

IBM InfoPrint Manager 3.1 for AIX



APAR IY00208 Documentation (8/30/99)

IBM Infoprint Manager 3.1 for AIX

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Using the IBM Infoprint 2000 Printer

The IBM Infoprint 2000 printer is a multi-purpose solution designed for a multiplicity of users. Whether you requiring the speed and precision of an Advanced Function Presentation (AFP) printer, or the print quality of a PostScript or PCL commercial printer with finishing capabilities, the Infoprint 2000 can meet your needs.

In addition, the Infoprint 2000 can be configured as a Xerox printer replacement that supports both Xerox LCDS and Xerox Metacode as input. You can obtain an Infoprint 2000 printer and configure it with Infoprint Manager 3.1 software to support any of the following:

- a network printer
- an Infoprint Network system
- a Data Center system

For more information about this new print solution, see [Configuring an IBM Infoprint 2000](#).

Configuring an IBM Infoprint 2000 Printer

By applying the July PTF U464746 (APAR IY00208), you will be able to print from the Infoprint 2000 printer. In order to submit print jobs to the Infoprint 2000, you must use a new destination support system (DSS) called **Infoprint 2000** (specified as **IP2000** on the command line).

Note that if your print installation uses the Infoprint Manager Email feature and you have applied APAR IY00208 and now need to reject that APAR, you must delete the Email destination on your Infoprint AIX server before proceeding.

Review the following topics before attempting to use the Infoprint 2000 printer:

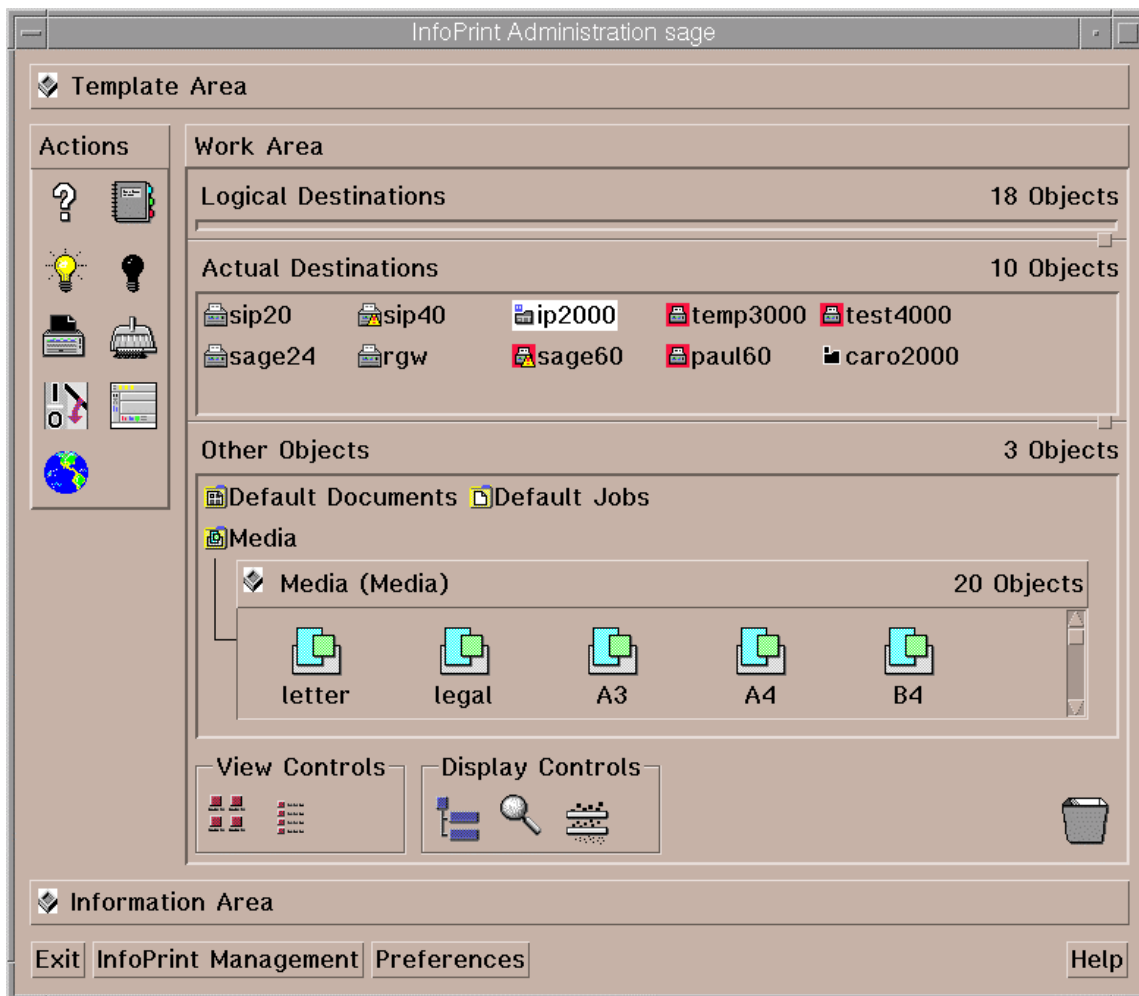
- [Matching Media on the Printer and the Server](#)
- [Submitting Jobs to the IBM Infoprint 2000 Printer](#)
- [Limitations that Apply to the IBM Infoprint 2000](#)

Matching Media on the Printer and the Server

Before you can send jobs to the IBM Infoprint 2000 printer, you must ensure that the media supported by the printer corresponds to the media specified by Infoprint Manager. You must:

1. Make sure media objects are defined for each media you will be using on the printer.
2. Tell Infoprint Manager what media is ready at the printer.

