *printer device*.

piobe

The standard printer input/output backend program used by AIX for printing. See also *ainbe*.

pipe-pull

In InfoPrint Manager, a document transfer method where InfoPrint Manager saves the documents in a file and transfers the address of the file to the server. InfoPrint Manager transfers the file to the server upon the request from the server. This is an efficient transfer method for large jobs and is the default transfer method at job submission. Contrast with *with-request*.

plex

A document or actual destination attribute used to define the placement of output images on the page. See the plex values *simplex* and *tumble*.

Portable Document Format (PDF)

An Adobe PostScript data format that can be viewed or printed.

Portable Operating System Interface for Computer Environments (POSIX)

An Institute of Electrical and Electronics Engineers (IEEE) standard for computer operating systems.

POSIX

Portable Operating System Interface for Computer Environments.

PostScript

Adobe's page description language. PostScript has become a standard for graphic design and layout software. PostScript files can contain both vector and raster data. Fonts are described using PostScript coding. Many desktop publishing systems produce PostScript data as their output data stream.

PostScript printer description (PPD)

A file that contains options for printing PostScript data on various printer devices.

PPD

PostScript printer description.

Prefix lengths

Identify a range of IPv6 addresses that are on the same network.

preflight

To assess all resources for a job before the actual print run.

prepress

Work done in the print shop before printing a job, such as preparing data and art, page imposition, color retouching, electronic editing, and page layout.

print database

The set of files on disk that provide a permanent repository for the attributes of all print objects, such as logical destinations, queues, and actual destinations.

print job

Synonym for *job*.

Print Quality Enhancement (PQE)

A printer facility that provides edge smoothing along diagonal lines, fine fidelity protection, and independent boldness control.

Print Services Facility (PSF)

Any of several programs, including PSF for AIX, PSF/MVS, PSF/VM, and PSF/VSE, that produce printer commands from the data sent to them.

print system

A group of one or more print servers and one or more printing devices, which might or might not be located in the same geographical area. The components of a print system are assumed to be interconnected in some manner, providing at least one network interface to print clients, and acting synergistically to supply the defined document print service. (D)

printable document

In InfoPrint Manager, an object that represents text or data to be printed by a job. Contrast with *resource document*.

printer description file (PDF)

A file that contains options for printing PostScript data on a specific printer device.

printer device

The physical output device that performs the printing function. See also *physical printer*.

printer driver

A file that describes the physical characteristics of a printer or other peripheral device. This file is used to convert graphics and text into device-specific data at the time of printing or plotting. Synonymous with *device driver*.

priority

In InfoPrint Manager, a number assigned to a job that determines its precedence in being printed. Jobs with higher priority numbers are handled before jobs with lower priority numbers.

process color

Color made up of CMYK links simulating a specified color. This is the traditional method of reproducing continuous tone color images (color separations). Because of the nature of color inks, certain inks do not reproduce well.

processor

In a computer, a functional unit that interprets and executes instructions. A processor consists of at least an instruction control unit and an arithmetic and logic unit. (T)

promote

In InfoPrint Manager, the action used to move a job to the beginning of the queue so that it will print on the next available printer that can handle that job.

protocol

A set of semantic and syntactic rules that determines the behavior of functional units in achieving communication.

pSeries

A family of workstations and servers based on IBM's POWER architecture. They are primarily designed for running multi-user numerical computing applications that use the AIX operating system.

PSF

Print Services Facility.

PSF destination support system

In InfoPrint Manager, the destination support system that communicates with PSF for AIX to print jobs.

PSF physical printer

In InfoPrint Manager, the object representing a printer device that uses the PSF destination support system.

Q

queue

In InfoPrint Manager, an object that manages a collection of jobs that are waiting to print. A queue receives jobs from one or more logical destinations and sends jobs to one or more actual destinations.

A line or list formed by items waiting for processing.

R

raster

A pattern of dots defined at varying data depths. Black and white images are one-bit (on/off); grayscale images are 8-bit (256 levels); RGB images are 24-bit; CMYK images are 32-bit.

raster image processor (RIP)

A processor in which a PostScript data stream is converted into dot patterns that are transferred to the final print medium. InfoPrint Manager uses an Adobe RIP to convert PostScript to IPDS for such printers as the InfoPrint 4000.

rc.pd

In InfoPrint Manager, a utility used to start the InfoPrint Manager servers listed in the **/etc/pd.servers** file.

read-only

In InfoPrint Manager, describes an attribute value that cannot be set by the user but can change based on other activity.

ready

A state in which an object is ready and able to perform tasks.

