Attributes for Actual Destinations

- · Infoprint uses actual destinations for job validation and scheduling.
- Infoprint uses the actual destination attributes xxx-supported for job validation. Infoprint uses both the xxx-ready and the xxx-supported attributes for job scheduling.
- Infoprint issues an error if you update an *xxx*-ready attribute with a value not currently assigned to the corresponding *xxx*-supported attribute.
- Actual destinations have different attribute sets based on the DSS that supports the destination.
- Infoprint supplies some attributes files that have the values for some of the actual destination attributes
 already set, based on the output device model or destination attachment type. You will find these
 attributes files in the /usr/lpp/pd/attr directory.

Attributes Not Displayed in the Infoprint Administrator's GUI

While all actual destination attributes and attribute values are supported for both basic and advanced Infoprint installations, neither Infoprint administrator's GUI displays a complete set.

- The basic Infoprint administrator's GUI displays only the attributes of greatest interest to Infoprint administrators.
- The advanced Infoprint administrator's GUI displays most attributes and attribute values, but omits a few that are used primarily in basic Infoprint installations.

You can list the values of attributes not displayed in the Infoprint administrator's GUI using the **pdIs** command. You can set the values of initially settable and resettable attributes using the **pdcreate** command. You can change the values of resettable attributes using the **pdset** command.

Initially Settable Attribute Listing

You can set these attributes with the **pdcreate** command when you create an actual destination.

attachment-type destination-data-stream destination-realization destination-support-system device-name print-queue-name

Resettable Attribute Listing

You can set these attributes with the **pdcreate** command when you create an actual destination or modify them with the **pdset** command after you create the actual destination.

accept-jobs
accounting-exit
ack-interval
add-carriage-returns
add-line-feeds
ascii-character-mapping
ascii-font-map
associated-queue
attribute-map
audit-exit

automatic-postscript-mode-switch auxiliary-sheet-selections-supported carriage-control-types-supported character-mappings-supported checkpoint-at-stacker color-mapping-table color-rip-servers connection-timeout content-orientations-supported convert-to-ebcdic-supported data-fidelity-problem-reported-supported default-font-fidelity-action default-font-resolution default-input-tray descriptor destination-command destination-locations destination-model destination-pass-through destination-register-threshold destination-release-timer destination-tcpip-internet-address destination-tcpip-port-number document-finishings-supported document-formats-supported document-types-supported dss-job-message-disposition dss-job-message-log-size dss-job-message-log-wrap ebcdic-character-mapping end-message-supported end-sheets-supported font-resolutions-supported force-destination-setup form-definition image-fit-supported image-length image-out-formats-supported image-width input-data-user-exit input-trays-medium input-trays-supported (BSD only; otherwise non-settable) intervention-timer job-batches-ready job-finishings-supported job-retry-count-limit job-retry-interval job-rip-actions-supported job-size-range-ready job-size-range-supported job-start-wait-supported list-of-managers log-accounting-data logical-destinations-assigned

maximum-concurrent-jobs maximum-copies-supported maximum-fonts-to-keep maximum-overlays-to-keep maximum-segments-to-keep media-ready (BSD only; otherwise non-settable) media-supported message message-font-type message-form-definition non-process-runout-timer notification-profile notify-operator number-up-supported offset-stacking-available optimize-for-multiple-copies output-appearances-supported output-bin output-bin-numbers output-data-user-exit output-format-supported overlay page-select-supported pcl-server-address pcl-server-port plex plexes-supported postscript-server-address postscript-server-port presentation-fidelity-problem-reported print-edge-marks print-qualities-supported printer-end-sheet printer-escape-codes printer-memory printer-resolutions-ready printer-resolutions-supported printer-separator-sheet printer-start-sheet printer-s370-channel-device-address printer-s370-channel-slot-number printer-timeout-period protected-attributes psf-tray-characteristics remote-queue resource-context resource-context-font resource-context-form-definition resource-context-overlay resource-context-page-definition resource-context-page-segment reverse-output rip-ini-file rip-server

scanner-corrections-supported screen-frequencies-supported scheduler-sort-primary-order scheduler-sort-secondary-order separator-sheets-supported sides sides-supported snmp-community-name snmp-retry-count snmp-timeout start-message-supported start-sheets-supported table-reference-characters-supported use-snmp x-image-shift-range-supported y-image-shift-range-supported

accept-jobs (All DSS)

This **resettable**, **single-valued** attribute indicates whether Infoprint can assign newly submitted or resubmitted jobs to this actual destination.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: true

Usage Guidelines

- A value of **false** does not prevent you from using the basic Infoprint administrator's GUI to reassign jobs that have been assigned to another actual destination to this actual destination.
- When this value is true and the value of the queue attribute assign-to-destination is true, Infoprint
 can assign jobs to this actual destination even if it is disabled. Of course, the jobs will not be printed
 or transmitted until the destination is enabled.

accounting-exit (PSF, Email, Fax)

This **resettable**, **single-valued** attribute specifies the name of an auxiliary-sheet object that sets accounting exit parameters.

Allowed Values: You can enter the name of an auxiliary sheet or any of these fixed values:

accounting-log

Accounting information is written to the /var/psf/accounting.log file.

blank This value is technically valid, but should not be used.

brief A sheet with brief accounting information is printed after the job.
 full A sheet with full accounting information is printed after the job.
 job-ticket Accounting information is written to the /var/psf/podaccount.log file.

none No accounting information is produced.

Default Value

Basic Infoprint administrator's GUI

job-ticket

Advanced Infoprint administrator's GUI and command line

accounting-log

ack-interval (PSF)

This **resettable**, **single-valued** attribute determines how often Infoprint sends acknowledgement requests to the destination.

Allowed Values: You can enter a value of 1 through 9999. This value represents pages.

Default Value: 100

Usage Guidelines: The unit for this attribute is pages. If you change this attribute value, the change can affect performance. You can control how often Infoprint updates the job attribute **pages-completed** by decreasing or increasing this value:

- Decreasing the value (number of pages) increases the number of acknowledgement requests during normal printing activities. This decreases the destination throughput and reduces the complexity of the exception recovery activities that Infoprint performs.
- Increasing the value (number of pages) decreases the number of acknowledgement requests. This provides less accurate information about the destination and exception conditions.

add-carriage-returns (PSF)

This **resettable**, **single-valued** attribute indicates whether Infoprint should add carriage return characters when transforming ASCII documents for printing on this actual destination.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: No default value.

add-line-feeds (PSF)

This **resettable**, **single-valued** attribute indicates whether Infoprint should add line feed characters when transforming ASCII documents for printing on this actual destination.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: No default value.

ascii-character-mapping (PSF)

This **resettable**, **single-valued** attribute indicates the ASCII code page that AIX uses to map the attributes of this PSF upload-TCP/IP-attached or PSF upload-SNA-attached physical printer.

Allowed Values: You can enter the name of an ASCII code page.

Default Value: No default value.

Usage Guidelines: Infoprint requires this attribute for PSF upload-SNA-attached and upload-TCP/IP-attached physical printers and ignores it for other attachment types.

ascii-font-map (PSF)

This **resettable**, **multi-valued complex** attribute defines how the destination maps the ASCII font escape sequences to AFP character sets that Infoprint uses for ASCII fonts. Infoprint uses this attribute to map each font-change escape to an AFP font character set.

Allowed Values: This complex attribute has these components for each value:

font-escape font-name

Syntax

font-escape:font-name

For example: 10cpi:C02055D0

Default Values

font-escape Value	font-name Value
10cpi	C02055D0
10cpi-emphasized	C02075D0
10cpi-subscript	C02055P0
10cpi-subscript-emphasized	C02075P0
10cpi-2wide	C02059A0
10cpi-2wide-emphasized	C02079A0
10cpi-2wide-2high	C02059L0
10cpi-2wide-2high-emphasized	C02079L0
10cpi-2wide-subscript	C02055J0
10cpi-2wide-subscript-emphasized	C02075J0
10cpi-2high	C02051K0
10cpi-2high-emphasized	C02071K0
10cpi-condensed	C02055F0
10cpi-condensed-subscript	C02051R0
10cpi-condensed-2wide	C02059C0
10cpi-condensed-2wide-subscript	C02056N0
12cpi	C02055E0
12cpi-emphasized	C02075E0
12cpi-subscript	C02054Q0

font-escape Value	font-name Value
12cpi-subscript-emphasized	C02074Q0
12cpi-2wide	C02059B0
12cpi-2wide-emphasized	C02079B0
12cpi-2wide-subscript	C02058M0
12cpi-2wide-subscript-emphasized	C02078M0
proportional	C02055G0
proportional-emphasized	C02075G0
proportional-subscript	C02055S0
proportional-subscript-emphasized	C02075S0
proportional-2wide	C02059G0
proportional-2wide-emphasized	C02079G0
proportional-2wide-subscript	C02051H0
proportional-2wide-subscript-emphasized	C02071H0
proportional-2high	C02055H0
proportional-2high-emphasized	C02075H0

associated-queue (All DSS)

This **resettable**, **single-valued** attribute identifies the queue from which this actual destination receives jobs.

Allowed Values: You can enter a text string up to 255 characters long that contains the ID of the queue. The ID cannot contain the cell name.

Default Value: No default value.

Usage Guidelines: The value for this attribute is the name of a queue. The associated queue must exist and be in communication with the destination before you can enable the actual destination.

associated-server (All DSS)

This **non-settable**, **single-valued** attribute identifies the name of the server in which this actual destination resides.

Allowed Values: Infoprint sets this value to the value of the *ServerName* portion of the argument from the **pdcreate** command used to create this actual destination.

Default Value: No default value.

attachment-type (PSF)

This **initially settable**, **single-valued** attribute identifies how the output device that this actual destination represents attaches to the PSF DSS and how Infoprint communicates with the output device.

Allowed Values: You can enter one of these fixed values:

Fixed Value Explanation

aix Infoprint communicates with this printer device by forwarding print requests to the

AIX print system. An AIX print queue must exist for this printer device.

channel Infoprint communicates with this S/370 channel-attached printer device through the

channel.

direct Infoprint communicates directly with the printer device through an AIX printer

backend program.

tcpip Infoprint communicates with this TCP/IP LAN-attached printer device directly

through the TCP/IP network.

upload-snaThis printer device is attached to an MVS system. Infoprint communicates with

PSF/MVS through the SNA LU 6.2 network.

upload-tcpip This printer device is attached to an MVS system. Infoprint communicates with

PSF/MVS through the TCP/IP network.

Default Value: No default value.

Usage Guidelines

• You need to specify a value for this attribute when you create a PSF actual destination.

- For fax destinations and e-mail destinations, the only valid value is tcpip.
- Some actual destination attributes apply only to certain attachment types.

attribute-map (BSD)

This **resettable**, **multi-valued complex** attribute provides a list of Infoprint attributes and their associated BSD flags.

Allowed Values: You can enter a text string that contains a mapping between Infoprint attributes and the BSD flags. This complex attribute has these components for each value:

Infoprint-attribute BSD-flag

Syntax

attribute:flag

For example:

destination-pass-through:-o

Default Values

destination-pass-through:-o job-name:-o-Z

Usage Guidelines

- By default, BSD assumes the generated command is a rembak command.
- Some printer devices, for example, the IBM 4317 Network Printer 17, IBM InfoPrint 20 Printer, and IBM InfoPrint 32 Printer, do not support the BSD -Z flag. If you receive the following error message when you try to print on one of these printers:

```
0782-597 The value of _Z attribute is not in the ring list specified in the limits field
```

delete the job-name:-o-Z value from the attribute-map attribute.

audit-exit (PSF, Email, Fax)

This **resettable**, **single-valued** attribute specifies the name of the auxiliary-sheet object that sets audit exit parameters.

Allowed Values: You can enter the name of an auxiliary sheet or any of these fixed values:

accounting-log

blank

brief

full

Audit information is written to the /var/psf/audit.log file.
This value is technically valid, but should not be used.
A sheet with brief audit information is printed after the job.
A sheet with full audit information is printed after the job.

job-ticket A sheet with full audit information from the job ticket is printed after the job.

none No audit information is produced.

Default Value: No default value.

Usage Guidelines: If you do not set a value, Infoprint produces no audit information at the end of a job submitted to this actual destination.

automatic-postscript-mode-switch (AIX)

This **resettable**, **single-valued** attributes indicates whether this actual destination supports switching into PostScript mode using controls placed in the data stream.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: false

Usage Guidelines

- If this actual destination has this feature, it can print PostScript documents among non-PostScript documents.
- The value for this attribute does not change if you delete the document-formats-supported value of postscript.

auxiliary-sheet-selections-supported (AIX, PSF)

This **resettable**, **multi-valued** attribute identifies the combination of start, separator, and end sheets that this physical printer supports for jobs.

Allowed Values: You can enter any of these fixed values:

end none sep sep-end start start-end start-sep start-sep-end

Default Values: end, none, sep, sep-end, start, start-end, start-sep, start-sep-end

Usage Guidelines

- Infoprint compares the job attribute **auxiliary-sheet-selection** to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.
- For PSF physical printers, if you remove all values that specify a particular auxiliary sheet (such as **start**), the job submitter cannot "turn off" the corresponding actual destination attribute (such as **printer-start-sheet**).

cancel-individual-document-supported (All DSS)

This **non-settable**, **single-valued** attribute indicates whether this actual destination is capable of cancelling a single document within a multi-document job.

Allowed Values: Infoprint sets this value to **false**.

Default Value: false

carriage-control-types-supported (PSF, Email, Fax)

This **resettable**, **multi-valued** attribute identifies the types of carriage controls that this actual destination supports.

Allowed Values: You can enter any of these fixed values:

ansi-ascii ansi-ebcdic machine none

Default Values: ansi-ascii, ansi-ebcdic, machine, none

Usage Guidelines

- Infoprint compares the document attribute **carriage-control-type** to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

character-mappings-supported (AIX, PSF, Email, Fax)

This **resettable**, **multi-valued** attribute identifies the character mappings (code pages) that this actual destination supports.

Allowed Values: You can enter any of these fixed values:

ibm-437 ibm-850 ibm-860 ibm-863 ibm-865 ibm-932 ibm-euccn ibm-eucjp ibm-euckr

Default Values

ibm-euctw

AIX The value of the **destination-model** attribute for the actual destination determines

the default value.

PSF, Email, Fax ibm-437, ibm-850, ibm-860, ibm-865, ibm-eucjp, ibm-euckr, ibm-euctw

Usage Guidelines: Infoprint compares the document attribute **default-character-mapping** to this attribute for scheduling.

checkpoint-at-stacker (PSF)

This **resettable**, **single-valued** attribute indicates where to pause jobs printing on this physical printer.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: false

Usage Guidelines: When this attribute is set to **false** (the default), the checkpoint for paused jobs occurs at the operator viewing point on the printer device (the printhead). This means that when a paused job resumes, printing begins where it stopped, without reprinting any pages.

Set this attribute to **yes** if you want the checkpoint to occur at the stacker. This means that when a paused job resumes, all pages not stacked will be reprinted. This guarantees that, even if there is a paper jam between the printhead and the stacker, you will have at least one copy of each printed page.

checkpoint-formats-supported (AIX, PSF, Email, Fax)

Infoprint sets this **non-settable**, **multi-valued** attribute to identify the checkpoints supported for paused jobs for this actual destination.