The **Infoprint Administration** window displayed below shows a highlighted Infoprint 2000 printer defined in the **Actual Destinations** pane. By moving to the **Other Objects** pane and selecting the letter media object, you can see the media attributes signified by 'letter' in the **View and Change Medium Properties** window.



The values specified in the **View and Change Medium Properties** window (displayed below) must match the values specified on the IBM Infoprint 2000 printer. Be sure that every field (type, size, color, etc..) match the values for the particular media at the printer exactly. If you need to add a media object that is not yet defined, see "Chapter 12. Configuring Media" in the *IBM Infoprint Manager for AIX: Administrator's Guide*, S544-5595.

View and Change Medium Properties

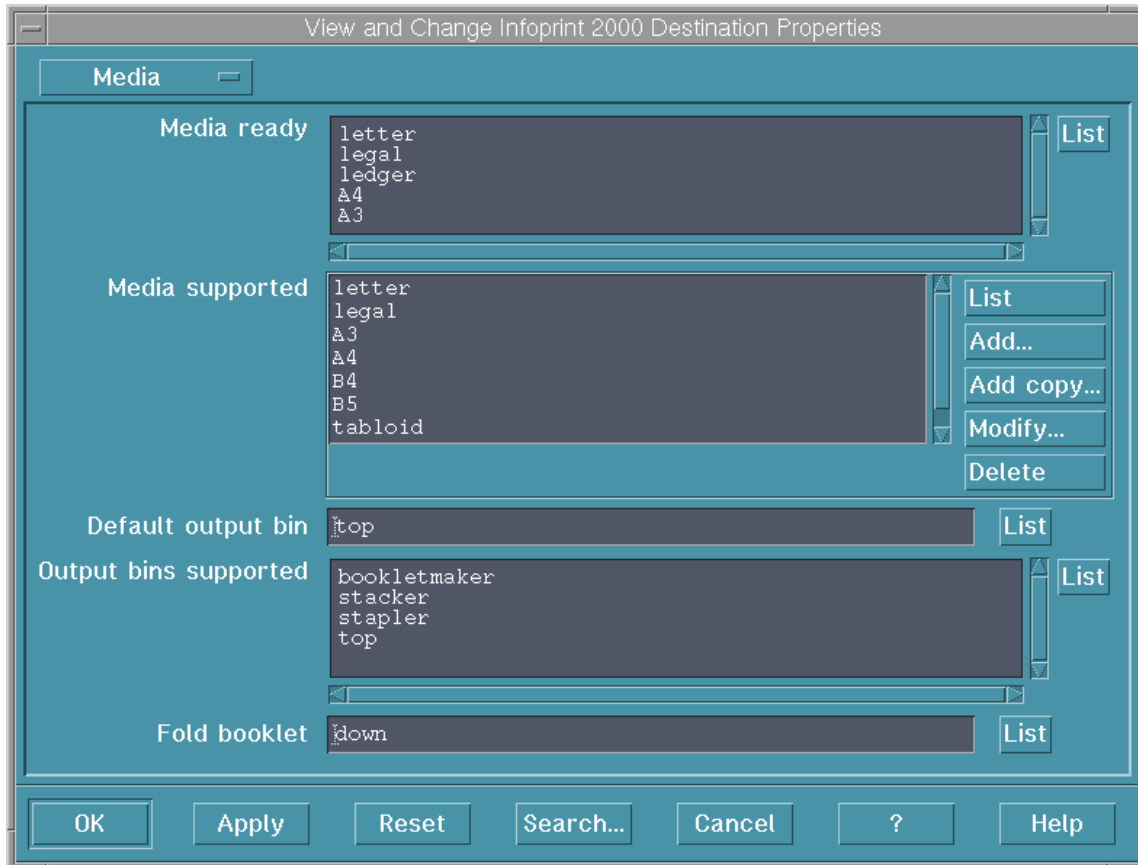
Medium name	letter	
Server	sage	
Type	stationery	List
Untrimmed width and length (inches)	8.5	11
Weight (grams)		
Color	white	List

Details

OK Apply Reset Search... Cancel ? Help

Telling Infoprint Manager what Media is Ready at the Printer

The image below shows the media page of the **View and Change Infoprint 2000 Destination Properties** window.



To see the current values for PSF tray characteristics for each item displayed in the **Media ready** field, specify the following from the AIX command line:

```
pdls -cp -r psf-tray-characteristics ip2000
```

where *ip2000* is the name of the actual destination used in this example.

