



IBM Infoprint Manager for AIX: Using Infoprint Library

Contents

Chapter 1. Information Storage and Retrieval	1
Software Features.	2
Scalability	3
Prerequisites	3
Chapter 2. Installing and Configuring Infoprint Library	5
Configuring the Infoprint Library on the Server	5
Configuring the Infoprint Library on a Windows System	6

Configuring the Infoprint Library on a Macintosh System	6
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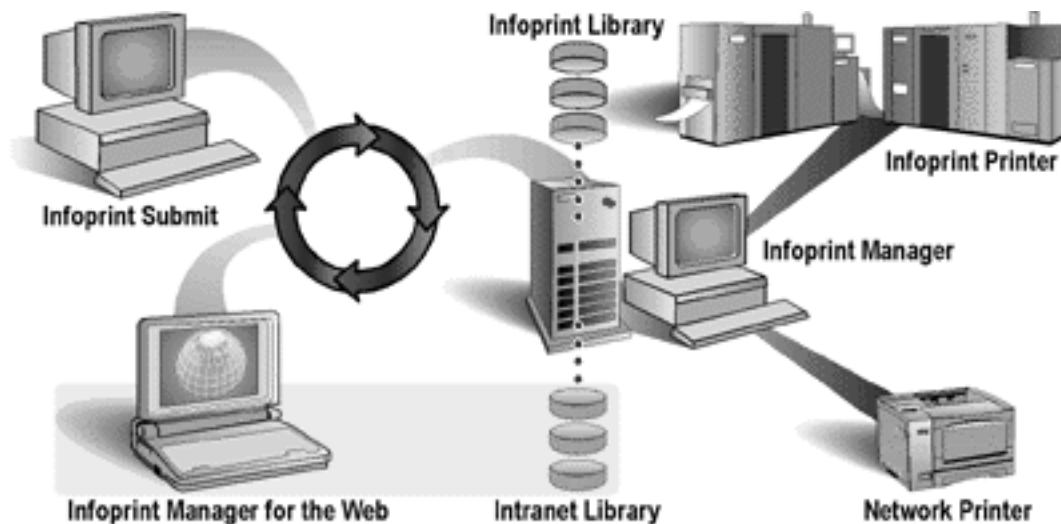
Chapter 3. Using the Infoprint Library Option	9
Managing Library	9
Adding a User	10
Changing a Password	10
About Library Groups.	10
Starting Library	10
Stopping Library	11

Chapter 1. Information Storage and Retrieval

Store it where everyone can find it.

Highlights:

- Allows sharing of documents across users, organizations, and locations
- Stores printing options with the documents for easy reprinting using Infoprint Submit or Infoprint Manager for the Web
- Allows a wide variety of extended storage devices with optional ADSM for AIX
- Protects your information with state-of-the-art security
- Provides search functions making documents and jobs easy to find and retrieve



A commercial print shop gets an order from a customer to reprint a book they printed months ago. Since the job ticket and all its associated files had already been archived in IBM Infoprint Library, they used the IBM Infoprint Submit application to quickly retrieve the job. The new print job requires that two new files be inserted into the book, so the operator makes these changes to the job ticket and submits the job using Infoprint Submit. The operator then archives the new job ticket and associated files back into the library.

The customer calls again and asks for 500 more copies of the same book. They quickly retrieve the job from the library. The job ticket shows that the RIPped files were saved and archived in the library. Since there are no changes to the job, Infoprint can use the RIP file for printing, thus saving the time and cost of re-RIPping the files.

Professors at the local university store their customized course materials in the **IBM Infoprint Library for the Web** so that their students can print them. They control access to their course materials using the student's university ID. Students use a Web browser to access the library and find the files. When the students want to print copies, they access the library, find the files, and submit them using Infoprint Manager for the Web.