Allowed Values: Infoprint sets this value to any of these fixed values:

dsf-document-number dsf-job-copy dsf-results-profile no-context-info

Default Values

AIX dsf-document-number, dsf-job-copy, dsf-results-profile

PSF, Email, Fax dsf-results-profile

Usage Guidelines: Infoprint uses this information to reschedule paused jobs.

color-mapping-table (PSF)

This resettable, single-valued attribute identifies the default color mapping table (CMT) that the output device uses when printing a document.

Allowed Values: You can enter a text string of up to 8 characters that contains the identification of the color mapping table.

Default Value: There is no default value.

□ color-rip-servers (3170)

This resettable, multi-valued attribute identifies the Internet Protocol address (IP Address parameter) and port number. of hosts capable of RIPping documents for this physical printer.

Allowed Values: You can enter a text string up to 4095 characters long that contains either of these types of address:

Dotted decimal address

A series of integers within the range of 0 to 255, each separated by a period, . (decimal address). For example:

9.99.12.85:11126

Hostname

For example:

leo.boulder.IBM.com:11126

Default Value: The value of the **destination-tcpip-internet-address** attribute with a port number of 11126.

command (PSF)

See destination-command.

command (AIX, BSD, PSF)

See destination-command.

connection-timeout (PSF)

This **resettable**, **single-valued** attribute sets the connection timeout parameter for TCP/IP-attached physical printers. This time period is the amount of time that Infoprint waits before it stops trying to communicate with the output device when it cannot make a connection.

Allowed Values: You can enter a value of 0 through 9999. The unit is seconds.

Default Value: 30

Usage Guidelines

- A value of **0** prevents any time out.
- Infoprint uses this attribute with TCP/IP-attached physical printers and ignores it for other attachment types.

content-orientations-supported (AIX, 3170)

This **resettable**, **multi-valued** attribute identifies the page presentations that this actual destination supports.

Input Synonym: You can use the synonym **orientations-supported**.

Allowed Values: You can enter any of these fixed values:

landscape portrait

reverse-landscape reverse-portrait

Default Values: portrait

Usage Guidelines

- Infoprint compares the document attribute **content-orientation** to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

convert-to-ebcdic-supported (PSF, Email, Fax)

This **resettable**, **single-valued** attribute indicates whether this actual destination supports converting document data from ASCII to EBCDIC.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: true

Usage Guidelines

- Infoprint compares the value of the document attribute convert-to-ebcdic to this attribute for job validation and scheduling.
- Infoprint uses the document attribute **convert-to-ebcdic** when printing line-data documents.
- You can use this attribute to restrict use of this actual destination.

data-fidelity-problem-reported-supported (PSF)

This **resettable**, **multi-valued** attribute identifies which types of data fidelity errors this actual destination reports.

Allowed Values: You can enter any of these fixed values:

all character none position

Default Values: all, character, none, position

Usage Guidelines

- Infoprint compares the document attribute data-fidelity-problem-reported to this attribute for scheduling.
- Use this attribute to specify whether Infoprint issues error messages for print-positioning and invalid-character errors that occur for channel-attached, TCP/IP-attached, upload-SNA-attached, and upload-TCP/IP-attached printer devices.

Print positioning errors occur when the print position for the data is beyond the valid printable areas as defined by the intersection of the physical and logical pages. (A logical page identifies the printing boundaries of a physical page.)

Invalid-character errors occur when the code point does not map to a character in a font.

default-font-fidelity-action (PSF)

This **resettable**, **single-valued** attribute indicates what Infoprint should do if a font required to print a document is not available in the resolution specified by the data stream, the document **font-resolution** attribute, or the actual destination **default-font-resolution** attribute.

Allowed Values: You can enter one of these fixed values:

Fixed Value Explanation

stop Stop printing the job.

continue Attempt to substitute a similar font at a different resolution.

Default Value: continue

Usage Guidelines: The value of the document attribute **font-fidelity-action** and the value specified in the data stream override the value of this attribute.

default-font-resolution (PSF)

This **resettable**, **single-valued** attribute specifies the font resolution used for documents printed on this actual destination when no value is specified in the data stream or by the document **font-resolution** attribute.

Allowed Values: You can enter one of these fixed values:

240 300 outline

Default Value: outline

Usage Guidelines

- The value of this attribute must be one of the values of the font-resolutions-supported attribute.
- Usually the font resolution and the printer resolution match, but there are two cases when they do not:
 - Some printer devices, for example, the InfoPrint 60 and InfoPrint 4000, can print fonts of any resolution, although the print head is always 600 pels.
 - It is possible to print a document created with fonts of one resolution on a printer device with a
 different resolution by substituting fonts. Depending on the document, the output may or may not
 be acceptable.

default-input-tray (AIX, PSF)

This **resettable**, **single-valued** attribute specifies the name of an input tray for a PSF actual destination.

Allowed Values: You can enter any value as long as the value maps to one of the actual destination input-trays-supported or psf-tray-characteristics attribute values.

Default Value: No default value.

Usage Guidelines

- The value you specify must be one of the values specified for the **input-trays-supported** or **psf-tray-characteristics** actual destination attribute.
- Infoprint only uses the value you supply for this attribute if:
 - The user does not specify a medium or input tray.
 - The form definition Infoprint uses for the job does not specify an input tray.

descriptor (All DSS)

This **resettable**, **single-valued** attribute provides a textual description of this actual destination.

Allowed Values: You can enter a text string up to 4095 characters long that describes this actual destination. You may want to include such things as the type and location of the output device that this actual destination represents and any usage information, such as restrictions for this actual destination.

Default Value: No default value.

Usage Guidelines: The use of this attribute is optional. However, a detailed description is useful to users who want to specify a given destination or to determine which destination can handle their jobs. A description is also helpful when you create a new logical destination and want to determine which actual destinations you should associate with the new logical destination.

destination-command (AIX, BSD, PSF)

This **resettable**, **single-valued** attribute specifies the command-line entry to invoke the desired device driver.

Input Synonyms: You can use the synonym **printer-command** or **command**.

Allowed Values: You can enter a text string up to 4095 characters long that contains the command.

Default Value

AIX /usr/lib/lpd/piobe

BSD /usr/lpd/rembak

PSF direct-attached physical printers

/usr/lib/lpd/piobe

PSF AIX-attached physical printers

qprt -Pxxx -dp -Z!

where *xxx* is the value of the **print-queue-name** attribute. If there is no value for the **print-queue-name** attribute, *xxx* is

asc If the destination-data-stream=ppds

pcl If the destination-data-stream=pcl4, pcl5, or pcl5c

Usage Guidelines

- For AIX physical printers, Infoprint uses the value as the command that the AIX physical printer
 executes for each document printed. It should include the full path name for the print driver you are
 using for your printer device.
- For PSF physical printers:
 - This attribute applies only to AIX-attached or direct-attached physical printers.
 - Infoprint uses the value as the command string to print a job on the AIX-attached printer and to send the job to the correct AIX queue.
 - Infoprint uses the command string to invoke the printer backend program for direct-attached physical printers.
 - If you do not specify this attribute for AIX-attached physical printers, Infoprint fills in the value of xxx (shown under Default Value) with the value of the print-queue-name attribute.

destination-data-stream (PSF)

This **initially settable**, **single-valued** attribute identifies the data stream format that is output to the printer device.

Allowed Values: You can enter one of these fixed values:

pcl4 pcl5 pcl5c ipds ppds

Input Synonym: You can use the synonym **printer-data-stream**.

Default Value

Direct-attached physical printers pcl4
AIX-attached physical printers pcl4
Other attachment types ipds

destination-locations (All DSS)

This resettable, multi-valued attribute identifies the location of the output device.

Input Synonyms: You can use the synonym **printer-locations** or **locations**.

Allowed Values: You can enter a text string up to 4095 characters long, for each value, that describes the physical location of the output device. Each value is a different description for the same location.

Default Values: No default values.

Usage Guidelines: Infoprint compares the job attribute **destination-locations-requested** to this attribute for scheduling. The user can specify the **destination-locations-requested** job attribute to request that Infoprint use the output device at this specific location to process the job.

destination-model (All DSS)

This **resettable**, **single-valued** attribute identifies the make and model number defined by the manufacturer of the output device.

Input Synonyms: You can use the synonym **printer-model** or **model**.

Allowed Values: You can enter a text string up to 4095 characters long that contains the make and model number of the output device.

Default Value: If SNMP communication is active, Infoprint queries the printer device and sets the values according to the response; otherwise no default value.

Usage Guidelines

- You must set this value when you create an AIX or PSF actual destination, unless Infoprint can determine the value by means of SNMP.
- If you allow SNMP to determine this value for an AIX physical printer or a PSF direct-attached physical printer, it must be one of the values of the server **snmp-aix-printer-models** attribute.
- For AIX physical printers and PSF direct-attached physical printers, this value must match the file
 prefix of a file in the /usr/lib/lpd/pio/predef directory on the AIX processor on which the physical
 printer was created.
- For AIX physical printers, Infoprint uses the value you specify here to determine the values to set for the document-formats-supported attribute.
- For PSF TCP/IP-attached actual destinations capable of printing halftones, and for any PSF physical printer that represents a printer device with a finisher attached, specify the model name in the format InfoPrintxxxx, where xxxx is the model number, for example, InfoPrint4000-708. Do not put a space between InfoPrint and the model number.

Note: If you configure these printer models as PSF direct-attached physical printers or as AIX physical printers, specify the model name as the file prefix of a file in the /usr/lib/lpd/pio/predef directory.

• Infoprint compares the job attribute destination-models-requested to this attribute for scheduling.

destination-name (All DSS)

This non-settable, single-valued attribute identifies the name of this actual destination.

Input Synonyms: You can use the synonym **printer-name**, **printer**, or **physical-printer**.

Allowed Values: Infoprint set this value to the *DestinationName* portion of the argument used with the **pdcreate** command or with the **pdmigpp** utility when this actual destination was created.

Default Value: No default value.

Usage Guidelines

- Infoprint compares the job attribute actual-destination-requested to this attribute for validation and scheduling.
- The name must be unique within the namespace.

destination-needs-attention-time (All DSS)

This **non-settable**, **single-valued** attribute reports the amount of time the output device has been waiting for simple intervention, such as loading paper.

Input Synonym: You can use the synonym **printer-needs-attention-time**.

Allowed Values: Infoprint sets this value to [*HH*:]*MM*. The unit is minutes or hours and minutes, separated by a colon.

Default Value: No default value.

destination-needs-key-operator-attention-time (All DSS)

This **non-settable**, **single-valued** attribute reports the amount of time the output device has been waiting for the attention of a key (or skilled) operator.

Input Synonym: You can use the synonym **printer-needs-key-operator-attention-time**.

Allowed Values: Infoprint sets this value to [*HH:*]*MM*. The unit is minutes or hours and minutes, separated by a colon.

Default Value: No default value.

destination-pass-through (AIX)

This resettable, single-valued attribute contains information used to update the printer's colon file.

Input Synonyms: You can use the synonym **printer-pass-through** or **other-options**.

Allowed Values: You can enter a text string up to 4095 characters long containing update information.

Syntax

'colon-file-attribute=value ...'

For example, to set the datastream filter attribute ($_{\bf d}$) in the printer colon file to "passthrough" ($_{\bf p}$), enter: destination-pass-through=' d=p'

Default Value: No default value.

destination-realization (All DSS)

This **initially settable**, **single-valued** attribute indicates whether the destination is an actual destination or a logical destination.

Input Synonym: You can use the synonym **printer-realization**.

Allowed Values: You can enter one of these fixed values:

actual logical

Default Value: logical

destination-register-threshold (All DSS)

This **resettable**, **single-valued** attribute specifies the amount of time that this actual destination will wait between attempts to communicate (register) with the server.

Input Synonyms: You can use the synonym **printer-register-threshold** or **register-threshold**.

Allowed Values: You can enter a value of [HH:]MM. The unit is minutes or hours and minutes, separated by a colon.

Default Value: 10

Usage Guidelines

- If you lower this value, network traffic increases when the server is down, but the actual destination registers more quickly when you bring up the server.
- If you raise this value, network traffic decreases when the server is down, but the actual destination registers more slowly when you bring up the server.

destination-release-timer (PSF, Email, Fax)

This **resettable**, **single-valued** attribute specifies the maximum amount of time between jobs, in seconds, before Infoprint gives up control of a PSF actual destination.

Input Synonym: You can use the synonym **printer-release-timer**.

Allowed Values: You can enter an integer from 0 through 9999. Unit value is seconds.

Default Value: 9999

Usage Guidelines

- The **destination-release-timer** allows Infoprint to share an output device with a print manager, such as PSF Direct. Specify a value of 9999 if the output device is not shared.
- The **destination-release-timer** allows time for all processes to stop running gracefully as Infoprint gives up control of the attached PSF actual destination.
- If the non-process-runout-timer attribute has a greater value than the destination-release-timer attribute, Infoprint issues an automatic NPRO. However, IBM recommends that you set non-process-runout-timer to a lower value than destination-release-timer.

destination-state (All DSS)

This **non-settable**, **single-valued** attribute identifies the current state of the actual destination.

Input Synonym: You can use the synonym **printer-state**.

Allowed Values: Infoprint sets and updates the value to one of these fixed values:

Fixed Value Explanation

connecting-to-printer

The actual destination has received a job and is trying to connect to its printer device. After it connects to the device, the actual destination locks the printer device until it finishes processing the job so that another print system cannot use the device.

Note: This state applies only to AIX physical printers and PSF direct-attached physical printers.

idle The actual destination is waiting for a job. An actual destination can be idle even if

its output device is printing a job from some other AIX process or from the AIX

print-spooling subsystem.

needs-attention The actual destination can connect to the output device, but for some reason the

output device cannot print.

needs-key-operator This state occurs when there is a serious problem with the output device. Either the

actual destination cannot connect to the output device or there is some other problem. For example, a printer device may be out of toner. Infoprint automatically disables the actual destination when the actual destination enters this state. If the actual destination uses SNMP, Infoprint automatically re-enables it when the

problem is corrected. To prevent automatic re-enabling, manually disable the actual

destination.

paused The actual destination was paused with the **pdpause** command or by a job with

job-start-wait=true.

printing The actual destination is processing a job.

shutdown The actual destination was shut down with the **pdshutdown** command.

Note: This state applies only to PSF actual destinations.

timed-out The actual destination received a job, but the actual destination could not connect to

the printer device in the time specified by the printer-timeout-period actual

destination attribute.

Note: This state applies only to AIX physical printers and PSF direct-attached

physical printers.

Default Value: No default value.

destination-support-system (All DSS)

This **initially settable**, **single-valued** attribute identifies the type of device driver for this actual destination.

Input Synonym: You can use the synonym device-support-system.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

aix piobe

bsd psf 3170 email fax

Default Value: psf

Usage Guidelines

- Infoprint compares the job attribute dss-requested to this attribute for scheduling.
- You must enter a value for this attribute when you create a actual destination unless it will use the PSF DSS.

destination-tcpip-internet-address (AIX, BSD, PSF, 3170)

This **resettable**, **single-valued** attribute identifies the Internet Protocol address (IP Address parameter) of this physical printer. This is the Internet Protocol address assigned to the output device.