An available resource, such as a value of the `media-ready` attribute. Contrast with *supported*.

red, green, blue (RGB)

The colors of CRT display phosphors. RGB images are for screen display only. They must be converted to CMYK images before printing.

registration

The accuracy of printing on paper relative to the edges of the paper.

The accuracy of printing a single color (cyan, magenta, or yellow) relative to black.

The accuracy of printing on one side of a page relative to printing on the reverse side of the page.

reprographics

The process of copying or duplicating documents or information.

requested

In InfoPrint Manager, pertaining to the specific values of attributes requested by a job when it is submitted. The requested attribute values of a job are validated against supported attribute values for an actual destination to determine if the printer can handle that job. Contrast with *supported*.

resettable attribute

An attribute whose value can be set or modified after an object has been created, assuming the object is in an appropriate state to be modified. See also *initially settable attribute*; contrast with *non-settable attribute*.

resource

In AFP, a file containing a collection of printing instructions used when printing a job. Resources include fonts, overlays, form definitions, page definitions, and page segments.

resource context

In InfoPrint Manager, an object that contains directory path information that helps the print system locate resources needed for printing a job. The resources include fonts, overlays, form definitions, page definitions, and page segments.

resource document

In InfoPrint Manager, an object that represents a resource, such as graphics or fonts, used by a job to print a printable document. Contrast with *printable document*.

resubmit

In InfoPrint Manager, an action used to reroute pending or retained jobs to a different logical destination than the one through which the job was originally submitted.

resume

In InfoPrint Manager, the action used to resume the printing of paused jobs or resume the distribution of jobs from paused servers or queues.

retained job

In InfoPrint Manager, an object that represents a job that is being stored in the print system for a specified amount of time, normally after the completion of printing the job. A retained job does not reside in a queue.

retention

The process of storing data after completion of a process for a certain length of time.

retrieval

The process of bringing digital archived data out of storage and into online memory for reuse. See also *archiving*.

RGB

Red, green, blue.

RIP

Raster image processor.

To convert data to dot patterns using a raster image processor.

root user

In the AIX environment, the system user with the most authority who can log in and execute restricted commands, shut down the system, and edit or delete protected files. Synonymous with *superuser*.

RPC

Remote Procedure Call.

RPM

Red Hat Package Management is the baseline package format of the Linux Standard Base distribution.

S

scanner

A device that converts hardcopy source data into digital format (halftone dots) to avoid retyping the data.

scheduler

In InfoPrint Manager, the scheduling method that the queue uses when assigning a job to an actual destination.

separator sheet

The sheet of paper, blank or otherwise, that separates documents in a job. See also *auxiliary sheet*.

server

In InfoPrint Manager, the object that accepts configuration, management, and printing requests, performs the requested operations, and sends responses back as a result of the operation.

settable attribute

See *initially settable attribute*, *resettable attribute*.

severity

An indication of how serious an error condition is.

shell

In the AIX operating system, a command interpreter that acts as an interface between the user and the operating system. In InfoPrint Manager documentation, all shell examples use the Korn shell.

shift-out, shift-in code

Control characters used to indicate the beginning and end of a string of double-byte, ideographic characters.

shortest-job-first

In InfoPrint Manager, a queuing technique where the next job assigned to the first position in the queue is the shortest job in the queue. Contrast with *deadline*, *FIFO (first-in-first-out)*, *job-priority*, and *longest-job-first*.

shut down

In InfoPrint Manager, the action used to halt all server or actual destination processes without deleting the server or actual destination.

signature

A group of pages that are printed, folded, cut, and bound together. Manual placement of pages in the signature is determined using a folding dummy.

simplex

In InfoPrint Manager, the value of the document or actual destination `plex` attribute indicating that output images are placed on the media in a head-to-head format, so that the top of one image is at the same edge as the top of the next image. Depending on the value of the document or actual destination `sides` attribute, the document can be printed on one or both sides of the paper. Contrast with *tumble*; see also *simplex printing* and *duplex printing*.

simplex printing

Printing on only one side of the paper. Contrast with *duplex printing (1)*.