For this example, Infoprint Manager displays the following values:

```
ip2000: psf-tray-characteristics = 1:letter:1:1:true
                                     2:legal:2:2:true
                                     3:ledger:3:3:true
                                     4:A4:4:4:true
                                     5:A3:5:5:true
                                     6:B5:6:6:true
```

The first three values in each line, e.g. 1:letter:1, represent tray name, medium, and input bin number. Tray name can be anything, but each one has to be unique. We used numbers 1 through 6 in this example for simplicity. The medium and bin number should match the actual setup on the printer. That is, if tabloid paper is loaded in bin 2, one line should be "2:tabloid:2:2:true".

To set or change these values, you must use the **pdset** command at the AIX command line. to set the **psf-tray-characteristics** attribute for all six bins on the printer to define which of the supported paper sizes are loaded on the Infoprint 2000 printer.

For example, if you map "letter" paper to bin "1" through the **psf-tray-characteristics** attribute, the form definition provided with the print job should call out bin "1". When you update the **psf-tray-characteristics** attribute to change a paper size on the Infoprint 2000, the Infoprint AIX server will update the printer profile to reflect the change.

To complete this task from the command line of your Infoprint AIX server, use the following procedure:

1. To change the media ready, you must first disable the printer.
2. To initially define complete set of media ready invoke the **pdset** command. The following example sets the values shown above:

```
pdset -cp -x "psf-tray-characteristics=1:letter:1:1:
2:letter:2:2: 3:legal:3:3: 4:tabloid:4:4: 5:A3:5:5:
6:A4:6:6:" ip2000
```

where *ip2000* is the name of the actual destination used in this example.

You can change an individual media ready. See the following example:

Currently, you have these values for psf tray characteristics:

```
ip2000: psf-tray-characteristics = 1:letter:1:1:true
                                     2:legal:2:2:true
                                     3:ledger:3:3:true
                                     4:A4:4:4:true
                                     5:A3:5:5:true
                                     6:B5:6:6:true
```

To change the paper in bin 3 from ledger to tabloid, invoke the following **pdset** command:

```
pdset -cp -x "psf-tray-characteristics+=3:tabloid" ip2000
```

where *ip2000* is the name of the actual destination used in this example.

Note that in the above command, we used "+=" instead of just "=". This means you are adding a value to the list rather than replacing the whole list.

In this case, we specified tray name "3", so the previous setting for that tray is replaced. If you specified a tray name that was not in the list, it would be added.

The **Media ready** field in the **View and Change Infoprint 2000 Destination Properties** window will reflect the media changes you have made.

Submitting Jobs to the IBM Infoprint 2000 Printer

The **Infoprint 2000** DSS allows you to submit jobs in two ways:

[Passthru Mode](#)

[Infoprint Mode](#)

Passthru Mode

Passthru sends the job to the Infoprint 2000 through a special socket connection that passes the job to Infoprint Manager spooler without ripping the job.

To submit a job as passthru, you must ensure that one of the following attributes has been specified:

job-ripped-by-server=false

doc-formats-ripped-at-dest=postscript

doc-formats-ripped-at-dest=pcl

The **jobs-ripped-by-server** attribute is a job attribute that takes precedence over the **doc-formats-ripped-at-dest** printer attribute.

When sending a job to the printer in passthru mode, you must not specify any of the following attributes:

Attributes Not Supported in Passthru Mode:

ACCOUNT_TEXT

BASE_PRINTER

CARRIAGE_CONTROL_TYPE

CHARS

CONVERT_TO_EBCDIC

DEFAULT_CHARACTER_MAPPING

DEFAULT_MEDIUM

DEFAULT_FONT_FIDELITY_ACTION

FONT_FIDELITY_ACTION

FORM_DEFINITION

HALFTONE

IMAGE_FIT

IMAGE_LENGTH
IMAGE_WIDTH
INPUT_EXIT
NEW_LINE_OPTION
NUMBER_UP
OTHER_TRANSFORM_OPTIONS
OUTPUT_BIN
OUTPUT_FORMAT
OVERLAY
PAGE_DEFINITION
PAGE_SELECT
PLEX
PRINTER_PASS_THROUGH
RESOURCE_CONTEXT
RESOURCE_CONTEXT_FONT
RESOURCE_CONTEXT_FORM_DEFINITION
RESOURCE_CONTEXT_PAGE_DEFINITION
RESOURCE_CONTEXT_PAGE_SEGMENT
RESOURCE_CONTEXT_OVERLAY
SHIFT_OUT_SHIFT_IN
SIDES
START_ON_NEW_SHEET
SUBJECT_TEXT

TABLE_REFERENCE_CHARACTERS
TRANSFORM_MESSAGE_FILE_NAME
X_IMAGE_SHIFT
Y_IMAGE_SHIFT
Y_IMAGE_SHIFT_BACK

If these attributes or conditions are sent to an Actual Destination, the file will print as black-and-white (MO:DCA-P) output.