Input Synonym: You can use the synonym **printer-tcpip-internet-address**.

Allowed Values: You can enter a text string up to 4095 characters long that is either of these types of address:

Dotted decimal address

A series of integers within the range of 0 to 255, each separated by a period, . (decimal address). For example:

9.99.12.85

Hostname

For example:

leo.boulder.IBM.com

Default Value: No default value.

Usage Guidelines

- · You must enter a value for destinations that use SNMP.
- You must enter a value for PSF TCP/IP-attached physical printers, for PSF upload-TCP/IP-attached physical printers, and for 3170 physical printers.
- Infoprint ignores this attribute for PSF channel-attached, direct-attached, and upload-SNA-attached physical printers.
- For printers attached using the i-data 7913 IPDS Printer LAN Attachment, use the IP address of the 7913.

destination-tcpip-port-number (PSF)

This **resettable**, **single-valued** attribute identifies the Port Number parameter for PSF TCP/IP-attached and upload-TCP/IP-attached actual destinations. This is the TCP/IP port number configured at the output device.

Input Synonym: You can use the synonym **printer-tcpip-port-number**.

Allowed Values: You can enter an integer from 1 through 2147483647, but you typically enter an integer from 5001 to 65535. For devices whose port is configurable, the port you specify must match the port configured at the output device. For printers attached using the i-data 7913 IPDS Printer LAN attachment, you must use the value of 5001.

Default Value: No default value.

Usage Guidelines: You must enter a value for PSF TCP/IP-attached and upload-TCP/IP-attached actual destinations. Infoprint ignores this attribute for other attachment types.

device-name (AIX, PSF, Email, Fax)

This **initially settable**, **single-valued** attribute identifies the name of the output device that this actual destination represents.

Allowed Values: You can enter a text string up to 255 characters long that contains the name (ID) of the output device that prints jobs assigned to this actual destination. The value usually identifies the path to the device name, commonly located in a **/dev** directory.

Default Value: No default value.

Usage Guidelines

- You must enter a value for this attribute when you create a PSF AIX-attached physical printer.
- You must configure the device name you specify in AIX. You can determine which device names
 exist by using the SMIT fastpath smit pdp and then listing all defined printers and plotters. If you
 need to create the output device within AIX, use the SMIT fastpath smit makprt.
- If an AIX print queue has been configured for this physical printer, the device name appears in the /etc/qconfig file.
- Do not specify a value for PSF TCP/IP-attached, upload-TCP/IP-attached, upload-SNA-attached, or channel-attached destinations.

device-support-system (All DSS)

See destination-support-system.

document-attributes-supported (All DSS)

This **non-settable**, **multi-valued** attribute identifies the document attributes that this actual destination supports. Infoprint checks this attribute during validation to allow jobs whose documents have these attributes to continue on to this actual destination.

Allowed Values: Infoprint sets a text string that contains a list of document attributes that this actual destination supports.

Note: This list includes only document attributes that directly affect the actual destination. Documents with attributes that affect the server, for example, **initial-value-document**, can be printed even though those attributes are not on this list.

Default Value

- AIX content-orientation, copy-count, default-input-tray, default-medium, destination-pass-through, document-comment, document-content, document-content-list, document-format, document-type, maximum-messages-printed, plex, print-quality, sides
- BSD copy-count, destination-pass-through, document-comment, document-content, document-content-list, document-format, document-type, maximum-messages-printed, plex, print-quality, sides
- **PSF** account-text, address1-text, address2-text, address3-text, address4-text, base-printer, building-text, carriage-control-type, chars, convert-to-ebcdic, copy-count, data-fidelity-problem-reported, default-character-mapping, default-input-tray, default-medium, default-printer-resolution, department-text, destination-pass-through, document-comment, document-content, document-content-list, document-finishing, document-format, document-type, font-fidelity-action, font-resolution, form-definition, image-fit, image-length, image-out-format, image-width, input-exit, input-tray-select, maximum-messages-printed, maximum-transform-pages-ahead, mvs-class, mvs-destination, mvs-forms, mvs-segment-id, name-text, new-line-option, node-id-text, number-up, other-transform-options, output-appearance, output-bin, output-format, overlay, page-definition, page-media-select, page-select, plex, programmer-text, resource-context, resource-context-font, resource-context-form-definition, resource-context-overlay, resource-context-page-definition, resource-context-page-segment, resource-context-user, resource-exit, room-text, scanner-correction, screen-frequency, segment-file-size, shared-formdef, shift-out-shift-in, sides, start-on-new-sheet, table-reference-characters, title-text, transform-message-file-name, transform-output-file-name, user-id-text, x-image-shift, x-image-shift-back, y-image-shift, y-image-shift-back
- bits-per-spot, black-overprint, cms-proclink, cms-product, compressed-output, content-orientation, control-strip, copy-count, default-medium, default-printer-resolution, destination-pass-through, document-content, document-content-list, document-format, document-type, dot-shape, enable-settrap, image-center-x, image-center-y, image-length, image-scale, image-width, maximum-messages-printed, output-bin, output-face-up, overprint, page-clip, plex, sides, x-image-shift, y-image-shift
- Email account-text, address1-text, address2-text, address3-text, address4-text, carriage-control-type, chars, convert-to-ebcdic, copy-count, default-character-mapping, document-comment, document-content, document-format, document-type, email-from-address, email-to-address, form-definition, image-fit, image-length, image-width, input-exit, maximum-messages-printed, new-line-option, number-up, other-transform-options, output-format, overlay, page-definition, page-select, resource-context, resource-context-font, resource-context-form-definition, resource-context-overlay, resource-context-page-definition, resource-context-page-segment, resource-context-user, resource-exit, shared-formdef, shift-out-shift-in, subject-text, table-reference-characters, title-text, transform-message-file-name, transform-output-file-name, x-image-shift, y-image-shift
- Fax account-text, address1-text, address2-text, address3-text, address4-text, callback-number, carriage-control-type, chars, convert-to-ebcdic, copy-count, default-character-mapping, destination-company-text, document-comment, document-content, document-format, document-type, fax-number, fax-to-name, form-definition, image-fit, image-length, image-width, input-exit, maximum-messages-printed, new-line-option, number-up, originating-company-text, other-transform-options, output-format, overlay, page-definition, page-select, resource-context, resource-context-font, resource-context-form-definition, resource-context-overlay, resource-context-page-definition,

resource-context-page-segment, resource-context-user, resource-exit, shared-formdef, shift-out-shift-in, subject-text, table-reference-characters, title-text, transform-message-file-name, transform-output-file-name, x-image-shift, y-image-shift

document-finishings-supported (PSF)

This **resettable**, **multi-valued** attribute identifies the document finishing options that this actual destination supports.

Allowed Values: You can enter any of these fixed values:

z-fold

Default Values: z-fold

Usage Guidelines

- Infoprint compares the document attribute **document-finishing** to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

document-formats-supported (All DSS)

This **resettable**, **multi-valued** attribute identifies the document formats that this actual destination supports. Infoprint sets this value dynamically to the document formats for which transforms are available.

Allowed Values: You can enter any of these fixed values:

Fixed Value	Input	DSS
	Synonym	
ascii		AIX, BSD, PSF (except upload printers)
dbcs-ascii		AIX, BSD, PSF
ditroff		BSD, PSF, email, fax
d630		AIX, BSD
gif		BSD, PSF, email, fax
hpgl	hp-gl	AIX, BSD
iso-6429		AIX, BSD
jpeg		BSD, PSF, email, fax
line-data		BSD, PSF, email, fax
modca-p	afpds	BSD, PSF, email, fax
passthru		AIX, BSD
pcl	hppcl, hp-pcl	AIX, BSD, PSF, email, fax
pdf		BSD, PSF, email, fax
postscript	ps	All
ppds		BSD
sap		BSD, PSF, email, fax
sap-abap		BSD, PSF, email, fax
simple-text	text	BSD
tiff		BSD, PSF, email, fax

Default Values

AIX ascii, hpgl, iso-6429, passthru, pcl, pdf, and postscript.

Based on the value of the **destination-model** attribute and how the **/usr/lpd/pio/predef** directory defines the printer model.

BSD ascii, iso-6429, pcl, ppds, postscript, simple-text.

PSF upload-SNA-attached and upload-TCP/IP-attached physical printers

If all transforms are available, dbcs-ascii, ditroff, gif, jpeg, line-data, modca-p, pcl,

postscript, sap, sap-abap, tiff

Other PSF physical printers

If all transforms are available, ascii, dbcs-ascii, ditroff, gif, jpeg, line-data, modca-p, pcl,

postscript, sap, sap-abap, tiff

3170 postscript

Email ditroff, gif, jpeg, line-data, modca-p, pcl, postscript, sap, sap-abap, tiff

Fax ditroff, gif, jpeg, line-data, modca-p, pcl, postscript, sap, sap-abap, tiff

Usage Guidelines

- When you create a PSF actual destination, Infoprint sets these values to the document formats for which transforms are available. When the server is shut down and restarted, Infoprint updates the values to reflect transforms that have been added or deleted. You can also modify these values.
- Infoprint compares the document attribute **document-format** to this attribute for validation and scheduling.
- Delete attribute values to restrict use of this actual destination.

document-types-supported (All DSS)

This **resettable**, **multi-valued** attribute identifies the types of documents that this actual destination supports.

Allowed Values: You can enter any of these fixed values:

Fixed Value DSS
| color-mapping-table PSF
cover-sheet Fax

document-definition PSF, 3170, email, fax

email-body Email
email-signature Email
file-reference All

font PSF, email, fax PSF, email, fax PSF, email, fax PSF, and part PSF, 3170, email, fax

insert PSF

job-ticketPSF, 3170, email, faxoverlayPSF, email, faxpage-definitionPSF, email, faxpage-segmentPSF, email, faxpage-shift-filePSF, email, fax

printable All

resource PSF, 3170, email, fax variable-data PSF, 3170, email, fax

Default Values

AIX file-reference, printable BSD file-reference, printable

PSF document-definition, file-reference, font, form-definition, formatted-job-ticket, insert,

job-ticket overlay, page-definition, page-segment, page-shift-file, printable, resource,

variable-data

3170 document-definition, file-reference, formatted-job-ticket, job-ticket printable, resource,

variable-data

Email document-definition, email-body, email-signature, file-reference, font, form-definition,

formatted-job-ticket, job-ticket overlay, page-definition, page-segment, page-shift-file,

printable, resource, variable-data

Fax cover-sheet, document-definition, file-reference, font, form-definition,

formatted-job-ticket, job-ticket overlay, page-definition, page-segment, page-shift-file,

printable, resource, variable-data

Usage Guidelines

Infoprint compares the document attribute document-type to this attribute for scheduling.

You can use this attribute to restrict use of this actual destination.

dss-job-message-disposition (PSF)

This **resettable**, **single-valued** attribute indicates how job messages about errors detected by the the device support system (DSS), such as data stream errors, are recorded.

Allowed Values: You can enter one of these fixed values:

log print

Default Value: print

Usage Guidelines: If you specify **log**, messages are written to

/var/psf/DestinationName/jobmessage.log, where DestinationName is the name of this actual destination.

dss-job-message-log-size (PSF)

This resettable, single-valued attribute indicates the size, in kilobytes, of the DSS job message log.

Allowed Values: You can enter an integer from 1 to 2000000. The unit is kilobytes.

Default Value: 8192

Usage Guidelines: This attribute is used only when the value of the dss-job-message-disposition

attribute is log.

dss-job-message-log-wrap (PSF)

This **resettable**, **single-valued** attribute indicates whether Infoprint should start overwriting messages at the beginning of the DSS job message log when the log is full.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: true

Usage Guidelines: This attribute is used only when the value of the **dss-job-message-disposition**

attribute is log.

ebcdic-character-mapping (PSF)

This **resettable**, **single-valued** attribute indicates the EBCDIC code page that PSF/MVS uses to map the attributes of this PSF upload-TCP/IP-attached or PSF upload-SNA-attached physical printer.

Allowed Values: You can enter the name of an EBCDIC code page.

Default Value: ibm-037

Usage Guidelines: Infoprint requires this attribute for PSF upload-SNA-attached and upload-TCP/IP-attached physical printers and ignores it for other attachment types.

enabled (All DSS)

This **non-settable**, **single-valued** attribute indicates whether this actual destination is enabled and can accept jobs.

Allowed Values: Infoprint sets this value to:

- **true** when an Infoprint administrator has issued the **pdenable** command, and the queue associated with the destination exists and is in communication with this actual destination.
- false when an Infoprint administrator has disabled this actual destination with the pddisable command.

Default Value: false

end-message-supported (All DSS)

This **resettable**, **single-valued** attribute indicates whether this actual destination supports the job attribute **job-end-message**.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: true

Usage Guidelines

- Use this attribute to allow operators to receive messages that users specify with the job-end-message
 job attribute when they submit the job. When the value of this attribute is true, Infoprint sends the
 message to the operators specified by the notify-operator attribute for this actual destination when
 the job finishes printing.
- Infoprint compares the job attribute job-end-message to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

end-sheets-supported (AIX, PSF)

This **resettable**, **multi-valued** attribute identifies the types of end sheets that this physical printer supports.

Allowed Values: You can enter any of the following fixed values. For PSF only, you can enter a string up to 255 characters long that contains identifiers of auxiliary-sheet objects.

Fixed Value	DSS	Explanation
accounting-log	PSF	This value is technically valid, but should not be used for end sheets.
blank	PSF	The end sheet is blank.
brief	AIX, PSF	The end sheet style is brief.
full	AIX, PSF	The end sheet style is full.
job-ticket	PSF	The job ticket is printed on the end sheet.
none	AIX, PSF	No end sheet prints.

Default Values

AIX brief, full, none

PSF **accounting-log**, **blank**, **brief**, **full**, **job-ticket**, **none**, and the names of other defined auxiliary sheets which have legal PSF auxiliary sheet attributes.

Usage Guidelines

- PSF physical printers can use auxiliary-sheet objects if they have valid psf-exit-xxx values. AIX
 physical printers print start and end sheets, but they do not use auxiliary-sheet objects.
- Infoprint verifies that the value of the **printer-end-sheet** attribute is a value of this attribute.
- You cannot delete a value from this attribute if the value you want to delete is the value of the **printer-end-sheet** attribute.
- For PSF physical printers, Infoprint sets this value dynamically to the names of all defined auxiliary sheets with legal attributes. You should never have to reset this value.

font-resolutions-supported (PSF)

This **resettable**, **multi-valued** attribute indicates the values of the document attribute **font-resolution** that this physical printer accepts.

Allowed Values: You can enter any of these fixed values:

240 300 outline

Default Values: 240, 300, outline

Usage Guidelines

- Usually the font resolution and the printer resolution match, but there are two cases when they do not:
 - Some printer devices, for example, the InfoPrint 60 and InfoPrint 4000, can print fonts of any resolution, although the print head is always 600 pels.
 - It is possible to print a document created with fonts of one resolution on a printer device with a
 different resolution by substituting fonts. Depending on the document, the output may or may not
 be acceptable.
- Infoprint compares the document attribute font-resolution to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

force-destination-setup (AIX, PSF, 3170)

This **resettable**, **single-valued** attribute indicates whether jobs requiring resources that this actual destination does not have ready or does not support should be held or scheduled to print.