Printing on one or both sides of the paper, placing output images on the media in a head-to-head format, so that the top of one image is at the same edge as the top of the next image. Contrast with *tumble duplex printing*; see also *duplex printing (2)*.

SMIT

System Management Interface Tool.

SNA

Systems Network Architecture.

spiral binding

A type of book binding in which wire or plastic coils are threaded through a series of holes or slots in the binding edge. Contrast with *edition binding*, *perfect binding*, and *wire-o binding*.

spot color

Individual colored inks formulated to exactly match a specified color. Spot color is used when CMYK process color cannot produce a reasonable facsimile of the color or when vivid color is needed. Spot color is also used when fluorescent or metallic colors are needed.

spread

In color printing, an area whose dimensions have been enlarged to eliminate white space between it and another color. Contrast with *choke*.

start sheet

The sheet of paper, blank or otherwise, that can precede a job. See also *auxiliary sheet*.

state

Synonym for *object state*.

stripping

The process of mechanically assembling film into plate layouts. Page imposition takes place during stripping.

subnet mask

Identify a range of IPv4 addresses that are on the same network.

subnetwork

Any group of nodes that have a set of common characteristics, such as the same network ID.

In the AIX operating system, one of a group of multiple logical divisions of another network, such as can be created by TCP/IP.

subtractive color system

A system that reproduces an image by mixing (adding) appropriate quantities of cyan, magenta, and yellow paints on white paper. These paints reflect certain colors and absorb—or subtract—others. Contrast with *additive color system*.

superuser

Synonym for *root user*.

supported

In InfoPrint Manager, pertaining to the specific job attribute values that the actual destination can accept during job validation. InfoPrint Manager validates the requested attribute values of the job against the supported attribute values of the actual destination to determine whether the actual destination can handle that job. Contrast with *requested*.

synchronous

Occurring with a regular or predictable time relationship to a specified action. Contrast with *asynchronous*.

system administrator

Synonym for *administrator*.

System Management Interface Tool (SMIT)

In the AIX operating system, an interface tool for installation, maintenance, configuration, and diagnostic tasks. SMIT lets you perform tasks without entering any commands.

Systems Network Architecture (SNA)

The description of IBM's logical structure, formats, protocols, and operational sequences for sending units through, and controlling the configuration and operation of, networks.

T

table reference character (TRC)

An optional control character in a print data set. The TRC identifies the font used to print the record and can be used to select a font during printing.

Tagged Image File Format (TIFF)

A digital format for storing scanned images. TIFF files are also referred to as raster format files (as opposed to vector format files). When used in desktop publishing, TIFF files produce only a low-resolution FPO image; the high-resolution data remains on the hard disk.

task help

A type of online help that provides a list of tasks that can be completed with a selected object. When you select a task, the help provides step-by-step information about how to complete the task.

TCP/IP

Transmission Control Protocol/Internet Protocol.

TCP/IP-attached printer

A printer device attached to an pSeries computer through telecommunication lines using the TCP/IP protocol.

In InfoPrint Manager, a PSF physical printer that represents a TCP/IP-attached printer device. See also *AIX-attached printer*, *direct-attached printer*, and *upload-TCP/IP-attached printer*.

template

In the InfoPrint Manager Administration GUI, an object that represents a set of default attribute values that has been defined for creating a particular type of object, such as an actual destination.

ticket

See *job ticket*.

TIFF

Tagged Image File Format.

Transmission Control Protocol/Internet Protocol (TCP/IP)

A set of communication rules used in the Internet and in any network that follows the U.S. Department of Defense standards for inter-network protocol. TCP provides a reliable host-to-host protocol between hosts in packet-switched communications networks and in interconnected systems of such networks. It assumes that the Internet Protocol (IP) is the underlying protocol. See also *Internet Protocol*.

trapping

In desktop publishing, the amount of overlap in overprinting colors. Trapping prevents white paper showing through gaps caused by normal errors in registration. On sheet-fed presses, trapping is usually 0.25 point. See also *choke* and *spread*.

TRC

Table Reference Character.