Job Attribute Conditions Not Supported in Passthru Mode:

1. Any use of the JOB_FINISHING attribute.
2. If the job is a variable data job or contains:
 - More than one printable document
 - an insert sheet
 - a file-reference document
 - a document with document_format=modca
 - a document with job_rip_action=rip_and_hold or job_rip_action=rip_only
 - a copy_count attribute set higher than 1.

Infoprint Mode

Infoprint mode implies that the job is ripped by Infoprint Manager. In this mode you can specify from a range of different calibration screens by using the [Halftone Management System](#).

Limitations that Apply to the IBM Infoprint 2000

Because the Infoprint 2000 printer allows you to print AFP files on IPDS printers, there are some limitations to the printer and job commands that you can use. The **Infoprint 2000** DSS does not support:

Task	Syntax
Duplex printing of tab paper. Note: While the Infoprint Manager GUIs allow you to request this support, printing duplex with tabbed paper causes output to be printed on the wrong side of the page and can cause a printer jam.	<pre>pdpr -x "sides=2 plex=simplex" File11</pre>
Forward space the job printing	<pre>pdspace -cd -f sidecount</pre>
Back space the job printing	<pre>pdspace -cd -b sidecount</pre>
Pausing a currently printing job	<pre>pdpause -cp -j</pre>
Resuming a job that had been paused while printing Note: This option is supported for jobs paused while ripping.	<pre>pdresume -cj</pre>
Synchronous shut down of a printer.	<pre>pdshutdown -cp -s</pre>

Printing Color Email

If you have color Portable Document Format (PDF) or PostScript files, you can send these files to target email address through Infoprint Manager and receive color output.

By applying the July PTF (APAR IY00208), you will obtain access to the color Email, provided you have followed the directions for [Configuring Email](#).

Note: Color Email is not supported if your Email job sent to an Actual Destination contains any of the attributes specified in the lists that follow. If these attributes or conditions are sent to an Actual Destination, the file will print as black-and-white (MO:DCA-P) output.

Document Attributes Not Supported for Color Email:

ACCOUNT_TEXT

ADDRESS1_TEXT

ADDRESS2_TEXT

ADDRESS3_TEXT

ADDRESS4_TEXT

CARRIAGE_CONTROL_TYPE

CHARS

CONVERT_TO_EBCDIC

DEFAULT_CHARACTER_MAPPING

FONT_FIDELITY_ACTION

FONT_RESOLUTION

FORM_DEFINITION

IMAGE_FIT

IMAGE_LENGTH

IMAGE_WIDTH

INPUT_EXIT

Document Attributes Not Supported for Color Email (continued):

NEW_LINE_OPTION

NUMBER_UP

OUTPUT_FORMAT

PAGE_DEFINITION

PAGE_SELECT

PLEX

RESOURCE_CONTEXT

RESOURCE_CONTEXT_FONT

RESOURCE_CONTEXT_FORM_DEFINITION

RESOURCE_CONTEXT_PAGE_DEFINITION

RESOURCE_CONTEXT_PAGE_SEGMENT

RESOURCE_CONTEXT_OVERLAY

RESOURCE_CONTEXT_USER

SHIFT_OUT_SHIFT_IN

SIDES

TABLE_REFERENCE_CHARACTERS

TRANSFORM_MESSAGE_FILE_NAME

X_IMAGE_SHIFT

Job Attribute Conditions Not Supported for Color Email:

1. Any use of the **job_finishing** attribute.
2. If the job is a variable data job or contains:
 - More than one printable document
 - an insert sheet
 - a file-reference document
 - a document with `document_format=modca`
 - a document with `job_rip_action=rip_and_hold` or `job_rip_action=rip_only`
 - a `copy_count` attribute set higher than 1.

Managing Halftone Calibration of Your Infoprint Printers

The Halftone Management System allows you to manage calibrations across your business enterprise. This interface gives you the ability to calibrate screens for each screen frequency on all your printers. The result is consistent grayscale for each appearance selection. This feature replaces the "Calibrating the Printer Device" function described in "Chapter 17. Actual Destination Tasks for Operators" in *IBM Infoprint Manager for AIX Administrator's Guide*, S544-5595-00.

You can run three IBM Infoprint 4000 printers and calibrate for each one. The Halftone Management System also allows you to calibrate each print engine separately, so one could support Tag Image File Format (TIFF) files, while the other processed Joint Photographic Experts Group (JPEG) files.

From the smallest network printer to the largest production printer, you can either use the calibration provided (generic), or create your own (customized). You can calibrate for different paper types to account for differences between supplies. Infoprint Manager will save and manage these calibrations, allowing you to select them on a job-by-job basis.

To find out how to install this feature, see [Configuring the Halftone Management System](#).

To find out how to begin using this feature, see [Using the Halftone Management System](#).

Configuring the Halftone Management System

By applying the July PTF U464746 (APAR IY00208), you will obtain access to the Halftone Management System interface, which replaces the Printer Calibration interface on Infoprint Basic Configurations.