Software Features

Infoprint Library for the Web	Infoprint Library
Store and retrieve jobs and associated files	
<ul style="list-style-type: none"> • Enables casual users to find, print, store, view, and manage their print information right from their Web browsers. • Stores files and printing options produced by Infoprint Manager for the Web. Casual users can locate and submit jobs over the network. • Stores all data on secure server. • Stores any kind of document used for printing. • Archives data and resource files. • Searches for archived print jobs and files based on date, author, job title, or print attributes. • Retrieves files for print submission. 	<ul style="list-style-type: none"> • Provides a long-term archival solution for customers with lots of data they want to archive and still be able to recall the data for reprinting at a later time. This solution provides maximum control over complex print documents. • Stores job tickets and jobs produced by Infoprint Submit or Infoprint Scan, which support full document assembly for commercial print shops. Operators can set print attributes for individual documents in a print job. • Stores data in a shared file system and tracks it in a database. • Stores job tickets and associated files used to print the job; these files can include source files in any data stream format, PostScript files, and RIP files, depending on options set in Infoprint Submit. • Archives the entire print job as a package or bundle so that users do not need to associate files with jobs. • Searches for jobs or files based on job and file keywords you provide when you archive the job. Up to 200 bytes per key can be specified. • Retrieves the entire print job or individual files from the library for print submission using Infoprint Submit. Retrieved files can be included in other print jobs and then stored with a new job ticket name.
Archive your documents in a secure library using low-cost storage media	
<ul style="list-style-type: none"> • Provides state-of-the-art security with easy-to-use administrative functions to ensure document security and integrity. Library access is controlled by the use of assigned user names and passwords. Users are defined using the interface. • Optionally uses ADSM HSM (hierarchical storage management), which provides automatic migration of files from the AIX system to less expensive storage systems supported by ADSM, including magnetic disk, optical disk, or tape. 	<ul style="list-style-type: none"> • Provides AIX-based security with groups of users having permissions (archive, retrieve, and delete) and administrative functions to ensure document security and integrity. Users are defined in the database. • Optionally uses ADSM HSM (hierarchical storage management), which provides automatic migration of files from the AIX system to less expensive storage systems supported by ADSM, including magnetic disk, optical disk, or tape. • Uses the DB2 for AIX product (a relational database product) to index files, thus providing reliable document search and retrieval for reuse.
Set up and customize the library	

<ul style="list-style-type: none"> • Requires no unique client installation because access is through Netscape and Internet Explorer. This means that remote access (for example, company-wide or worldwide) is much easier. • Can be customized by IBM technical experts. Contact your PSC representative for details. 	<ul style="list-style-type: none"> • Requires that client code be installed for each Windows® or Macintosh user because the Infoprint Library is designed to work with Infoprint Submit. Library code may reside on the same computer as the Infoprint Multiple Printer Controller (MPC) or on another AIX server. • Provides fully customizable search retrieval panels that allow searching for specified fields (for example, by customer name, date, job name). Users can define keywords for files or jobs (up to 200 byte limit) and use these for searches. Sort features let users sort on column data (up to three columns).
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Scalability

ADSM allows you to automatically manage your storage space. Older jobs can be migrated to less expensive storage devices and still be easily accessible. More disk space or additional devices (supported by ADSM) or library servers separate from the MPC can be added.

Prerequisites

Infoprint Library for the Web	Infoprint Library
Library Server Software Prerequisites	
<ul style="list-style-type: none"> • IBM Infoprint Manager for AIX version 2.1.1 must be installed on an AIX version 4.2.1 or later operating system. • (Optional) ADSM for AIX Version 3.1 with possible extended device support and the Space Management Support feature. 	<ul style="list-style-type: none"> • Infoprint Manager for AIX version 2.1.1 must be installed on an AIX version 4.2.1 or later operating system. • DB2 for AIX version 5.0 (UDB) with a 5-client use pack. • (Optional) ADSM for AIX Version 3.1 with possible extended device support and the Space Management Support feature.
Client Software Prerequisites	
<ul style="list-style-type: none"> • Windows 95 or Windows NT operating system installed on your client system. May be installed on Macintosh or AIX operating systems, but with limited function (print submission is not supported). • Netscape version 4.04 or later or Internet Explorer version 4 installed on your client system 	<ul style="list-style-type: none"> • Windows 95, Windows NT, or Macintosh operating system installed on your client system. • Windows Infoprint Submit clients must have either IBM DB2 Client Application Enabler for Windows 95 or Windows NT installed. • Macintosh Infoprint Submit clients must have the IBM DB2 client Application Enabler for Macintosh installed.
Library Server Hardware Prerequisites	

<ul style="list-style-type: none"> • IBM 4161 Infoprint Multiple Printer Controller (MPC) Model 001 (minimum) or IBM RS/6000 with AIX operating system 4.2.1. • Requires at least 210 MB of available hard-disk space on the Infoprint server system for program files. • Additional hard-disk space on the Infoprint server system for files that will be printed and stored. The amount of space needed depends on the size and volume of these files. 	<ul style="list-style-type: none"> • IBM 4161 Infoprint Multiple Printer Controller (MPC) Model 002 (minimum) or IBM RS/6000 with AIX operating system 4.2.1. • Requires approximately 300 MB of available hard-disk space on the Infoprint server system for program files and a minimal database. • Additional hard-disk space on the Infoprint server system for job tickets, their associated jobs, and retained jobs. The amount of space depends on the size and volume of these files. • When using your Library component for archiving, you may use the same F50 RS/6000 machine (and its AIX terminal) that you use for Infoprint, or you may purchase an additional RS/6000.
Optional Storage Devices (Requires ADSM for AIX)	
Any device supported by ADSM version 3.1, such as the IBM 3175 MagStar Tape Library.	Any device supported by ADSM version 3.1, such as the IBM 3175 MagStar Tape Library.