TrueType font (TTF)

A font format based on scalable outline technology with flexible hinting. Glyph shapes are based on quadratic curves. The font is described with a set of tables contained in a TrueType Font File.

TTF

TrueType font.

tumble

In InfoPrint Manager, the value of the document or actual destination **plex** attribute indicating that output images are placed on the media in a head-to-toe format, so that the top of one image is at the same edge as the bottom of the next image. The document must be printed on both sides of the paper. Contrast with *simplex*.

tumble duplex printing

Printing on both sides of the paper, placing output images on the media in a head-to-toe format, so that the top of one image is at the same edge as the bottom of the next image. Contrast with *simplex printing (2)*, *duplex printing (2)*.

U

UCR

Under color removal.

under color removal (UCR)

Conversion of neutral color areas to black ink that reduces use of CMY inks, improves trapping, and reduces setup time. Generally, UCR is performed during image scanning, but some RIPs perform it during processing. Synonymous with *gray component replacement (GCR)*.

unmanage

In the InfoPrint Manager Administration GUI, the action used to put an object into a mode where its icon does not reflect the changes of status for the object.

upload printer

See *upload-TCP/IP-attached printer*.

upload-TCP/IP-attached printer

In InfoPrint Manager, a PSF physical printer that represents a printer device attached through an MVS system and managed by PSF/MVS. InfoPrint Manager communicates with the MVS system through the TCP/IP network. See also *AIX-attached printer*, *direct-attached printer*, and *TCP/IP-attached printer*.

V

validate

In InfoPrint Manager, to compare the attribute values requested by a job with the supported attribute values of the actual destinations in the system and to determine whether there is an actual destination capable of printing or sending the job.

value

A specific characteristic of an attribute.

variable

A name used to represent a data item whose value can change while the program is running.

variable data

Data that can be changed between copies of a document. For example, a form letter (constant data) can be merged with variable data, such as a customer's name and address to produce personalized documents.

varnish

A protective layer applied to a finished sheet, usually for photos, but sometimes used as a design element because of its reflective qualities. Varnishes can be tinted.

vector

An absolute coordinate point and line in space. PostScript files can contain vector artwork. Vector files are converted to rasters during the RIP process.

velox

A black and white photographic print made from a halftone negative, to be used as a proof copy.

vignette

An image with soft, fade-away edges.

Virtual Machine (VM)

A product that manages the resources of a single computer so that multiple computing systems appear to exist.

A virtual data processing system that appears to be at the exclusive disposal of a particular user, but whose functions are accomplished by sharing the resources of a real data processing system. (T)

Virtual Storage Extended (VSE)

A program whose full name is the Virtual Storage Extended/Advanced Function. It is a software operating system controlling the execution of programs.

Visual Systems Management (VSM)

In AIX, a type of graphical user interface that allows system management through the direct manipulation of objects.

VM

Virtual Machine.

VSE

Virtual Storage Extended.

VSM

Visual Systems Management.

W

web

A roll of paper used in web or rotary printing.

well

In the InfoPrint Manager Administration GUI, an area in a pane that contains a group of objects related to the objects in the pane; for example, a queues well in a servers pane.

what you see is what you get (WYSIWYG)

Refers to the fact that the composite image displayed on the screen at a computer workstation has the appearance of the final printed image.

window

A rectangular area of the screen that you can move about, place on top of, or pull under other windows, or reduce to an icon.

wire-o binding

A continuous double series of wire loops run through punched slots along the binding side of a booklet. Contrast with *edition binding*, *perfect binding*, and *spiral binding*.

with-request

In InfoPrint Manager, a document transfer method where the client transfers the documents directly to the server. Contrast with *pipe-pull*.

workstation

A terminal or microcomputer, usually one that is connected to a mainframe or to a network, at which a user can use applications.

write access

A level of authorization that grants the ability to modify data.

WYSIWYG

What you see is what you get.

X

X-Windows

A network-transparent windowing system developed by MIT. It is the basis for Enhanced X-Windows, which runs on the AIX Operating System.

xerography

A dry printing process using corona-charged photoconductive surfaces to hold latent images that are developed with a dry toner and then transferred to paper and fused with heat.

Xstation

A terminal that is connected through a network to an pSeries computer, from which a user can perform command-line functions and run X-Windows based applications.

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