The Halftone Management System interface consists of two parts:

1. A daemon process that runs on the Infoprint AIX server.
2. A client that also runs on the Infoprint AIX server.

You invoke the Halftone Management System through the **Printer Calibration** icon (the page embossed with a lower-case **i** that is the fourth icon from the right) on the toolbar of the Infoprint Manager desktop:



This page describes the following two procedures that you should ensure have been completed before attempting to [use the Halftone Management System](#):

1. Restarting the Halftone Management System
2. [Calibrating a Densitometer](#)

Restarting the Halftone Management System

If you find the Halftone Management System icon in the tool bar on your Infoprint Manager desktop after applying this PTF and it starts, you do not need to perform this procedure and should go to [Calibrating a Densitometer](#). If you do not see the Halftone Management System icon on your Infoprint Manager desktop or it does not start, you can use the following procedure to start the Halftone Management System:

1. From your Infoprint AIX server's command line, ensure that your Infoprint AIX server is running by specifying:

```
ps -ef | grep pdserver
```

You should see a response that shows the server running:

ID	Process Number	Time	Process and Server Name
root	26078...	11:24:36 ...	pdserver <i>servername</i>

Note that the server must be running before you start the calibration client.

2. From the **root** directory, start the Calibration daemon (**runcalibd**) by specifying:

```
./usr/lpp/pd/ipcal/bin/runcalibd
```

A return to the command prompt indicates that the daemon is properly connected.

3. Now, you must start the Halftone Management client, on either this Infoprint AIX server or another AIX server by specifying the following at a command prompt, or invoking the toolbar icon as described in [Invoking the Halftone Management System](#):

```
./usr/lpp/pd/ipcal/bin/runcalib
```

From the client screen, a pop-up **Halftone Management System** window announces Starting the Halftone Management System Client.

4. Then the Halftone Management System window opens.

The client has created a **calibgui.db** file in the directory from which you entered the command.

Note that starting from a different directory will mean you have to redefine the servers to which you want to connect. Multiple clients can be started on the same AIX server, but they must be started from different directories. Because the clients would try to share the **calibgui.db** file, you cannot start two clients from the same directory.

Calibrating a Densitometer

The following procedure describes how to calibrate the XRITE 400B (1060) densitometer, using the Reflection Reference Card (part number 400-62).

The Reflection Reference is the card that is used to calibrate the densitometer. You will use only the circular patches labeled 1 (white reference) and 3 (black reference). The densitometer should be calibrated periodically, or whenever the instrument displays **RECAL**. You should store the Reflection Reference Card in its envelope. The following presumes that the Serial Number B2844504E-02320 Reflection Reference is used.

1. Press the **FUNCTION** and **ENTER** keys in sequence, then release.

After the version and copyright notices appear, the display will show N cal O Y.

2. Press the **ZERO** key and release.

After the version and copyright notices appear, the display will show N qcal Y.

3. Press the **FUNCTION** key and release.

SET LO is displayed momentarily, followed by 0.09L. This is the white patch ORTHO value from the Reflection Reference card.

4. If 0.09L displays, press the **ENTER** key.

SET HI is displayed momentarily, followed by 0.09L. This is the black patch ORTHO value from the Reflection Reference card.

5. If O 1.78H displays, press the **ENTER** key.

6. When you see READ WHT displayed, center the circle on the base of the densitometer over the white patch (the one labeled "1") on the Reflection Reference. Push the head down and then release it to establish the white patch Optical Density.

If INVALID displays, repeat the measurement.

7. When you see READ BLK displayed, center the circle on the base of the densitometer over the white patch (the one labeled "3") on the Reflection Reference. Push the head down and then release it to establish the black patch Optical Density.

If INVALID displays, repeat the measurement.

The densitometer is now calibrated.

To find out how you can calibrate and set output appearances, see [Using the Halftone Management System](#).

Using the Halftone Management System

The Halftone Management System allows you to calibrate the output appearance of each of your printers by providing a set of generic output screens (screen frequency combined with output appearance) and allowing you to define additional calibrations for each printer's specific paper types, colors, or any other environmental consideration.

To use this tool to calibrate your printers, perform the following procedures in sequence:

1. [Invoking the Halftone Management System](#)
2. [Connecting to Your Infoprint AIX Server](#)
3. [Working with Patch Sets](#)
4. [Printing a Patch Set](#)
5. [Measuring Optical Density with a Densitometer](#)
6. [Calibrating a Halftone](#)
7. [Specifying a Halftone for Printing on the Infoprint AIX Server](#)

Invoking the Halftone Management System

The Halftone Management System can be invoked from the Basic Infoprint Administrator's GUI:

1. Start the Infoprint AIX server Calibration daemon (**runcalibd**) has been started by entering the following command from an AIX command line: .

```
/usr/lpp/pd/ipcal/bin/runcalibd.
```

After a few minutes, the command prompt should return.

2. Ensure that your Halftone Management System daemon is running by specifying:

```
ps -ef | grep runcalibd.
```

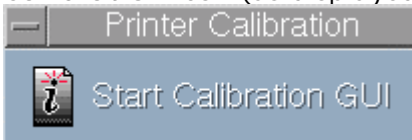
You should see a response that shows the **runcalibd** daemon running:

ID	Process Number	Time	Process and Server Name
root	26078...	11:24:36runcalibd

3. From the toolbar that displays that the bottom of the Basic Infoprint Administrator's GUI (displayed below), double-click on the **Printer Calibration** icon (fourth icon from the right).