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Chapter 2. Installing and Configuring Infoprint Library

In the past, print shops stored metal plates or camera-ready copy on warehouse shelves, with a note indicating the information contained on the media. In today's digital environment, print shops must be able to store data in digital or electronic format on some sort of storage and retrieval device: magnetic tapes, disks, or optical platters loaded in a juke box.

Infoprint Library is optional for Infoprint Manager, but it offers an excellent means of digitally storing data. The Library consists of two basic components:

- A Library server that runs on the Infoprint AIX server.
- A library client that runs on the Windows or Macintosh client where Infoprint Submit is installed.

Once you create a job in Infoprint Submit, you can archive that job into Infoprint Library. You can retrieve any job (or file) that has been archived. You access the library client through the Infoprint Submit application.

This page consists of the following procedures:

- Configuring the Infoprint Library on the Server
- Configuring the Infoprint Library on a Windows Client
- Configuring the Infoprint Library on a Macintosh Client

Configuring the Infoprint Library on the Server

To configure Infoprint Library on the Infoprint AIX server, ensure that you have used the Infoprint Installer and selected the Infoprint Library option. This process installs all the necessary code.

Once the Infoprint Installer has completed and you have rebooted the server, you can configure the Infoprint AIX server by using the following procedure:

1. Configure the server to support saving RIP files and preflighting jobs on either web page <http://www.printers.ibm.com/R5PSC.NSF/Web/ins7981d> or the *Installation: Performing Optional Configuration* PDF file that is located at <ftp://ftp.software.ibm.com/printers/specs/optp331.pdf>.
2. From an AIX window, type `smitty` and take the following path: **Infoprint Printing System**→**Infoprint Utilities**→**Configure Infoprint Library**
3. From the **LOCALE** pop-up menu that appears at the bottom of your screen, specify the language that you want for the server.

Note: This value should correspond to whatever you specified as the "Preferred Language" in the Infoprint Installer.

4. Specify a value for the size of the `/ipdata/library` file system, which is where Infoprint files and job tickets will reside.
5. Specify a value for the size of the `/libdb` file system, which is where the data base code and data will reside
6. In the **ARE YOU SURE?** dialog box that appears, click **Enter**.

Once you receive notification that Library is configured, you can define the Client on either a Windows or a Macintosh system.

Configuring the Infoprint Library on a Windows System

Once you have installed and configured Library on the Infoprint AIX server, you can install the Infoprint Library client support (DB/2 Windows) by using the following procedure:

1. Insert the Infoprint Manager client CD and navigate to the **submit/winnt/db2cae** directory.
2. From the same directory, open a DOS window and enter the following command:

```
ipdb2ins servername d:
```

where *servername* defines the Infoprint AIX server where you have installed and configured Infoprint Library and where *d:* is the drive where the Infoprint Library client (DB/2 Windows) will be installed.

3. This can take 2 or 3 minutes to complete. Once it has completed successfully, you will see a message requesting that you reboot the client system before attempting to start Infoprint Library.

Configuring the Infoprint Library on a Macintosh System

Once you have installed and configured Library on the Infoprint AIX server, you can install the DB/2 Macintosh client by using the following procedure:

1. From the client CD-ROM provided with Infoprint Manager, install Infoprint Submit on your system.
2. Click on the **CAEMacUS** file in the **CAEMacUS** folder to start this executable.
3. Press **Continue**. DB2 client enabler instructions display. Ignore them and press **Continue**.
4. When the install has completed and the system reboots, expand the DB/2 entry from the system's top level folder and click on **Command Line Processor** to start the DB/2 Command Line Processor.
5. Using the DB/2 Command Line Processor, catalog the TCP/IP node:

```
CATALOG TCPIP NODE infodb REMOTE servername SERVER 1447
```

where *infodb* specifies an arbitrary name you give to the node that contains the DB/2 server, and *servername* specifies the host name of the Infoprint AIX server where the Library resides. *1447* specifies the port number for the DB/2 service. Because this port number is used on the DB/2 server, you cannot change this value.