Input Synonym: You can use the synonym **force-printer-setup**.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: false

Usage Guidelines

- When the value of force-destination-setup is false, Infoprint checks that the actual destination can
 process each job in the queue before scheduling the job to print. If the job requires any resources
 that are not ready or not supported, the job is RIPped if appropriate, then held. The
 required-resources-not-ready job attribute indicates what resources are not ready. The
 required-resources-not-supported job attribute indicates what resources are not supported.
- When the value of force-destination-setup is true, Infoprint does not check whether the actual
 destination can process the job until the job is sent to the actual destination. At that time, if any
 required resources are not ready or not supported, Infoprint disables the actual destination and sends
 a message to the operator to change the destination setup. When the operator enables the actual
 destination, the job is printed or transmitted.

force-printer-setup (AIX, PSF, 3170)

See force-destination-setup.

form-definition (PSF)

This **resettable**, **single-valued** attribute identifies the default form definition that the output device uses when printing or transmitting a document.

Allowed Values: You can enter a text string up to 8 characters long that contains the form-definition ID.

Default Value

Basic Infoprint administrator's GUI

F100D

Advanced Infoprint administrator's GUI and command line

F1A10111

Usage Guidelines

- The form definition controls positioning of the output image on the page.
- A form definition can specify overlays, a paper source for cut-sheet printers (input bin selection), duplex printing, and text suppression on a page.

image-fit-supported (PSF, Email, Fax)

This **resettable**, **multi-valued** attribute specifies the methods of adjusting TIFF, GIF, and JPEG images to fit on the printed page that this actual destination supports.

Allowed Values: You can enter any of these fixed values:

position-and-trim scale-to-fit

Default Value: No default value.

Usage Guidelines: Infoprint compares the document attribute **image-fit** to this attribute for validation and scheduling.

image-length (3170)

This **resettable**, **single-valued** specifies the default length of a page of PostScript, PCL, TIFF, GIF, JPEG, or PDF data after it has been transformed for Infoprint printing or transmission.

Allowed Values: The value you specify is in the form *nnnn.nnnu*

nnnn.nnn is a number that can optionally contain a decimal point.

u is the units in inches (i) or millimeters (m). If you do not specify a unit, the default unit is pels. You cannot use a decimal point when the unit is pels.

For 240-pel resolution printers, valid values are:

 16 - 8160
 pels

 0.065 - 34
 inches

 1.641 - 863.628
 millimeters

For 300-pel resolution printers, valid values are:

16 - 10200 pels 0.052 - 34inches 1.313 - 863.628 millimeters

For 480-pel resolution printers, valid values are:

16 - 16320 pels 0.065 - 34inches 1.641 - 863.628 millimeters

For 600-pel resolution printers, valid values are:

16 - 20400 pels 0.052 - 34inches 1.313 - 863.628 millimeters

Default Value: No default value.

Usage Guidelines

- This attribute is valid only for GIF, JPEG, PCL, PDF, PostScript, and TIFF documents.
- If a text margin is already built into the file, try image-length=11i to set the length to 11 inches.
- This attribute is used if you do not specify a value for the image-length document attribute or in the file specified by the **rip-ini-file** attribute.

image-out-formats-supported (PSF)

This **resettable**, **multi-valued** attribute specifies the formats of image data, produced by the program that transforms line data to AFP data, that this actual destination supports.

Allowed Values: You can enter any of these fixed values:

ioca-uncompressed im1 io1 io1-g4 io1-mmr asis

Default Values: ioca-uncompressed, im1, io1, io1-g4, io1-mmr, asis

Usage Guidelines

- · Infoprint compares the document attribute image-out-format to this attribute for validation and scheduling. You should use the document attribute when you print line-data documents.
- The value io1-g4 applies only to the actual destination. You cannot request this value with the document attribute image-out-format. If the document format is postscript and the value io1-g4 for this attribute is:

The PostScript transform produces IO1-G4 images. Present

Not present

The PostScript transform produces IM1 images instead of IO1-G4 images, which the output device associated with this actual destination cannot print.

image-width (3170)

This **resettable**, **single-valued** attribute specifies the default width of a page of PostScript, PCL, TIFF, GIF, JPEG, or PDF data after it has been transformed for Infoprint printing or transmission.

Allowed Values: The value you specify is in the form *nnnn.nnnu*

nnnn.nnn is a number that can optionally contain a decimal point.

u is the units in inches (i) or millimeters (m). If you do not specify a unit, the default unit is pels. You cannot use a decimal point when the unit is pels.

For 240-pel resolution printers, valid values are:

16 - 8160 pels 0.065 - 34 inches 1.641 - 863.628 millimeters

For 300-pel resolution printers, valid values are:

16 - 10200 pels 0.052 - 34 inches 1.313 - 863.628 millimeters

For 480-pel resolution printers, valid values are:

16 - 16320 pels 0.065 - 34 inches 1.641 - 863.628 millimeters

For 600-pel resolution printers, valid values are:

16 - 20400 pels 0.052 - 34 inches 1.313 - 863.628 millimeters

Default Value: No default value.

Usage Guidelines

- This attribute is valid only for GIF, JPEG, PCL, PDF, PostScript, and TIFF documents.
- If a text margin is already built into the file, try image-width=8.5i to set the length to 8.5 inches.
- This attribute is used if you do not specify a value for the **image-width** document attribute or in the file specified by the **rip-ini-file** attribute.

input-data-user-exit (PSF, Email, Fax)

This **resettable**, **single-valued** attribute specifies the name of a program that monitors input data to this actual destination. For example, if a certain document format is printed on special media, the input data exit program can issue a message requesting the operator to change the paper whenever a job in that format is submitted.

Allowed Values: You can enter a text string of up to 255 characters.

Default Value: No default value.

Usage Guidelines: You can use the sample input data exit program supplied with Infoprint, /usr/lpp/psf/bin/ainuxind (source /usr/lpp/psf/exits/ainuxind.c) or write your own. To use your own user-exit program:

- 1. Verify that the XL C Compiler and the **bosadt.bosadt.obj**, **bosadt.bosadt.data**, and **bosadt.lib.obj** components of the Base Application Development Toolkit of the AIX operating system are installed. You will need them to compile your user exit.
- 2. Log on as root.
- 3. Using /usr/lpp/psf/exits/ainuxind.c as a model, create your source file in the /usr/lpp/psf/exits directory. The function name of the user exit must be INDATA (in all uppercase letters) because that is the entry point in the module.
- 4. Make a backup copy of the existing executable input-data user exit, /usr/lpp/psf/bin/ainuxind, in another directory, then delete it from /usr/lpp/psf/bin.
- 5. Change to the /usr/lpp/psf/exits directory and enter:

make

to compile your user-exit program.

6. Enter:

make install

to copy the executable user-exit program from the /usr/lpp/psf/exits directory into the /usr/lpp/psf/bin directory.

input-trays-medium (AIX)

This **resettable**, **multi-valued complex** attribute identifies which output medium is in which printer tray.

Allowed Values: This complex attribute has these components for each value:

tray-identification medium-identifier

You can specify multiple values, one for each input tray on the printer device.

Syntax

tray-identification:medium-identifier

For example:

tray-1:A4-colored

Default Values: If Simple Network Management Protocol (SNMP) communication is active, Infoprint queries the printer device and sets the values according to the response; otherwise tray-1:letter

Usage Guidelines

- Infoprint automatically sets the values for the input-trays-supported and media-ready attributes from the values of this attribute.
- Infoprint verifies that the values of the medium-name component of this attribute are values of the media-supported attribute.

Components and Values: There are two components:

tray-identification: This **single-valued** component identifies the type of input tray. You can enter one of these fixed values:

```
auto-envelope-feed
bottom
continuous-form-feed
envelope
large-capacity
manual
manual-envelope-feed
middle
top
tray-1
tray-2
```

The default value for this component is tray-1.

medium-name: This **single-valued** component identifies the medium in the input tray. You can enter a text string up to 255 characters long that contains the name of the medium or one of the fixed values of the **medium-identifier** attributes of the default media. See the medium attribute **medium-identifier** for a list of these values. The default value for this component is **letter**.

input-trays-supported (AIX, BSD, PSF)

This **non-settable** (AIX and PSF) or **resettable** (BSD), **multi-valued** attribute identifies the types of input trays, such as top or envelope, installed on the printer device.

Allowed Values

AIX Infoprint sets the values for this attribute based on the values of the **input-trays-medium** attribute.

BSD You can enter any names that describe input trays.

PSF Infoprint sets the values for this attribute based on the values of the **psf-tray-characteristics** attribute.

Default Values

AIX The value of the **input-trays-medium** attribute.

BSD No default value.

PSF The value of the **psf-tray-characteristics** attribute.

Usage Guidelines

• Infoprint uses this attribute for job validation and scheduling:

AIX Infoprint compares the document attribute **default-input-tray** to this attribute.

BSD This attribute is for information only.

PSF Infoprint compares the document attribute **default-input-tray** or **input-tray-select** to this

attribute.

• You can use this attribute to restrict use of this actual destination.

intervention-timer (PSF)

This **resettable**, **single-valued** attribute specifies the maximum amount of time, in seconds, that Infoprint waits before it treats an intervention-required condition at the output device as a permanent error.

Allowed Values: You can enter a value of 1 through 9999. The unit is seconds.

Default Value: 9999

Usage Guidelines: A value of **9999** specifies that a permanent error condition can never occur.

job-attributes-supported (All DSS)

This **non-settable**, **multi-valued** attribute identifies the job attributes that this actual destination supports.

Allowed Values: Infoprint sets a text string that contains a list of job attributes that this actual destination supports.

Note: This list includes only job attributes that directly affect the actual destination. Jobs with attributes that affect the server, for example, **job-retention-period**, can be printed even though those attributes are not on this list.

Default Values

AIX auxiliary-sheet-selection, job-batch, job-start-wait

BSD job-batch, job-start-wait

PSF auxiliary-sheet-selection, formatted-job-ticket-content, job-batch, job-finishing, job-rip-action, job-start-wait, media-sheets-completed, optimize-for-multiple-copies

3170 formatted-job-ticket-content

Email formatted-job-ticket-content, job-batch, job-rip-action, job-start-wait, media-sheets-completed

Fax formatted-job-ticket-content, job-batch, job-rip-action, job-start-wait,

job-batches-ready (All DSS)

media-sheets-completed

This **resettable**, **multi-valued** attribute specifies which job-batch values are acceptable to this actual destination.

Allowed Values: You can enter a text string up to 4095 characters long, for each value, that contains the job-batch name.

Default Values: No default values.

Usage Guidelines: Infoprint compares the value of the job attribute **job-batch** to this attribute during job scheduling.

job-finishings-supported (PSF)

This **resettable**, **multi-valued** attribute identifies the job finishing options that this actual destination supports.

Allowed Values: You can enter any of these fixed values:

edge-stitch edge-stitch-2 edge-stitch-3 saddle-stitch staple-bottom-left staple-top-left

Default Values: edge-stitch, edge-stitch-2, edge-stitch-3, saddle-stitch, staple-bottom-left, staple-top-left

Usage Guidelines

- Infoprint compares the job attribute job-finishing to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

job-retry-count-limit (AIX, BSD, PSF, 3170, Fax)

This **resettable**, **single-valued** attribute indicates the number of times that Infoprint should attempt to submit a job to this actual destination after an initial failure.

Allowed Values: You can enter an integer from 0 through 2147483647.

Default Value: 0

Usage Guidelines

- Values greater than **0** are useful when poor network line quality causes temporary loss of communication between this actual destination and the backend program. A second or subsequent attempt to submit the job may succeed if communication can be reestablished.
- If the job cannot be submitted within the specified number of attempts, Infoprint disables the destination and places it in the **needs-key-operator** state.
- The job-retry-interval actual destination attribute indicates the number of seconds between attempts.
- If the value of this attribute is **0**, the **job-retry-interval** attribute is ignored.
- If the value of the **job-retry-interval** attribute is **0**, this attribute is ignored.

job-retry-interval (AIX, BSD, PSF)

This **resettable**, **single-valued** attribute indicates the number of seconds that Infoprint should wait between attempts to submit a job to this actual destination.

Allowed Values: You can enter an integer from 0 through 2147483647.

Default Value: 0

Usage Guidelines

- If the job cannot be submitted within the specified number of attempts, Infoprint disables the destination and places it in the **needs-key-operator** state.
- The job-retry-count-limit actual destination attribute indicates the number of attempts after an initial failure.
- If the value of this attribute is **0**, the **job-retry-count-limit** attribute is ignored.
- If the value of the job-retry-count-limit attribute is 0, this attribute is ignored.

job-rip-actions-supported (PSF, Email, Fax)

This **resettable**, **multi-valued** attribute indicates whether this actual destination supports converting a PostScript job to raster image patterns and holding the job, printing the job, or neither.

Allowed Values: You can enter any of these fixed values:

rip-and-hold rip-and-hold-ignore-ready rip-and-print rip-and-print-ignore-ready rip-only rip-only-ignore-ready

Default Value: rip-and-hold, rip-and-hold-ignore-ready, rip-and-print, rip-and-print-ignore-ready, rip-only-ignore-ready

Usage Guidelines: Infoprint compares the job attribute **job-rip-action** to this attribute for validation and scheduling.

job-size-range-ready (All DSS)

This **resettable**, **single-valued complex** attribute defines the range of job sizes in bytes (octets) that this actual destination can accept and print.

Allowed Values: This complex attribute has these components:

lower-limit upper-limit

Each limit can be an integer from 0 to 9223372036854775800. The first integer is the lower limit and the second integer is the upper limit. The lower limit must be less than or equal to the upper limit. Separate the limits by a colon (:). The unit value is bytes (octets).

Syntax

lower-limit:upper-limit

For example, 1025:1000000

Default Value: 0:9223372036854775800

Usage Guidelines

- You can use this attribute to restrict jobs sent to this actual destination according to the capacity of the output device or your policy for output device use.
- You must set the range for this attribute within the range of the job-size-range-supported value.
- Infoprint compares the job attribute total-job-octets to this attribute for scheduling.

Components and Values: There are two components:

lower-limit: This **single-valued** component identifies the lower limit value of the job size. The unit value is octets (bytes). If you only supply the lower limit value, Infoprint sets the upper limit to 9223372036854775800.

upper-limit: This **single-valued** component identifies the upper limit value of the job size. The unit value is octets (bytes). If you only supply the upper limit value, Infoprint sets the lower limit to 0.

job-size-range-supported (All DSS)

This **resettable**, **single-valued complex** attribute defines the range of job sizes in bytes (octets) that this actual destination can accept.

Allowed Values: This complex attribute has these components:

lower-limit upper-limit

Each limit can be an integer from 0 to 9223372036854775800. The first integer is the lower limit and the second integer is the upper limit. The lower limit must be less than or equal to the upper limit. Separate the limits by a colon (:). The unit value is bytes (octets).

Syntax

lower-limit:upper-limit

For example: 1025:1000000

Default Value: 0:9223372036854775800

Usage Guidelines

- You can use this attribute to restrict jobs sent to this actual destination according to the capacity of the output device or your policy for output device use.
- You must set the range for this attribute equal to or greater than the range you specify for the **job-size-range-ready** attribute value.
- Infoprint compares the job attribute total-job-octets to this attribute for validation and scheduling.