4. Double-click on the Halftone Management System that appears above the **Printer Calibration** icon (as displayed below).



This icon starts the Halftone Management System client.

If you press this icon before starting the Halftone Management System daemon, Infoprint Manager provides an Error pop-up dialog with the following message:

```
Error in connecting to host fully_qualified_server_name -- A remote host refused an attempted connect operation.
```

To resolve this problem, you must close the Halftone Management System client window and restart the daemon.

Once you have completed these steps, move to the procedure described in [Connecting to Your Infoprint AIX Server](#) below.

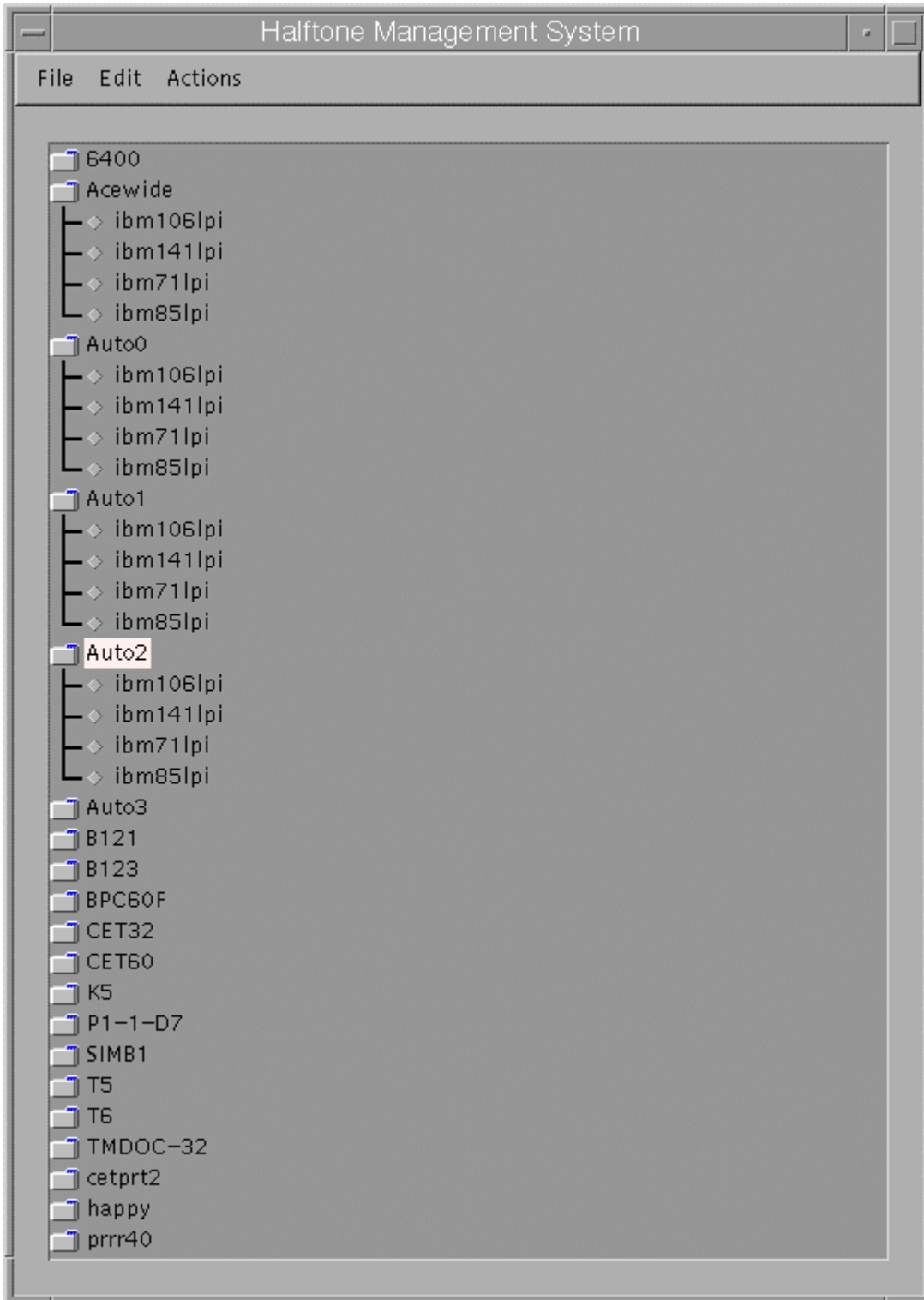
Connecting to Your Infoprint AIX Server

The first time you start the Halftone Management client, you will see a blank screen. You must connect to the Infoprint AIX server to see a list of the printers that are available for calibration:

1. From the **Halftone Management System** (or **Main**) window, select the **Edit -> Servers** option.
2. From the **Servers** window, select the **File -> Add Server** option.
3. In the **Server Properties** window, fill in the **Server Name** field with the symbolic server name, and the **Hostname** field with either the explicit name of the server or the server's dotted decimal notation IP address.

