Attributes for Servers

An Infoprint server is an object that represents the server that manages the validation, routing, and scheduling of jobs.

Initially Settable Attribute Listing

There are no specifiable attributes for a server.

Resettable Attribute Listing

You can modify these attributes with the **pdset** command after you create a server.

> **accept-unsupported-jobs**
> **descriptor**
> **job-submission-timer**
> **list-of-managers**
> **log-accounting-data**
> **maximum-barco-rips**
> **maximum-non-raster-rips**
> **maximum-raster-rips**
> **message**
> **notification-profile**
> **npm-server-ip-address**
> **npm-server-port-number**
> **protected-attributes**
> **save-rip-files**
> **security-level**
> **snmp-normal-poll-interval**
> **snmp-problem-poll-interval**

accept-unsupported-jobs

This **resettable, single-valued** attribute indicates whether the server accepts jobs even when no actual destination supports the required attribute values.

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

Fixed Value	Input Synonym
true	**yes**
false	**no**

Default Value

Basic   **true**
Advanced **false**

Usage Guidelines

When the value of the **accept-unsupported-jobs** is **true**, the server accepts jobs even when no actual destination supports the required attribute values. Infoprint holds these jobs and sets the **required-resources-not-supported** job attribute to a list of the unsupported values.

| **Note:** Even when **accept-unsupported-jobs** is **true**, the server accepts the job even when the
| **actual-destinations-requested** job attribute specifies nonexistent actual destination.

When the value of **accept-unsupported-jobs** is **false**, the server rejects jobs that require unsupported attribute values.

If changes to job or actual destination attributes after the job has been accepted produce unsupported attribute values, Infoprint holds the job and sets the **required-resources-not-supported** job attribute to the list of unsupported values.

actual-destinations-ready

This **non-settable, multi-valued** attribute identifies the supported actual destinations that are ready to receive jobs from queues in this server.

Input Synonym: You can use the synonym **physical-printers-ready**.

Allowed Values: Infoprint sets this value to the names of the actual destinations that are ready to accept jobs. A actual destination name is:

Added when actual destinations associated with queues in this server are enabled and are in the **idle**, **connecting-to-printer**, or **printing** state.

Removed when you disable or pause an actual destination and one of these destination states (**timed-out**, **needs-attention**, or **needs-key-operator**) exists.

Default Values: No default values.

actual-destinations-supported

This **non-settable, multi-valued** attribute identifies the actual destinations that this server supports.

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

Allowed Values: Infoprint sets this value to the names of the actual destinations associated with the queues contained in this server. Infoprint adds the destination name when an actual destination associated with queues in this server registers with this server.

Default Values: No default values.

cancel-individual-document-supported

This **non-settable, single-valued** attribute indicates whether the server is capable of cancelling individual documents within a multi-document job.

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

Default Value: **false**

descriptor

This **resettable, single-valued** attribute provides a description of this server.

Allowed Values: You can enter a text string up to 4095 characters long that contains a description of this server. You may want to specify things such as:

The purpose of the server; which users, user groups, or departments will use the objects contained in this server.

Any other information that is unique to your company or organization.

Default Value: No default value.

Usage Guidelines: The use of this attribute is optional. However, a detailed description is useful if you have a large number of servers or if you have many people managing your network printing system.

destination-states-supported

This **non-settable, multi-valued** attribute identifies the destination states that this server supports.

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

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

connecting-to-printer
idle
needs-attention
needs-key-operator
paused
printing
shutdown
timed-out

Default Values: No default values.

document-attributes-supported

This **non-settable, multi-valued** attribute identifies the document attributes that the server supports.

Allowed Values: Infoprint sets these values to include all the document attributes supported by any actual destination registered with the server. These values are dynamic; Infoprint adds and removes values based on the values of registered actual destinations.

Default Values: No default values.

events-supported

This **non-settable, multi-valued** attribute lists the events that the server or the objects in the server support.

Server

Allowed Values: Infoprint sets these values to the following events:

checkpoint-taken
class-aborted
class-actual-destination-attention
class-actual-destination-configuration
class-actual-destination-default
class-actual-destination-status
class-error
class-job-attention
class-job-default
class-job-problem
class-job-status
class-logical-destination-attention
class-logical-destination-configuration
class-logical-destination-default
class-logical-destination-status
class-queue-attention
class-queue-configuration
class-queue-default
class-queue-status
class-report
class-server-attention
class-server-configuration
class-server-default
class-server-status
class-state-changed
class-warning
close-to-discard-time
destination-disabled
destination-enabled
destination-function-unavailable
destination-needs-administrator
destination-needs-attention
destination-needs-operator
destination-registered
destination-shutdown-job-requeued
destination-state-changed
destination-timed-out
destination-unregistered
destinations-not-ready-for-job
detailed-messages
document-aborted-by-destination
document-aborted-by-server
document-cancelled-at-destination
document-content
file-transferred
internal-server-error
job-aborted-by-server
job-assigned-to-destination
job-assigned-to-destination-at-end
job-assigned-to-queue
job-cancelled-by-operator
job-cancelled-by-user