Components and Values: There are two components:

lower-limit: This **single-valued** component identifies the lower limit value of the job size. The unit value is octets (bytes). If you only supply the lower limit value, Infoprint sets the upper limit to 9223372036854775800.

upper-limit: This **single-valued** component identifies the upper limit value of the job size. The unit value is octets (bytes). If you only supply the upper limit value, Infoprint sets the lower limit to 0.

job-start-wait-supported (PSF, Email, Fax)

This **resettable**, **single-valued** attribute indicates whether job submitters are allowed to pause the actual destination just before the job prints.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: false

Usage Guidelines: Infoprint compares the job attribute **job-start-wait** to this attribute for validation and scheduling.

list-of-managers (All DSS)

This **resettable**, **multi-valued** attribute identifies the people responsible for the configuration of this actual destination and maintenance of the output device associated with this actual destination.

Input Synonym: You can use the synonym **managers**.

Allowed Values: You can enter a text string up to 255 characters long, for each value, that contains such things as the name, user ID, office number, or telephone number of the person responsible for this actual destination and the output device associated with it.

Default Values: No default values.

Usage Guidelines: This attribute is useful if a user needs to contact someone to report a problem or to request a change.

locations (All DSS)

See destination-locations.

log-accounting-data (All DSS)

This **resettable**, **single-valued** attribute, if set, defines whether the accounting log is active for this actual destination. If you set the value to the default by using the == operator, the value of the server attribute **log-accounting-data** is used.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: No default value.

Usage Guidelines: You can use this attribute to activate or deactivate the accounting log for this actual destination.

Note: The accounting log contains the following job attributes and values for each job submitted to this actual destination:

job-identifier submission-time completion-time pages-completed job-owner logical-destination-assigned

logical-destinations-assigned (All DSS)

This **resettable**, **single-valued** attribute, if set, designates the logical destination through which submissions to this actual destination are forwarded.

Allowed Values: You can enter a text string of up to 255 characters that contains the name of the logical destination.

Default Value: No default value.

Usage Guidelines: The named logical destination must exist in the same Infoprint server as the actual destination.

When a job submission is received at an actual destination object with the *logical-destinations-assigned* set, the *actual-destinations-requested* attribute is set to the name of the actual destination that received the request, and then the job is submitted through the specified *logical-destinations-assigned*.

If **logical-destinations-assigned** is **not** set in the actual destination, the actual destination does not accept direct job submission requests, which are rejected with an unsupported error message.

managers (All DSS)

See list-of-managers.

maximum-concurrent-jobs (All DSS)

This **resettable**, **single-valued** attribute defines an upper limit for the number of jobs that this actual destination can process at a time.

Allowed Values

AIX	You can enter an integer from 1 through 9.
BSD	You can enter an integer from 1 through 9.
PSF	You can enter an integer from 1 through 99.
3170	You can enter an integer from 1 through 99.
Email	You can enter an integer from 1 through 99.
Fax	You can enter an integer from 1 through 99.

Default Value

AIX 2

Actual Destination

BSD

PSF direct-attached physical printers

PSF AIX-attached physical printers

Other PSF physical printers

4

3170 4 12 Email Fax 12

Usage Guidelines: You can use this attribute to tune your Infoprint system to efficiently use your destination resources.

maximum-copies-supported (All DSS)

This resettable, single-valued attribute indicates the number of document copies, in a single job, that this actual destination allows.

Allowed Values: You can enter an integer from 1 through 2147483647.

Default Value

AIX, BSD, PSF, 3170 2147483647

Email, Fax

Usage Guidelines

- · You can use this attribute to restrict jobs sent to this actual destination according to the capacity of the output device or your policy for output device use.
- Infoprint compares the document attribute copy-count to this attribute for scheduling.

maximum-fonts-to-keep (PSF)

This resettable, single-valued attribute specifies the maximum number of fonts to keep in the memory of the printer device between jobs.

Allowed Values: You can enter an integer from 0 through 999.

Default Value: 10

Usage Guidelines

- Fonts are a single size and typeface in a particular type family, including letters, numerals, punctuation marks, special characters, and ligatures.
- If you specify that the printer device can store fonts in its memory between jobs, the printer will not have to download the same fonts for the next job. However, this requires additional printer memory.

maximum-overlays-to-keep (PSF)

This resettable, single-valued attribute specifies the maximum number of overlays to keep in the memory of the printer device between jobs.

Allowed Values: You can enter an integer from 0 through 999.

Default Value: 0

Usage Guidelines

- Overlays are collections of predefined data such as lines, shading, test boxes, and logos that the printer device can merge with variable data on a page or a form.
- If you specify that the printer device can store overlays in its memory between jobs, the printer will not
 have to download the same overlays for the next job. However, this requires additional printer
 memory.

maximum-segments-to-keep (PSF)

This **resettable**, **single-valued** attribute specifies the maximum number of page segments to keep in the memory of the printer device between jobs.

Allowed Values: You can enter an integer from 0 through 999.

Default Value: 0

Usage Guidelines

- Page segments contain text and images that the printer device can include at any addressable point on a page or an electronic overlay.
- If you specify that the printer device can store page segments in its memory between jobs, the printer will not have to download the same page segments for the next job. However, this requires additional printer memory.

media-ready (AIX, BSD, PSF, 3170)

This **non-settable** (AIX, PSF, and 3170) or **resettable** (BSD), **multi-valued** attribute identifies the media presently loaded in the printer device.

Allowed Values

AIX	Infoprint sets the values for this attribute based on the values of the input-trays-medium
	attribute.

BSD You can enter any values of the **media-supported** attribute.

PSF Infoprint sets the values for this attribute based on the values of the **psf-tray-characteristics** attribute.

Infoprint sets the values for this attribute based on the values of the **media-supported** attribute.

Default Values

AIX	The values of the input-travs-medium attribute.

BSD No default value.

PSF The values of the **psf-tray-characteristics** attribute.

The values of the **media-supported** attribute.

Usage Guidelines

- Infoprint restricts the possible values for this attribute to the values currently specified for the media-supported attribute.
- Infoprint compares the document attribute default-medium to this attribute for job scheduling.

media-supported (AIX, BSD, PSF, 3170)

This resettable, multi-valued attribute identifies the types of media that the actual destination supports.

Allowed Values: You can enter a text string up to 255 characters long that contains the names of the media. These can be:

- The medium identifiers of medium objects created by the **pdcrmed** utility. For these fixed values, see the medium **medium-identifier** attribute.
- · The medium identifiers of medium objects you created yourself
- For PSF physical printers and BSD physical printers, any names that describe the media, even if no medium objects with those names exist

Default Values: For AIX, BSD, and PSF physical printers, if SNMP communication is active, Infoprint queries the printer device and sets the values according to the response; otherwise:

AIX letter

BSD No default values.

PSF (basic Infoprint administrator's GUI)

All allowed fixed values.

PSF (advanced Infoprint administrator's GUI and command line)

AIX-attached physical printers

letter

Direct-attached physical printers

letter

Other physical printers

No default values.

The names of all default medium objects.

Usage Guidelines

• Infoprint uses this attribute for job validation:

AIX	Infoprint compares the document attribute default-medium to this attribute for job
	validation and scheduling.

BSD This attribute is for information only.

PSF Infoprint compares the document attribute **default-medium** or **page-media-select** to this attribute for job validation and scheduling.

Infoprint compares the document attribute **default-medium** to this attribute for job validation and scheduling.

- For AIX physical printers, Infoprint verifies that the values of the *medium-identifier* component of the **input-trays-medium** attribute are values of this attribute.
- For PSF physical printers, Infoprint verifies that the values of the *medium-loaded* component of the **psf-tray-characteristics** attribute are values of this attribute.

- The physical printer does not automatically update this attribute. When you create a medium object, you must add its medium identifier to each physical printer that supports it.
- You can use this attribute to restrict use of this actual destination.

message (All DSS)

This **resettable**, **single-valued** attribute provides information associated with this actual destination.

Allowed Values: You can enter a text string up to 4095 characters long that contains information about this actual destination.

Default Value: No default value.

Usage Guidelines: Use of this descriptive attribute is optional.

message-font-type (PSF)

This **resettable**, **single-valued** attribute identifies the font type that the printer device uses to print the message page.

Allowed Values: You can enter one of these fixed values:

normal condensed

Default Value: normal

message-form-definition (PSF)

This **resettable**, **single-valued** attribute identifies the AFP form definition that the printer device uses to process the message page.

Allowed Values: A text string up to 255 characters long that contains the form definition ID.

Default Value: F1MG0110

model (All DSS)

See destination-model.

non-process-runout-timer (PSF)

This **resettable**, **single-valued** attribute designates the amount of time, in seconds, that a continuous-forms printer device waits for the next job before it runs the forms from the print transfer station to the stacker after the last page of a job prints.

Allowed Values: You can enter an integer from 0 through 9999. The unit is seconds.

Default Value: 60

Usage Guidelines: If you enter a value of **0**, Infoprint does not allow the timer to expire.

notification-profile (All DSS)

This **resettable**, **multi-valued complex** attribute designates which users Infoprint notifies of specified events related to this actual destination, and how Infoprint notifies them.

Allowed Values: This complex attribute has these components for each value:

event-identifiers delivery-address delivery-method event-comment locale

Syntax

-x "notification-profile={event-identifiers=event ... delivery-address=name@node delivery-method=value event-comment='some text' locale=locale}"

For example:

-x "notification-profile={event-identifiers=class-actual-destination-status
 delivery-address=jeff@ttank delivery-method=message
 event-comment='Its still going' locale=En US.IBM-850}"

Components and Values: This attribute has five components:

event-identifiers: This **multi-valued** component specifies the events for which the user receives messages. You can enter any of the values listed for the server attribute **events-supported**. The default values are:

object-deleted object-cleaned printer-needs-administrator printer-needs-attention printer-needs-operator printer-timed-out

delivery-address: This **single-valued** component provides the address of the person who receives the event messages or the directory location and file name where Infoprint stores the message. You can enter a text string up to 255 characters long that contains the user name and node or the directory and file name. If no value is provided, Infoprint uses the login ID of the user who created this actual destination as a default.

delivery-method: This **single-valued** component specifies how the user receives event messages. The values you can enter are:

Fixed Value Input Synonym
electronic-mail e-mail, email
file
file-add-to
message

none

The default is message.

If you specify a value of file or file-add-to, you must specify a value for the delivery-address component.

event-comment: This **single-valued optional** component supplies textual information that Infoprint appends to the event message. You can enter a text string up to 4095 characters long that contains the comment. There is no default value for this component.

locale: This **single-valued** component defines the language and code page of notification messages. The default for this component is the locale of the person who created this actual destination.

Note: The Infoprint messages in the language corresponding to the locale must be installed.

notify-operator (All DSS)

This **resettable**, **multi-valued complex** attribute identifies people that are to receive the attribute **job-start-message** or **job-end-message** message.

Input Synonym: You can use the synonym operators.

Allowed Values: This complex attribute has these components for each value:

delivery-method delivery-address

Syntax

delivery-method:delivery-address

For example:

message:op2@phyptr1

Do not specify the component names; specify only values separated by a colon. Specify the method value first, then the address value.

Default Value: message:user@node, where the user@node is the login ID of the user who created this actual destination.

Components and Values: This attribute has two components:

delivery-method: This **single-valued** component specifies how the person receives the messages. You can enter one of these fixed values:

electronic-mail message none

If you do not enter a value, Infoprint uses the value **message** as a default.

delivery-address: This **single-valued** component provides the address of the person to receive the messages. You enter the login ID and node of the person as a value. Infoprint uses the login ID of the person who created this actual destination with the **pdcreate** command as a default if you do not enter a value.

number-up-supported (PSF, Email, Fax)

This **resettable**, **multi-valued** attribute specifies the number of pages that this actual destination can print on a single side of the paper.

Allowed Values: You can enter any of these fixed values:

Fixed Value Input Synonym

imposition-simple-1-up 1up imposition-simple-2-up 2up imposition-simple-3-up 3up imposition-simple-4-up 4up

generic-none

Default Values: imposition-simple-1-up, imposition-simple-2-up, imposition-simple-3-up, imposition-simple-4-up, generic-none

Usage Guidelines

• The value **generic-none** applies only to the actual destination. You cannot request this value with the document attribute **number-up**.

When the values for **number-up-supported** include **generic-none**, the actual destination accepts documents without a value for the **number-up** attribute. The actual destination also accepts documents without a value for the **number-up** attribute when there are no values for **number-up-supported**.

- Infoprint compares the document attribute number-up to this attribute for validation and scheduling.
- · You can use this attribute to restrict use of this actual destination.

object-class (All DSS)

This **non-settable**, **single-valued** attribute identifies the object class to which this object belongs.

Allowed Values: Infoprint sets this value to **destination**.

Default Value: destination

offset-stacking-available (PSF)

This **resettable**, **single-valued** attribute indicates whether PSF AIX-attached or direct-attached physical printers support offsetting jobs in the output stack.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: false

Usage Guidelines

- This attribute applies only to PSF AIX-attached and direct-attached physical printers. Other actual destinations ignore this attribute.
- · Offset stacking occurs only if the form definition for the job specifies offset stacking.
- PPDS and PCL4 data streams do not support the offset stacking option; therefore, this attribute has
 no effect on destinations using those data streams.
- This attribute is not used for job validation or scheduling.

operators (All DSS)

See notify-operator.

optimize-for-multiple-copies (AIX, BSD, PSF, 3170)

This **resettable**, **single-valued** is used with the **optimize-for-multiple-copies** job attribute to indicate whether the printer device should save pages in order to print multiple copies of the job faster.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value

true Physical printers representing InfoPrint 4000 printer devices (printer-model=InfoPrint4000)

that are migrated from PSF for AIX or created using the Infoprint administrator's GUI

false All other actual destinations

Usage Guidelines

• This attribute is used in combination with the **optimize-for-multiple-copies** job attribute:

Job Attribute	Destination Attribute	Results
true	true	Pages are saved
true	false	Pages are not saved
false	true	Pages are not saved
false	false	Pages are not saved
No value	true	Pages are saved
No value	false	Pages are not saved

• If the printer device cannot save pages, the job is printed and this attribute is ignored.

orientations-supported (AIX, 3170)

See content-orientations-supported.

other-options (AIX, BSD, PSF, 3170)

See destination-pass-through.

output-appearances-supported (PSF)

This **resettable**, **multi-valued** attribute identifies the values for the document attribute **output-appearance** that this physical printer supports.

Allowed Values: You can enter a customized value or any of these fixed values:

standard highlight-midtones dark

Default Values: standard, highlight-midtones, dark

Usage Guidelines

- Infoprint compares the document attribute output-appearance to this attribute for validation and scheduling.
- · You can use this attribute to restrict use of this actual destination.

output-bin (PSF)

This **resettable**, **single-valued** attribute specifies the name of the output bin to which you want Infoprint to direct the output from jobs.

Allowed Values: You can enter a text string up to 255 characters long that contains the output bin name.

Default Value: No default value.