For example, the **Server Name** field value could be `sage.penn.boulder.ibm.com`, while the **Hostname** field value could be either `sage` or `9.99.43.73`.

4. Return to the **Main** window and either use left mouse button to double-click on each printer or highlight the printer and press enter to display its output screens (as displayed below). The Main window displays all printers defined to the Infoprint server to which you are connected, but only the IPDS printers contain screens that can be calibrated.



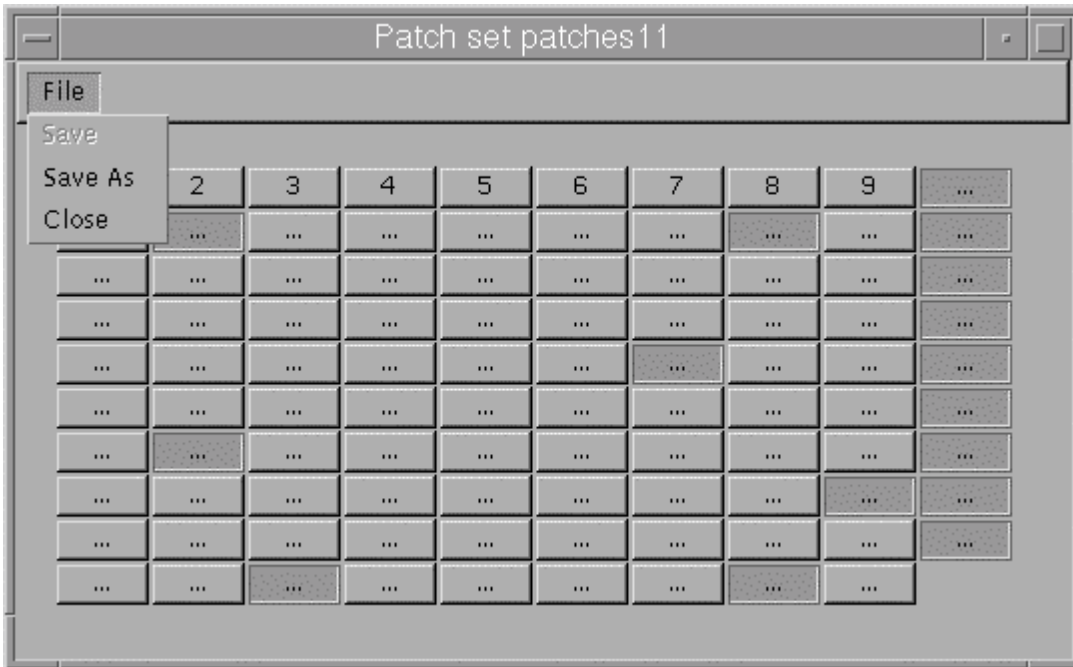
Working with Patch Sets

In order to calibrate a particular printer for a particular paper type, you must first select a patch set. A patch set is a file that displays patches in different shades of gray for all screen frequencies.

To perform this task, use the following procedure:

1. From the **Halftone Management System** window, click on an output appearance (such as `ibm1061pi`), and select the **Edit -> Patch Sets** option.
2. From the **Patch Sets** window, click on a patch set (such as `patches11`) and select the **Edit -> Properties** option.
3. From the **Patch Set *name*** window (where *name* indicates the patch set highlighted in the previous step), use the left mouse button to select the patches that you would like to modify in order to create a unique patch set.
4. Once you have defined the patch set, select the **File -> Save as** option and save your patch set with a unique name.

Note that the shipped patch set `patches11` cannot be modified. However, a user-created patch set can be modified through the **Save** option. In the example below, the **Save** option is greyed-out because no changes have been made to the file.



Printing a Patch Set

Once you have either created a customized patch set or settled on a standard patch set for use, you must print it to the Infoprint printer so you can use the densitometer to measure the density of each grey patch. To print a patch set, use the following procedure:

1. Select both the printer and the screen that you want to calibrate for a paper type.
2. Before printing, set the **logical-destination-assigned** attribute of the actual destination (printer) to the name of the logical printer with which it is associated. If you have not set this attribute, the system will prompt you to make a selection.

Note that this logical printer must not send jobs to any other actual destination except the one that you are calibrating.

3. Using either the Infoprint Submit job ticket window or the **pdpr** Command from the AIX command line, print the patch set.

Measuring Optical Density with a Densitometer

The following procedure describes how you can measure optical density using the XRITE 400B Densitometer. While you can use other densitometers, this procedure has been verified with this particular make and model. Ensure that the Status T density readings are absolute, not paper reference.

1. Press the **FUNCTION** key until DEN appears. If DEN-R appears, press the **ZERO** key and try again.
2. Center the circle on the base of the densitometer over the area to be measured.
3. Push the head down and release it to measure the Optical Density (OD).

The density reading will appear as X.XXD.

4. Record the X.XX value as it is displayed.

Several measurements should be taken at different representative locations on each gray patch and averaged to obtain an accurate OD value.