6. Using the DB/2 Command Line Processor, catalog the database:

```
CATALOG DATABASE infopr AT NODE infodb
```

where *infopr* specifies the name of Infoprint data base, and *infodb* is the arbitrary name you give to the node that contains the DB/2 server.

Note: For Infoprint Library to work correctly, you must use this *infopr* name.

7. Using the DB/2 Command Line Processor, connect to the data base:

```
CONNECT TO infopr USER root USING root_password
```

where *infopr* specifies the name of Infoprint data base, *root* specifies the root user of the server, and *root_password* specifies the password for the AIX root user.

Note: For Infoprint Library to work correctly, you must use this *infopr* name. Enter quit to exit the Command Line Processor.

8. Complete the DB/2 Configuration
 - a. Go to the the Control Panel and specify the following path: **ODBC Setup PPC → Setup Data Sources→ADD**
 - b. Select the **IBM ODBC DB2** for PPC driver.
 - c. To add the INFOPRT data base that you created above, select **OK**.
 - d. To close the window, click on the box in the top left corner.

Once you have completed these tasks, reboot the client and you will be ready to begin “Chapter 3. Using the Infoprint Library Option” on page 9.

Chapter 3. Using the Infoprint Library Option

Infoprint Library indexes data for fast search and retrieval. Library also stores data for as long as necessary and can move less frequently accessed data to less expensive storage media. The storage media needed to support your archiving requirements will be based upon the size of your data.

This page consists of the following sections:

- [Managing Library](#)
- [About Library Groups](#)
- [Starting Library](#)
- [Stopping Library](#)

Managing Library

The IBM Infoprint Library administrator is responsible for the Library environment, which includes hardware, software applications, and end users.

- Hardware includes library and object servers, client PCs, the TCP/IP network, and the Magstar MP tape subsystem.
- Software includes the base operating system, prerequisite software, such as DB2/6000 and ADSM with the HSM feature, and client and server programs.

The following are typical tasks required to administer and maintain Library:

- Installing and maintaining Library programs and prerequisite software
- Defining and labelling storage volumes
- Working with end users to determine Library retrieval requirements
- Defining Library users
- Backing up Library data bases

Defining users to Library and placing those users in defined Library groups is similar to defining a new user account in the AIX operating system; you assign the names and passwords end users need to access Library.

You can use the Users and Groups Manager to change passwords and add users to your Infoprint AIX system. To access the Users and Groups Manager, select the Application Manager control that is located on the front panel. A window containing other icons will display. Select the **Systems Administration** icon to display the Users and Groups Manager.

The Users and Groups Manager provides easy visual management of the user accounts and groups on your system. To start the application, select this icon. To learn the basics about using a Visual System Management (VSM) interface, select:

- Template Area
- Actions
- Work Area
- View Controls
- Display Controls

The Actions area contains activities you can perform. Each activity or action has an icon that graphically represents the task or tasks associated with managing user accounts and groups on your system.

Adding a User

To add a user, select the **newuser** icon located in the **Users Templates** area and drag it into the Users Work Area. You will be prompted to provide a name and additional optional information for the new user you create.

Changing a Password

Drag the **Password** icon onto the user icon representing the account you want to change. The Password action displays a dialog window for you to set or change a user's password. Because a password is known only by the account user and the system, you must know the user's password to change a user's password.

You are prompted to enter the new password and then enter the new password again. A system message signals that the password has been changed successfully. The password is changed immediately in the user data base files and takes effect the next time the user logs in.

Note: Note that changing the password while a user is logged in does not affect the user's current session and processes. Also, if you are the **root** user when you change a user's password, the system sets the ADMCHG flag on the password so that the user is forced to change the password the next time they log in.

About Library Groups

As a library administrator, you can add users to the following AIX groups that were created when Infoprint Library was installed:

- **libwrite**
Users in this group can archive files to the library and retrieve files from the library.
- **libuser**
Users in this group can archive files to the library and retrieve and delete files from the library.
- **libadmin**
Users in this group can archive files to the library and retrieve and delete files from the library.
- **libread**
Users in this group can only retrieve files from the library.

Starting Library

When you power on the Infoprint AIX server, the IBM Infoprint Library server daemon and other related Library processes automatically start as part of AIX initialization. Infoprint Submit users must specify their AIX user ID and password defined by the Library administrator before they can access Infoprint Library.

Stopping Library

If you need to power off or reboot the Infoprint AIX server, or stop Infoprint Library for any reason, stop AIX with the **shutdown** command. Then power off the Infoprint AIX server. The Infoprint Library client is automatically stopped when Infoprint Submit is stopped.