Usage Guidelines

- The name you specify must match the name in one of the values for the **output-bin-numbers** actual destination attribute.
- Infoprint only uses the value you specify for the **output-bin** actual destination attribute if the user does not specify a value for the **output-bin** document attribute and if the form definition Infoprint uses for the job does not specify an output bin.

output-bin-numbers (PSF)

This **resettable**, **multi-valued complex** attribute specifies a bin name followed by a bin number. Infoprint uses this attribute to map names of an output-bin, such as top, to bin numbers that the printer device understands.

Allowed Values: This complex attribute has these components for each value:

bin-name bin-number

The bin-name component is a text string, the bin-number component is a numeric value. Separate the values with a colon.

Syntax

bin-name:bin-number

For example:

top:1
staple:2

Default Values: If SNMP communication is active, Infoprint queries the printer device and sets the values according to the response; otherwise no default values.

Usage Guidelines: Infoprint automatically updates the **output-bins-supported** actual destination attribute from the value or values you set for this attribute.

output-bins-supported (PSF, 3170)

This **non-settable**, **multi-valued** attribute identifies the supported output bins on the printer device.

Allowed Values

PSF Infoprint sets this value from the values you supply for the **output-bin-numbers** actual

destination attribute. If you add or delete a value from the output-bin-numbers attribute,

Infoprint modifies this attribute to match your change.

Infoprint sets this value to the names of the output bins on the InfoColor 70 printer device.

Default Values

PSF No default values.

3170 main, test

Usage Guidelines

- Infoprint compares the value of the **output-bin** document attribute to this attribute during job validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

output-data-user-exit (PSF, Email, Fax)

This **resettable**, **single-valued** attribute specifies the name of a program that monitors output data from this actual destination. For example, the output data exit program can print a report at the end of a job listing the start and end time and the number of fonts, page segments, and overlays in the job so that you can track output device performance.

Allowed Values: You can enter a text string of up to 255 characters.

Default Value: No default value.

Usage Guidelines: You can use the sample output data exit program supplied with Infoprint, /usr/lpp/psf/bin/ainuxout (source /usr/lpp/psf/exits/ainuxout.c) or write your own. To use your own user-exit program:

- 1. Verify that the XL C Compiler and the **bosadt.bosadt.obj**, **bosadt.bosadt.data**, and **bosadt.lib.obj** components of the Base Application Development Toolkit of the AIX operating system are installed. You will need them to compile your user exit.
- 2. Log on as root.
- 3. Using /usr/lpp/psf/exits/ainuxout.c as a model, create your source file in the /usr/lpp/psf/exits directory. The function name of the user exit must be **OUTDATA** (in all uppercase letters) because that is the entry point in the module.
- 4. Make a backup copy of the existing executable output-data user exit, /usr/lpp/psf/bin/ainuxout, in another directory, then delete it from /usr/lpp/psf/bin.
- 5. Change to the /usr/lpp/psf/exits directory and enter:

make

to compile your user-exit program.

6. Enter:

make install

to copy the executable user-exit program from the /usr/lpp/psf/exits directory into the /usr/lpp/psf/bin directory.

output-format-supported (PSF, Email, Fax)

This resettable, multi-valued attribute is used with the number-up-supported attribute to identify the ways of imposing pages on a sheet that this actual destination supports.

Allowed Values: You can specify any of these fixed values:

side-by-side-copies simple-n-up booklet-print slit-and-merge

Default Value: side-by-side-copies, simple-n-up, booklet-print, slit-and-merge

Usage Guidelines

- See the document attribute output-format for explanations of the attribute values.
- Infoprint compares the document attribute output-format to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

overlay (PSF, Email, Fax)

This resettable, single-valued attribute specifies an overlay that Infoprint uses for each sheet-side for all jobs printed on this actual destination.

Allowed Values: You can enter a text string up to eight characters long that contains the name of the overlay.

Default Value: No default value.

Usage Guidelines: This overlay prints in addition to any overlay that the form definition for the job

specifies.

page-select-supported (PSF, Email, Fax)

This **resettable**, **multi-valued** attribute specifies the type of page numbering that this actual destination supports.

Allowed Values: You can enter a fixed value of **numeric**.

Default Value: numeric

Usage Guidelines: Infoprint compares the document attribute **page-select** to this attribute for validation and scheduling.

pcl-server-address (PSF, Email, Fax)

This **resettable**, **single-valued** attribute identifies the Internet Protocol address (IP Address parameter) of the host where the daemon that transforms PCL data imbedded in an AFP data file resides.

Allowed Values: You can enter a text string up to 4095 characters long that is either of these types of address:

Dotted decimal address

A series of integers within the range of 0 to 255, each separated by a period, . (decimal address). For example:

9.99.12.85

Hostname

For example:

leo.boulder.IBM.com

Default Value: 127.0.0.1 (the local host)

Usage Guidelines: This attribute is not used in transforming PCL data that is not imbedded in AFP data files.

pcl-server-port (PSF, Email, Fax)

This **resettable**, **single-valued** attribute identifies the Port Number parameter of the host where the daemon that transforms PCL data imbedded in an AFP data file resides.

Allowed Values: You can enter an integer from 1 through 2147483647, but you typically enter an integer from 5001 to 65535.

Default Value: 8253

Usage Guidelines: This attribute is not used in transforming PCL data that is not imbedded in AFP data files.

physical-printer (All DSS)

See destination-name.

plex (PSF)

This **resettable**, **single-valued** attribute identifies the plexes that this printer prints. Plex indicates whether the page images of the output document are conditioned for eventual one-sided or two-sided printing, and the relative orientation of consecutive pages.

Allowed Values: You can enter one of these fixed values:

simplex tumble

Default Values

AIX simplex

BSD No default value.

PSF simplex

Usage Guidelines

- The value of the **plex** attribute must be one of the values of the **plexes-supported** attribute.
- · Infoprint uses plex specifications in this order:
 - 1. **plex** document attribute
 - 2. The plex specification in the form definition
 - 3. plex actual destination attribute

Note: Because all IBM-supplied form definitions contain a plex specification, the **plex** actual destination attribute is used only with custom form definitions that do not contain a plex specification.

plexes-supported (AIX, BSD, PSF, 3170)

This **resettable**, **multi-valued** attribute identifies the plexes that this physical printer supports. Plex indicates whether the page images of the output document are conditioned for eventual one-sided or two-sided printing, and the relative orientation of consecutive pages.

Allowed Values: You can enter any of these fixed values:

simplex tumble

Default Values

AIX simplex

BSD No default value.

PSF (basic Infoprint administrator's GUI)

If SNMP communication is active, Infoprint queries the printer device and sets the values according to the response; otherwise **simplex**, **tumble**.

PSF (advanced Infoprint administrator's GUI and command line)

If SNMP communication is active, Infoprint queries the printer device and sets the values according to the response; otherwise **simplex**.

3170 simplex, tumble.

Usage Guidelines: Infoprint compares the document attribute **plex** to this attribute for scheduling.

postscript-server-address (PSF, Email, Fax)

This **resettable**, **single-valued** attribute identifies the Internet Protocol address (IP Address parameter) of the host where the daemon that transforms PostScript data imbedded in an AFP data file resides.

Allowed Values: You can enter a text string up to 4095 characters long that is either of these types of address:

Dotted decimal address

A series of integers within the range of 0 to 255, each separated by a period, . (decimal address). For example:

9.99.12.85

Hostname

For example:

leo.boulder.IBM.com

Default Value: 127.0.0.1 (the local host)

Usage Guidelines: This attribute is not used in transforming PostScript data that is not imbedded in AFP data files.

postscript-server-port (PSF, Email, Fax)

This **resettable**, **single-valued** attribute identifies the Port Number parameter of the host where the daemon that transforms PostScript data imbedded in an AFP data file resides.

Allowed Values: You can enter an integer from 1 through 2147483647, but you typically enter an integer from 5001 to 65535.

Default Value: 8251

Usage Guidelines: This attribute is not used in transforming PostScript data that is not imbedded in AFP data files.

presentation-fidelity-problem-reported (PSF)

This **resettable**, **single-valued** attribute identifies the types of errors that cause this actual destination to stop printing when Infoprint detects them.

Actual Destination

Allowed Values: You can enter one of these fixed values:

Fixed Value Explanation

barcode Infoprint stops printing the file when it detects an error in bar code data in the Bar

Code Object Content Architecture (BCOCA) data stream, or if the printer device

does not support BCOCA.

image Infoprint stops printing the file when it detects an error in image or graphics data in

the Image Object Content Architecture (IOCA) or Graphics Object Content

Architecture (GOCA) data streams, or if the printer device does not support IOCA or

GOCA.

all Infoprint stops printing the file if it detects either barcode or image data problems.

none Infoprint prints the file without reporting barcode or image errors.

Default Value: none

print-edge-marks (AIX, BSD, PSF, 3170)

This resettable, single-valued specifies whether this physical printer prints edge marks on the output.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: false

print-qualities-supported (AIX, BSD)

This resettable, multi-valued attribute identifies the levels of print quality available on this physical printer.

Input Synonym: You can use the synonym qualities-supported.

Allowed Values: You can enter any of these fixed values:

draft high normal

Default Values

AIX normal

BSD No default value.

Usage Guidelines

- Infoprint compares the document attribute **print-quality** to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

print-queue (PSF)

See print-queue-name.

print-queue-name (PSF)

This **initially settable**, **single-valued** attribute specifies which AIX print queue is the default value for the **destination-command** attribute.

Note: Do not confuse this attribute with the **associated-queue** attribute, which specifies the Infoprint queue that sends jobs to this physical printer.

Input Synonym: You can use the synonym **print-queue**.

Allowed Values: You can enter a text string up to 255 characters long that contains the name of the AIX print queue.

Default Value: No default value.

Usage Guidelines

- If the attachment-type is **aix**, Infoprint uses this attribute to determine the default value following the **-P** flag in the **destination-command** attribute.
- If the attachment type is not aix, Infoprint does not use the print-queue-name attribute.

printer (All DSS)

See destination-name.

printer-command (AIX, BSD, PSF)

See destination-command.

printer-data-stream (PSF)

See destination-data-stream.

printer-end-sheet (AIX, PSF)

This **resettable**, **single-valued** attribute identifies the style of end sheet that the printer device uses.

Allowed Values: You can enter one of the following fixed values. For PSF only, you can enter an identifier of an auxiliary-sheet object.

Fixed Value	DSS	Explanation
accounting-log	PSF	This value is technically valid, but should not be used for end sheets.
blank	PSF	The end sheet is blank.
brief	AIX, PSF	The end sheet style is brief.
full	AIX, PSF	The end sheet style is full.
job-ticket	PSF	The job ticket is printed on the end sheet.
none	AIX, PSF	No end sheet prints.

Default Value

AIX full

Actual Destination

PSF none

Usage Guidelines

- PSF physical printers can use auxiliary-sheet objects if they have valid **psf-exit-**xxx values. AIX physical printers print auxiliary sheets, but they do not use auxiliary-sheet objects.
- Infoprint verifies that the value of this attribute is a value of the **end-sheets-supported** attribute.

printer-escape-codes (PSF)

This **resettable**, **single-valued** attribute specifies the printer escape codes this physical printer uses to print line-data jobs.

Allowed Values: You can enter a string up to 255 characters long containing the printer escape codes.

Syntax: Escape codes must be in lowercase format and cannot include spaces. You must enter unprintable characters, and may enter printable characters, in this format:

\xnn

where *nn* is a two-character (one-byte) hexadecimal code. For example:

 $\x1b$

represents ESC

Default Value: No default value.

Usage Guidelines: Use printer escape codes to control fonts, line spacing, and the size of the output page, enabling more than 80 characters to print on a line.

For example, this hex string:

x1bx5bx53x0cx00x01x20x01x20x00x00x4bx60x38x40x4exc0

translates to the following values:

1b ESC

5b Left square bracket

53 S

0c00Length of command0120Top margin (0.2 inches)0120Bottom margin (0.2 inches)0000Left margin (0 inches)4b60Right margin (13.4 inches)3840Page length (10 inches)4ec0Page width (14 inches)

The first four values (ESC, [, S, command length) are always the same in a string of escape codes specifying page dimensions. The values representing the margins and page length and width are hex values in 1440ths of an inch and can be changed to meet your specifications. All dimensions are measured as if the page were printed in portrait.

printer-memory (PSF)

This **resettable**, **single-valued** attribute describes the amount of printer memory (in kilobytes) for this PSF AIX-attached or direct-attached printer.

Note: If the printer device reports an out-of-memory condition, you can add more memory to the printer device or decrease the value for this attribute.

Allowed Values: You can enter an integer from 512 to 65535. The unit is kilobytes.

Default Value

Direct-attached physical printers

1024

AIX-attached physical printers

1024

Other attachment types

No default value.

Usage Guidelines: Infoprint uses this attribute with PSF AIX-attached physical printers and direct-attached physical printers and ignores it for other attachment types.

printer-model (All DSS)

See destination-model.

printer-name (All DSS)

See destination-name.

printer-needs-attention-time (All DSS)

See destination-needs-attention-time.

printer-needs-key-operator-attention-time (All DSS)

See destination-needs-key-operator-attention-time.

printer-pass-through (AIX, BSD, PSF, 3170)

See destination-pass-through.

printer-realization (All DSS)

See destination-realization.

printer-register-threshold (All DSS)

See destination-register-threshold.

printer-release-timer (PSF, Email, Fax)

See destination-release-timer.

printer-resolutions-ready (PSF, 3170)

This **resettable**, **multi-valued** attribute specifies which of the values specified for the **printer-resolutions-supported** attribute this physical printer is ready to use.

Allowed Values: You can enter any of these fixed values:

Fixed Value	DSS
240	PSF
300	PSF
480	PSF
600	PSF, 3170

The unit is pels.

Default Values: No default values.

Usage Guidelines

- This attribute applies only for printing image data. It has no effect on font resolutions.
- Refer to the printer device documentation for information on the resolution you should specify.
- If you specify a resolution that the printer device does not support, jobs will still print under most conditions. However, you may see poor printed results.
- The values of the printer-resolutions-ready attribute must be a subset of the values of the printer-resolutions-supported attribute.
- Infoprint compares the document attribute default-printer-resolution to this attribute for scheduling.

printer-resolutions-supported (PSF, 3170)

This **resettable**, **multi-valued** attribute specifies the resolution, in pels, at which the printer device can print PostScript and PCL jobs.

Allowed Values: You can enter any of these fixed values:

Fixed Value	DSS
240	PSF
300	PSF
480	PSF
600	PSF, 3170

The unit is pels.

Default Values

PSF (basic Infoprint administrator's GUI)

240, 300, 480, 600

PSF (advanced Infoprint administrator's GUI and command line)

240

3170 600

Usage Guidelines

- This attribute applies only for printing image data. It has no effect on font resolutions.
- Refer to the printer device documentation for information on the resolution you should specify.
- If you specify a resolution that the printer device does not support, jobs will still print under most conditions. However, you may see poor printed results.
- Infoprint compares the document attribute **default-printer-resolution** to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

printer-separator-sheet (AIX, PSF)

This resettable, single-valued attribute identifies the style of separator sheet that the printer device uses.

Allowed Values: You can enter one of the following fixed values. For PSF only, you can enter an identifier of an auxiliary-sheet object.