Calibrating a Halftone

Once you have either selected an existing patch set or created your own customized patch set, you must print it out, use a densitometer to measure the density of each grey patch. Once you have taken densitometer readings, you must enter the calibration values in the Halftone Calibration Management System to create a calibration curve for the printer.

Note: Ensure that you use the Halftone Management System to both add and delete patch files and Calibration files.

Use the following procedure to accomplish these tasks:

1. From the **Halftone Management System** window, select the **Actions -> Print Patches** option.
2. From the pop-up window, specify **yes**.
3. Once you retrieve your output from the printer, use the densitometer to measure the patches.
4. Select the same actual destination (printer) and screen that you selected before you printed the patch set.

Note that the printed patch set identifies the screen, patch set, and printer, along with a date/time stamp.

5. Once you have finished using the densitometer, return to the **Halftone Management System** window and select the **Actions -> Calibrate** option.
6. From the **Enter calibration values** window (shown below), set **The number of entries to average** field (it defaults to 3) to the number of measurements you took for each patch.
7. To enter your densitometer readings, begin with the **0%** field. Enter your first 0% value and press **Enter**. Your value will be displayed under the columns **Average**, **Min**, and **Max**.

Enter calibration values

Printer: sage60
 Screen: generic106lpi
 Patch set : patches11
 The number of entries to average:
 Calibration name:

% gray	Entry	Average	Min	Max	# entries
0%	<input type="text"/>			0	<input type="button" value="Clear"/>
10%	<input type="text"/>			0	<input type="button" value="Clear"/>
20%	<input type="text"/>			0	<input type="button" value="Clear"/>
30%	<input type="text"/>			0	<input type="button" value="Clear"/>
40%	<input type="text"/>			0	<input type="button" value="Clear"/>
50%	<input type="text"/>			0	<input type="button" value="Clear"/>
60%	<input type="text"/>			0	<input type="button" value="Clear"/>
70%	<input type="text"/>			0	<input type="button" value="Clear"/>
80%	<input type="text"/>			0	<input type="button" value="Clear"/>
90%	<input type="text"/>			0	<input type="button" value="Clear"/>
100%	<input type="text"/>			0	<input type="button" value="Clear"/>

If you specified more than 1 in the number of entries to average field, the cursor will remain in the field for your next reading. Otherwise, it will move on to the next patch field. Continue until all your readings have been entered. The display below shows a sample customized Calibration named `first_run`. Note that the 50% setting only has two values submitted.

Printer: Acewide
 Screen: ibm106lpi
 Patch set : patches11
 The number of readings per patch: 3
 Calibration name: first_run
 Calibrating engine: 1

% gray	Entry	Average	Min	Max	# entries	
0%		0.6667	0.5	0.8	3	Clear
10%		0.2833	0.02	0.8	3	Clear
20%		0.9000	0.8	1.0	3	Clear
30%		0.2667	0.1	0.4	3	Clear
40%		0.5667	0.2	0.8	3	Clear
50%		0.9500	0.9	1.0	2	Clear
60%		0.7040	0.6	0.8	3	Clear
70%		0.3667	0.2	0.5	3	Clear
80%		0.8133	0.76	0.9	3	Clear
90%		0.0333	0.02	0.05	3	Clear
100%		0.7333	0.6	0.9	3	Clear

Do Cancel

- Once you have filled in your calibration values, press the **Do** button. Your calibration is saved in the `/usr/local/Infoprint/config` directory and ready for use.

Specifying a Halftone for Printing on the Infoprint AIX Server

You can use a particular halftone for printing a greyscale file through either [Infoprint Submit](#) interface (if the client GUI is running on a Windows 95 or Windows NT system) or the [AIX command line](#) (if the client GUI is running on an AIX operating system).

Note: The Halftone Management System does not need to be running when you print the job.

Printing from Infoprint Submit

You can print using a particular halftone for printing a greyscale file from a job ticket (*name.jtk* file) in Infoprint Submit. Through this interface, you can specify a specific screen and output appearance. Begin by selecting a value in the **Screen Name** field of the **Look** tab. Note that all screen frequencies shipped with the product have the term 'ibm' prepended to their identifier. If you are accessing this interface for the first time after applying this PTF, all your previous default calibrations will have 'ibm' attached to the name.

Infoprint Manager allows you to determine output appearance on a job-by-job basis by setting a default screen and output appearance in a default document or job object. For more information about creating default document or default job objects, see Chapter 11, "Creating and Managing Default Job and Document Objects" in the *IBM Infoprint Manager for AIX Administrator's Guide*, (S544-5495).

Printing from the AIX Command Line

You can submit a halftone calibration from the AIX command line by using some variation of the following:

Command	Printer
<code>pdpr</code>	<code>-p sip20-sage</code>

Customized Calibration file
<code>-x halftone=generic106lpi:highlight-midtones.mycal</code>
File to Be Printed
<code>greyscale.ps</code>

Note: When submitting a `pdpr` command from the AIX command line, you specify the **halftone** attribute, rather than setting both frequency and output appearance as you do when using the Infoprint Submit client interface.