Fixed Value	DSS	Explanation
accounting-log	PSF	This value is technically valid, but should
		not be used for separator sheets.
blank	PSF	The separator sheet is blank.
brief	PSF	The separator sheet style is brief.
full	PSF	The separator sheet style is full.
job-ticket	PSF	The job ticket is printed on the separator
		sheet.
none	AIX, PSF	No separator sheet prints.

Default Value

AIX none PSF none

Usage Guidelines

- PSF physical printers can use auxiliary-sheet objects if they have valid **psf-exit-**xxx values. AIX physical printers print start and end sheets, but they do not use auxiliary-sheet objects.
- Because AIX physical printers do not print separator sheets, the only valid value for them is **none**.
- Infoprint verifies that the value of this attribute is a value of the **separator-sheets-supported** attribute.

printer-start-sheet (AIX, PSF, 3170)

This **resettable**, **single-valued** attribute identifies the type of start sheet that this printer device uses.

Allowed Values: You can enter one of the following fixed values. For PSF only, you can enter an identifier of an auxiliary-sheet object.

Actual Destination

Fixed Value DSS Explanation

accounting-log PSF This value is technically valid, but should not be

used for start sheets.

blankPSFThe start sheet is blank.briefAIX, PSFThe start sheet style is brief.fullAIX, PSF, 3170The start sheet style is full.

job-ticket PSF The job ticket is printed on the start sheet.

none AIX, PSF, 3170 No start sheet prints.

Default Value

AIX full

3170

PSF (basic Infoprint administrator's GUI)

job-ticket

PSF (advanced Infoprint administrator's GUI and command line)

brief full

Usage Guidelines

- PSF physical printers can use auxiliary-sheet objects if they have valid psf-exit-xxx values. AIX
 physical printers print start and end sheets, and 3170 physical printers print start sheets; but they do
 not use auxiliary-sheet objects.
- Infoprint verifies that the value of this attribute is a value of the start-sheets-supported attribute.

printer-state (All DSS)

See destination-state.

printer-s370-channel-device-address (PSF)

This **resettable**, **single-valued** attribute identifies the control unit address parameter for channel-attached physical printers. This is the device address of the control unit for the printer device.

Allowed Values: You can enter a hexadecimal address expressed as a series of characters in the range: integer (0..9), alpha (a..f, A..F); legal values are 01-FE.

Default Value: No default value.

Usage Guidelines: You must enter a value for PSF channel-attached physical printers. Infoprint ignores this attribute for other attachment types.

printer-s370-channel-slot-number (PSF)

This **resettable**, **single-valued** attribute identifies the slot number parameter for channel-attached physical printers. This is the slot number in which the S/370 Channel Emulator/A adapter adapter is installed.

Allowed Values: You can enter an integer from 1 through 2147483647.

Default Value: No default value.

Usage Guidelines: You must enter a value for PSF channel-attached physical printers. Infoprint ignores this attribute for other attachment types.

printer-tcpip-internet-address (AIX, BSD, PSF, 3170)

See destination-tcpip-internet-address.

printer-tcpip-port-number (PSF)

See destination-tcpip-port-number.

printer-timeout-period (AIX, PSF)

This **resettable**, **single-valued** attribute specifies the amount of time, in seconds, that Infoprint allows for the server to try to connect to a shared network printer (printer device) after the physical printer receives a new job request.

Input Synonym: You can use the synonym **timeout-period**.

Allowed Values: You can enter an integer from 0 through 2147483647. The unit is seconds.

Default Value: 60

Usage Guidelines

- For PSF actual destinations, this attribute applies only to physical printers with an attachment type of direct.
- While the server is attempting to connect to the printer device, this physical printer is in the timed-out state, but it can still accept jobs.
- If the server cannot connect to the printer device within the specified time, the following happens:
 - The printer state becomes timed-out.
 - This physical printer will not accept new jobs.
 - Infoprint may issue a warning message, depending on the notification profile of this physical printer.
 - The server continues to try to connect to the printer device until successful, or until this physical printer is disabled.
 - Infoprint sends a warning message at the end of each timeout period (if specified by the notification profile).

problem-message (All DSS)

This **non-settable**, **single-valued** actual destination attribute provides information on the cause of a problem with a actual destination.

Allowed Values: Infoprint sets this value to a text string that contains the message information.

Default Value: No default value.

Usage Guidelines

- This attribute may contain problem information whenever the actual destination state is not idle, connecting-to-printer, or printing.
- If the actual destination state is **needs-key-operator**, Infoprint disables the actual destination. If the actual destination uses SNMP, Infoprint automatically re-enables it when the problem is corrected. To prevent automatic re-enabling, manually disable the actual destination.

protected-attributes (All DSS)

This **resettable**, **multi-valued** attribute specifies one or more actual destination attributes that DCE prevents Infoprint operators from setting or changing.

Allowed Values: You can enter one or more actual destination attributes.

Default Values: This attribute always specifies itself, **protected-attributes**, as a value.

Usage Guidelines: Normally, anyone with DCE **write** permission for actual destinations can set values for actual destination attributes. By default, the **pd_admin** and **pd_operator** DCE groups both have **write** permission. Once you define an actual destination attribute as a protected attribute, you must have DCE **delete** permission to modify the attribute. Members of the **pd_operator** DCE group do not have **delete** permission unless the DCE administrator modifies the default permissions for that group.

psf-tray-characteristics (PSF)

This **resettable**, **multi-valued complex** attribute defines the characteristics of the PSF input trays.

Allowed Values: This complex attribute has these components for each value:

input-tray medium-loaded job-bin-number tray-number duplex-supported

You can specify multiple values, one for each input tray of the printer device up to the maximum of five.

Syntax

input-tray:medium-loaded:job-bin-number:tray-number:duplex-supported

For example:

top:letter:1:1:false

Default Values: If SNMP communication is active, Infoprint queries the printer device and sets the values according to the response; otherwise, the default values are as described for each component.

Usage Guidelines

- Infoprint automatically sets the **media-ready** and **input-trays-supported** actual destination attributes from the value you set here.
- Infoprint verifies that the values of the **media-loaded** component of this attribute are values of the **media-supported** attribute.

Components and Values: This attribute has five components:

input-tray: This **single-valued** component specifies which input tray this value defines. You can use any name you want, for example:

alternate bottom envelope insert large-capacity main manual side top

The default value for PSF AIX-attached and direct-attached physical printers is **top**. For other physical printers, there is no default value.

Note: The **insert** input tray is on the finisher, not the printer device itself. This means that you cannot print inserts with the rest of the job. If you want printed inserts, preprint them and load the printed sheets into the **insert** input tray.

media-loaded: This **single-valued** component specifies the media that is presently in the specified input tray. Infoprint adds the value you specify for this component automatically to the **media-ready** actual destination attribute.

The value you specify does not have to match one of the values specified by the **medium-identifier** medium attributes. However, it must be one of the values specified by the **media-supported** attribute for this physical printer.

Note: If you want to change the value of this component, make sure you add the value to the **media-supported** attribute first.

The default value for PSF AIX-attached and direct-attached physical printers is **letter**. For other physical printers, there is no default value.

job-bin-number: This **single-valued** component specifies a bin number that the data stream can specify to select this input tray. Each AFP printer device model has its own configuration of paper input trays, known as bins, each with a specific number. This component maps the value specified for the input tray and loaded media to a bin number that Infoprint understands and uses. Some values have special meanings:

Input Tray Name	Job Bin Number	Tray Number
alternate	1	5
bottom	2	4
envelope	65	6
manual	100	2
top	1	1

Actual Destination

You can enter an integer from 1 to 255. The default value for PSF AIX-attached and direct-attached physical printers is 1. For other physical printers, there is no default value.

If you specify any of the values for the **input-tray** name shown in the table, and no values for this component and the **tray-number** component, the values for both of these components default to the values shown in the explanation of this component. You can specify values for all three components if those values are not appropriate for a particular printer device.

tray-number: This **single-valued** component identifies the tray number of the input tray, depending on the printer model, associated with the job bin number.

You can enter an integer of 1 or 2. The default value for PSF AIX-attached and direct-attached physical printers is 1. This component does not apply to other attachment types.

For AIX-attached physical printers and direct-attached physical printers, if you specify any of the values for the **input-tray** name shown in the table under **job-bin-number** and no value for this component, the value for this component defaults to the value shown in the explanation of the **job-bin-number** component.

Note: See the documentation for the printer device for further information on which types of input trays this printer supports.

duplex-supported: This **single-valued** component specifies that two-sided printing is possible from this input tray. You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

The default value for PSF AIX-attached and direct-attached physical printers is **false**. This component does not apply to other attachment types.

qualities-supported (AIX, BSD)

See print-qualities-supported.

register-threshold (All DSS)

See destination-register-threshold.

registered-with-spooler (All DSS)

This **non-settable**, **single-valued** attribute indicates whether this actual destination and a server have established communication.

Allowed Values: Infoprint sets one of these fixed values:

true false

Default Value: false

remote-queue (AIX)

This **resettable**, **single-valued** attribute indicates whether the backend program sends data to a remote print queue rather than controlling this AIX physical printer directly.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: false

Usage Guidelines: If the printer backend program is a variation of, or front end to, **rembak**, specify

true.

resource-context (PSF, Email, Fax)

This **resettable**, **single-valued** attribute defines the default directory paths that Infoprint searches for AFP resources, including fonts, form definitions, overlays, page definitions, page segments, and color mapping table

| **Allowed Values:** You can enter the name of a resource-context object or a text string up to 255 characters long that defines the directory path to fonts. Separate multiple paths with a colon. You can specify one or more paths for one resource context. You can specify paths for file systems mounted to AIX, such as MVS data sets and VM minidisks.

| Syntax

- path:path
- | For example:
- /fonts:/dept123/fonts

Default Value: No default values, but Infoprint always searches /usr/lpp/psf/reslib,

/usr/lpp/afpfonts, and /usr/lpp/psf/fontlib.

Usage Guidelines

- You can use this attribute to locate default resources or color mapping tables.
- Infoprint searches resource paths in this order:
 - 1. resource-context-user document attribute
 - resource-context-font, resource-context-form-definition, resource-context-overlay, resource-context-page-definition, or resource-context-page-segment document attribute, as appropriate for the type of resource.
 - 3. resource-context document attribute
 - 4. **PSFPATH** environment variable
 - 5. resource-context-font, resource-context-form-definition, resource-context-overlay, resource-context-page-definition, or resource-context-page-segment actual destination attribute, as appropriate for the type of resource
 - 6. resouce-context actual destination attribute
 - 7. /usr/lpp/psf/reslib
 - 8. /usr/lpp/afpfonts
 - 9. /usr/lpp/psf/fontlib

If Infoprint cannot find the resource because none of the paths contain the resource, it still processes the job and prints error messages at the end of the job. Infoprint reports the job as completed.

resource-context-font (PSF, Email, Fax)

This **resettable**, **single-valued** attribute defines the directory paths that Infoprint searches for fonts for the job.

Allowed Values: You can enter the name of a resource-context object or a text string up to 255 characters long that defines the directory path to the AFP resources. You can specify one or more paths for one resource context.

Syntax

path:path

Default Value: No default values, but Infoprint always searches /usr/lpp/psf/reslib.

Usage Guidelines: You can use this attribute to locate default resources or color mapping tables.

Infoprint searches resource paths in this order:

- 1. resource-context-user document attribute
- resource-context-font, resource-context-form-definition, resource-context-overlay, resource-context-page-definition, or resource-context-page-segment document attribute, as appropriate for the type of resource
- 3. resource-context document attribute
- 4. **PSFPATH** environment variable
- resource-context-font, resource-context-form-definition, resource-context-overlay, resource-context-page-definition, or resource-context-page-segment actual destination attribute, as appropriate for the type of resource
- 6. resource-context actual destination attribute
- 7. /usr/lpp/psf/reslib
- 8. /usr/lpp/afpfonts for fonts
- 9. /usr/lpp/psf/fontlib for fonts

If Infoprint cannot find the resource because none of the paths contain the resource, it still processes the job and prints error messages at the end of the job. Infoprint reports the job as completed.

resource-context-form-definition (PSF, Email, Fax)

This **resettable**, **single-valued** attribute defines the directory paths that Infoprint searches for the form definition for the job.

Allowed Values: You can enter the name of a resource-context object or a text string up to 255 characters long that defines the directory path to form definitions. Separate multiple paths with a colon. You can specify one or more paths for one resource context. You can specify paths for file systems mounted to AIX, such as MVS data sets and VM minidisks.

Syntax

path:path

For example:

/formdef:/dept123/form

Default Value: No default values, but Infoprint always searches /usr/lpp/psf/reslib.

Usage Guidelines

- You can use either the document or the actual destination form-definition attribute to specify the form definition.
- Infoprint searches paths in this order:
 - 1. resource-context-user document attribute
 - 2. resource-context-form-definition document attribute
 - 3. resource-context document attribute
 - 4. **PSFPATH** environment variable
 - 5. resource-context-form-definition actual destination attribute
 - 6. /usr/lpp/psf/reslib
- If Infoprint cannot find the resource because none of the paths contain the resource, it still processes the job and prints error messages at the end of the job. Infoprint reports the job as completed.

resource-context-overlay (PSF, Email, Fax)

This **resettable**, **single-valued** attribute defines the directory paths that Infoprint searches for an overlay for the job.

Allowed Values: You can enter the name of a resource-context object or a text string up to 255 characters long that defines the directory path to overlays. Separate multiple paths with a colon. You can specify one or more paths for one resource context. You can specify paths for file systems mounted to AIX, such as MVS data sets and VM minidisks.

Syntax

path:path

For example:

/overlay:/dept123/overlay

Default Value: No default values, but Infoprint always searches /usr/lpp/psf/reslib.

Usage Guidelines

- You use a form definition for the job to specify the overlay.
- Infoprint searches paths in this order:
 - 1. resource-context-user document attribute
 - 2. resource-context-overlay document attribute
 - 3. resource-context document attribute
 - 4. **PSFPATH** environment variable
 - 5. resource-context-overlay actual destination attribute
 - 6. /usr/lpp/psf/reslib
- If Infoprint cannot find the resource because none of the paths contain the resource, it still processes the job and prints an error messages at the end of the job. Infoprint reports the job as completed.

resource-context-page-definition (PSF, Email, Fax)

This **resettable**, **single-valued** attribute defines the directory paths that Infoprint searches for a page definition for the job.

Allowed Values: You can enter the name of a resource-context object or a text string up to 255 characters long that defines the directory path to page definitions. Separate multiple paths with a colon. You can specify one or more paths for one resource context. You can specify paths for file systems mounted to AIX, such as MVS data sets and VM minidisks.

Syntax

path:path

For example:

/pagedef:/dept123/page-definition

Default Value: No default values, but Infoprint always searches /usr/lpp/psf/reslib.

Usage Guidelines

- You use the page-definition document attribute to specify the page definition for the job.
- Infoprint searches paths in this order:
 - 1. resource-context-user document attribute
 - 2. resource-context-page-definition document attribute
 - 3. resource-context document attribute
 - 4. **PSFPATH** environment variable
 - 5. resource-context-page-definition actual destination attribute
 - 6. /usr/lpp/psf/reslib
- If Infoprint cannot find the resource because none of the paths contain the resource, it still processes the job and prints error messages at the end of the job. Infoprint reports the job as completed.

resource-context-page-segment (PSF, Email, Fax)

This **resettable**, **single-valued** attribute defines the directory paths that Infoprint searches for page segments for the job.

Allowed Values: You can enter the name of a resource-context object or a text string up to 255 characters long that defines the directory path to page segments. Separate multiple paths with a colon. You can specify one or more paths for one resource context. You can specify paths for file systems mounted to AIX, such as MVS data sets and VM minidisks.

Syntax

path:path

For example:

/pageseg:/dept123/page-segment

Default Value: No default values, but Infoprint always searches /usr/lpp/psf/reslib.

Usage Guidelines

- You specify the page segments within the job.
- · Infoprint searches paths in this order:
 - 1. resource-context-user document attribute
 - 2. resource-context-page-segment document attribute
 - 3. resource-context document attribute
 - 4. PSFPATH environment variable
 - 5. resource-context-page-segment actual destination attribute
 - 6. /usr/lpp/psf/reslib
- If Infoprint cannot find the resource because none of the paths contain the resource, it still processes the job and prints error messages at the end of the job. Infoprint reports the job as completed.

reverse-output (3170)

This **resettable**, **single-valued** attribute indicates whether this physical printer should print jobs in reverse (last page first).

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: false

Usage Guidelines: If you specify **true**, you may also wish to specify **true** for the document attribute **output-face-up** so that pages will be collated in the right order.

rip-ini-file (3170)

This **resettable**, **single-valued** attribute identifies the default **.ini** file for this physical printer. This file contains default page setup values used to RIP files.

Allowed Values: You can enter a text string up to 255 characters long that contains the full path name of the file.

Default Value: /usr/lpp/pd/bin/default.ini

rip-server (3170)

- | This **non-settable**, **multi-valued** attribute identifies the Internet Protocol address (IP Address parameter) of hosts capable of RIPping documents for this physical printer.
- This attribute is replaced by "color-rip-servers (3170)" on page 12.
- | **Allowed Values:** Infoprint migrates any information specified with this attribute to the color-rip-servers actual destination attribute. For more information, see "color-rip-servers (3170)" on page 12.

Default Value: The value of the **destination-tcpip-internet-address** attribute.

scanner-corrections-supported (PSF)

This resettable, multi-valued attribute identifies the scanner calibration methods for which this physical printer supports correction.

Allowed Values: You can enter any of these fixed values:

Ricoh420

XeroxDocuimage620S

none

Default Values: Ricoh420, XeroxDocuimage620S, none

Usage Guidelines: Infoprint compares the document attribute scanner-correction to this attribute for validation and scheduling.

scheduler-sort-primary-order (All DSS)

This resettable, single-valued attribute identifies which of the schedulers specified by the schedulers-supported attribute Infoprint uses to determine how to schedule jobs.

Allowed Values: You can enter one of these fixed values:

Fixed Value Explanation

deadline Infoprint schedules jobs with the earliest deadline first. fifo Infoprint schedules jobs in the order they are submitted.

job-priority Infoprint schedules jobs in order of priority.

Infoprint schedules jobs in order of size, longest first. longest-job-first shortest-job-first Infoprint schedules jobs in order of size, shortest first.

Default Value: job-priority

scheduler-sort-secondary-order (All DSS)

This resettable, single-valued attribute identifies which of the schedulers specified by the schedulers-supported attribute Infoprint uses to determine how to break ties produced by the scheduler specified by the scheduler-sort-primary-order attribute. For example, if you normally schedule jobs by priority, you can specify that when two jobs have the same priority, Infoprint should schedule the shorter one first.

Allowed Values: You can enter one of these fixed values:

Fixed Value Definition

deadline Infoprint schedules jobs with the earliest deadline first. fifo Infoprint schedules jobs in the order they are submitted.

job-priority Infoprint schedules jobs in order of priority.

longest-job-first Infoprint schedules jobs in order of size, longest first. shortest-job-first Infoprint schedules jobs in order of size, shortest first.

Default Value: fifo

schedulers-supported (All DSS)

This **non-settable**, **multi-valued** attribute identifies the scheduling algorithms that this actual destination supports.

Allowed Values: Infoprint sets this value to these fixed values:

Fixed Value Definition

deadline Infoprint schedules jobs with the earliest deadline first. **lifo** Infoprint schedules jobs in the order they are submitted.

job-priority Infoprint schedules jobs in order of priority.

longest-job-firstshortest-job-firstInfoprint schedules jobs in order of size, longest first.Infoprint schedules jobs in order of size, shortest first.

Default Values: deadline, fifo, job-priority, longest-job-first, shortest-job-first

screen-frequencies-supported (PSF)

This **resettable**, **multi-valued** attribute identifies the screen frequencies used for printing halftones that this physical printer supports.

Allowed Values: You can enter any of these fixed values:

71

85

106

141

Default Values: 71, 85, 106, 141

Usage Guidelines: Infoprint compares the document attribute **screen-frequency** to this attribute for validation and scheduling.

separator-sheets-supported (AIX, PSF)

This **resettable**, **multi-valued** attribute identifies the separator sheets that this physical printer supports.

Allowed Values: You can enter any of the following fixed values. For PSF only, you can enter a string up to 255 characters long that contains identifiers of auxiliary-sheet objects.

Fixed Value	DSS	Explanation
accounting-log	PSF	This value is technically valid, but should
		not be used for separator sheets.
blank	PSF	The separator sheet is blank.
brief	PSF	The separator sheet style is brief.
full	PSF	The separator sheet style is full.
job-ticket	PSF	The job ticket is printed on the separator sheet.
none	AIX, PSF	No separator sheet prints.

Default Values

AIX none

Actual Destination

PSF

accounting-log, blank, brief, full, job-ticket, none, and the names of other defined auxiliary sheets which have legal PSF auxiliary sheet attributes.

Usage Guidelines

- PSF physical printers can use auxiliary-sheet objects if they have valid psf-exit-xxx values. AIX
 physical printers print start and end sheets, but they do not use auxiliary-sheet objects.
- Because AIX physical printers do not print separator sheets, the only valid value for them is none.
- Infoprint verifies that the value of the printer-separator-sheet attribute is a value of this attribute.
- You cannot delete a value from this attribute if the value you want to delete is the value of the **printer-separator-sheet** attribute.
- For PSF physical printers, Infoprint sets this value dynamically to the names of all defined auxiliary sheets with legal attributes. You should never have to reset this value.

sides (PSF)

This **resettable**, **single-valued** attribute identifies whether the printer device prints on one or two sides of the media.

Allowed Values: You can enter an integer value of 1 or 2.

Default Values: If SNMP communication is active, Infoprint queries the printer device and sets the values according to the response; otherwise 1

Usage Guidelines

- The value of the sides attribute must be one of the values of the sides-supported attribute.
- · Infoprint uses sides specifications in this order:
 - 1. sides document attribute
 - 2. The sides specification in the form definition
 - 3. sides actual destination attribute

Note: Because all IBM-supplied form definitions contain a sides specification, the **sides** actual destination attribute is used only with custom form definitions that do not contain a sides specification.

sides-supported (AIX, BSD, PSF, 3170)

This **resettable**, **multi-valued** attribute identifies whether this physical printer supports printing on one or two sides of the media.

Allowed Values: You can enter an integer of 1 or 2.

Default Values

AIX '

BSD No default value.

PSF (basic Infoprint administrator's GUI)

1. 2

PSF (advanced Infoprint administrator's GUI and command line)

1

3170 **1**, **2**

Usage Guidelines

- You can use this attribute to restrict jobs sent to this actual destination according to the capacity of the output device or your policy for output device use.
- Infoprint compares the document attribute sides to this attribute for scheduling.

snmp-active (AIX, BSD, PSF, Fax, Email)

This **non-settable**, **single-valued** attribute indicates whether Infoprint has established Simple Network Management Protocol (SNMP) communications with the output device that this actual destination represents.

Allowed Values: Infoprint sets this value to one of these fixed values:

true false

Default Value: If you have defined a value for the **destination-tcpip-internet-address** attribute and Infoprint has established SNMP communication with the printer device, **true**; otherwise **false**.

snmp-community-name (AIX, BSD, PSF)

This **resettable**, **single-valued** attribute indicates the name of the SNMP community to which the printer device that this physical printer represents belongs.

Allowed Values: You can enter a text string up to 255 characters long that contains the SNMP community name.

Default Value: public

Usage Guidelines: If the value of the **use-snmp** attribute is **false**, this attribute is ignored.

snmp-retry-count (AIX, BSD, PSF)

This **resettable**, **single-valued** attribute indicates the number of times, after an initial failure, that Infoprint should attempt to establish SNMP communication with the printer device that this physical printer represents.

Allowed Values: You can enter an integer from 0 through 2147483647.

Default Value: 2

Usage Guidelines

- If the value of the **use-snmp** attribute is **true**, and if you have defined a value for the **destination-tcpip-internet-address** attribute, Infoprint attempts to establish SNMP communication with the printer device when:
 - The physical printer is created.
 - Any of the SNMP attributes of the physical printer are changed,
 - The physical printer is enabled and the value of the snmp-active attribute is false.

Actual Destination

- The server is started.
- If the value of the **use-snmp** attribute is **false**, this attribute is ignored.

snmp-timeout (AIX, BSD, PSF)

This **resettable**, **single-valued** attribute indicates the number of seconds that Infoprint should wait for SNMP operations on the printer device that this physical printer represents to complete.

Allowed Values: You can enter an integer from 0 through 2147483647.

Default Value: 5

Usage Guidelines

- Set a value of **0** to use the SNMP default timeout period.
- If the value of the use-snmp attribute is false, this attribute is ignored.

start-message-supported (All DSS)

This **resettable**, **single-valued** attribute indicates whether the actual destination supports the job attribute **job-start-message**.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: true

Usage Guidelines

- When you set this attribute value to true, operators can receive messages that users specify with the
 job-start-message job attribute when they submit the job. Infoprint sends the message to the
 operators specified by the notify-operator attribute for this actual destination when the job starts
 printing. Sending a start message does not stop the job from printing; normally the job prints without
 operator intervention.
- Infoprint compares the job attribute job-start-message to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

start-sheets-supported (AIX, PSF, 3170)

This resettable, multi-valued attribute identifies the start sheets that this physical printer supports.

Allowed Values: You can enter any of the following fixed values. For PSF only, you can enter a string up to 255 characters long that contains identifiers of auxiliary-sheet objects.

Fixed Value DSS Explanation

accounting-log PSF This value is technically valid, but should not be

used for start sheets.

blankPSFThe start sheet is blank.briefAIX, PSFThe start sheet style is brief.fullAIX, PSF, 3170The start sheet style is full.

job-ticket PSF The job ticket is printed on the start sheet.

none AIX, PSF, 3170 No start sheet prints.

Default Values

AIX brief, full, none

PSF accounting-log, blank, brief, full, job-ticket, none, and the names of other defined auxiliary

sheets which have legal PSF auxiliary sheet attributes.

3170 full, none

Usage Guidelines

- PSF physical printers can use auxiliary-sheet objects if they have valid psf-exit-xxx values. AIX
 physical printers print start and end sheets, and 3170 physical printers print start sheets; but they do
 not use auxiliary-sheet objects.
- Infoprint verifies that the value of the **printer-start-sheet** attribute is a value of this attribute.
- You cannot delete a value from this attribute if the value you want to delete is the value of the
 printer-start-sheet attribute.
- For PSF physical printers, Infoprint sets this value dynamically to the names of all defined auxiliary sheets with legal attributes. You should never have to reset this value.

table-reference-characters-supported (PSF, Email, Fax)

This **resettable**, **single-valued** attribute identifies whether this actual destination supports table reference characters. Some line-data applications produce table reference characters to specify font changes.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: true

Usage Guidelines

- Infoprint compares the document attribute table-reference-characters to this attribute for scheduling.
- You can use this attribute to restrict use of this actual destination.

timeout-period (AIX, PSF)

See printer-timeout-period.

use-snmp (AIX, BSD, PSF, Fax, Email)

This **resettable**, **single-valued** attribute indicates whether Infoprint should attempt SNMP communication with the output device that this actual destination represents.

Allowed Values: You can enter one of these fixed values:

Fixed Value Input Synonym

true yes false no

Default Value: true

Usage Guidelines: If Infoprint fails to establish SNMP contact with an output device, it uses the **ping** command to test whether it is possible to communicate with the device in other ways. If the **ping** command succeeds, Infoprint concludes that the device is not an SNMP device and resets this attribute to **false**.

warning-message (AIX, BSD, PSF)

This **non-settable**, **single-valued** actual destination attribute provides information about printer device conditions that require attention but allow printing to continue, such as low paper or low toner.

Allowed Values: Infoprint sets this value to a text string that contains the message information.

Default Value: No default value.

Usage Guidelines: Infoprint uses this attribute only when SNMP communication is active with the printer device.

x-image-shift-range-supported (PSF, 3170, Email, Fax)

This **resettable**, **single-valued complex** attribute specifies, in millimeters, the lower and upper numeric boundaries for the X offset of a page. The X offset, along with the Y offset, sets the origin of the logical page on the physical page.

Allowed Values: This complex attribute has these components:

lower-limit upper-limit

Each component can have a numeric value from -577.99 mm through 577.99 mm. Separate the values with a colon.

Syntax

lower-limit:upper-limit

Each value uses a format of *nnnn.nnn*, where *nnnn.nnn* is the decimal millimeter value. For example, 1:10

Infoprint uses millimeters for the unit of measure.

Default Values: 0:577.99 mm

Components and Values: This attribute has two components:

lower-limit: This **single-valued** component defines the minimum amount of image shift that you can specify with the document or default document attribute **x-image-shift** or **x-image-shift-back**.

upper-limit: This **single-valued** component defines the maximum amount of image shift that you can specify with the document or default document attribute **x-image-shift** or **x-image-shift-back**.

Usage Guidelines

- Infoprint compares the document attributes **x-image-shift** and **x-image-shift-back** to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.

y-image-shift-range-supported (PSF, 3170, Email, Fax)

This **resettable**, **single-valued complex** attribute specifies, in millimeters, the lower and upper numeric boundaries for the Y offset of a page. The Y offset, along with the X offset, sets the origin of the logical page on the physical page.

Allowed Values: This complex attribute has these components:

lower-limit upper-limit

Each component can have a numeric value from -577.99 mm through 577.99 mm. Separate the values with a colon.

Syntax

lower-limit:upper-limit

Each value uses a format of *nnnn.nnn*, where *nnnn.nnn* is the decimal millimeter value. For example, 1:20

Infoprint uses millimeters for the unit of measure.

Default Values: 0:577.99 mm

Components and Values: This attribute has two components:

lower-limit: This **single-valued** component defines the minimum amount of image shift that you can specify with the document or default document attribute **y-image-shift** or **y-image-shift-back**.

upper-limit: This **single-valued** component defines the maximum amount of image shift that you can specify with the document or default document attribute **y-image-shift** or **y-image-shift-back**.

Actual Destination

Usage Guidelines

- Infoprint compares the document attributes **y-image-shift** and **y-image-shift-back** to this attribute for validation and scheduling.
- You can use this attribute to restrict use of this actual destination.