> **job-cannot-be-scheduled**
> **job-discarded**
> **job-modified**
> **job-paused**
> **job-promoted**
> **job-reordered**
> **job-requeued**
> **job-resubmitted**
> **job-resumed**
> **job-retained**
> **job-state-changed**
> **job-submission-not-complete**
> **job-unassigned**
> **no-document**
> **no-resource**
> **object-cleaned**
> **object-created**
> **object-deleted**
> **object-modified**
> **object-paused**
> **object-resumed**
> **other-error**
> **other-warning**
> **past-discard-time**
> **processing-started**
> **queue-backlogged**
> **queue-no-longer-backlogged**
> **queue-state-changed**
> **resource-needs-attention**
> **resource-needs-operator**
> **server-shutdown-complete**
> **server-shutdown-started**
> **server-startup-complete**
> **server-state-changed**
> **unable-to-register**
> **unrecognized-resource**

Default Values: No default values.

hostname

See **server-hostname**.

i-p-address

See **server-ip-address**.

ip-address

See **server-ip-address**.

job-attributes-supported

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

Allowed Values: Infoprint sets these values to include all the job attributes supported by any actual destination registered with the server. These values are dynamic; Infoprint adds and removes values based on the values of registered actual destinations.

Default Values: No default values.

job-state-reasons-supported

This **non-settable, multi-valued** attribute identifies the job-state reasons that this server supports.

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

> **aborted-by-system**
> **cancelled-by-operator**
> **cancelled-by-user**
> **deadline-in-jeopardy**
> **imposition-failed**
> **job-hold-set**
> **job-print-after-specified**
> **required-resource-not-ready**
> **required-resource-not-supported**
> **rip-and-hold-complete**
> **rip-completed-media-hold**
> **rip-failed**
> **successful-completion**

job-states-supported

This **non-settable, multi-valued** attribute identifies the job states that this server supports.

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

> **cancelled**
> **held**
> **imposing**
> **paused**
> **pending**
> **pre-processing**
> **printing**
> **processing**
> **retained**
> **ripping**
> **terminating**
> **unknown**

job-submission-timer

This **resettable, single-valued** attribute specifies the maximum time that the server will try to assemble a job before it will time out if it has not assembled all the documents.

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

Default Value: 30

Usage Guidelines: If the server has not completed the assembly of a job within the specified time, it identifies the job submission as complete and sends the job to the queue.

list-of-managers

This **resettable, multi-valued** attribute lists the people that are responsible for the configuration and operation of this server.

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

Allowed Values: You can enter a text string up 255 characters long, per value, that contains the name or user ID of the person responsible for this server. You may also want to include the telephone number and office location of the person.

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.

locale

This **non-settable, single-valued** attribute identifies the locale for this server.

Allowed Values: Infoprint sets this value based on the environment variables for this server at startup time. The priority sequence to obtain the language for the locale from the environment variables is:

1. **LC_ALL**
2. **LC_MESSAGES**
3. **LANG**

Default Value: No default value.

log-accounting-data

This **resettable, single-valued** attribute defines whether the accounting logs for all associated actual destinations are activated or deactivated by default. The actual destination attribute **log-accounting-data** setting overrides the setting of this value for that actual destination.

Allowed Values: You can enter one of these values:

Fixed Value	*Input Synonym*
true	**yes**
false	**no**

Default Value: **false**

Server

Usage Guidelines: If the value for any actual destination associated with this server is set to the default attribute value (no value), the value set for this server attribute sets the condition for that actual destination.

The accounting log for each actual destination contains the following job attributes and values for each job submitted to that actual destination.

> **job-identifier**
> **submission-time**
> **completion-time**
> **pages-complete**
> **job-owner**

logical-destinations-ready

This **non-settable, multi-valued** attribute identifies which logical destinations within this server are ready to accept jobs.

Input Synonym: You can use the synonym **logical-printers-ready**.

Allowed Values: Infoprint sets and resets this value as administrators enable or disable logical destinations within this server.

Default Values: No default values.

logical-destinations-supported

This **non-settable, multi-valued** attribute identifies the logical destinations that this server supports.

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

Allowed Values: Infoprint sets and resets this value as administrators create or delete logical destinations within this server.

Default Values: No default values.

logical-printers-ready

See **logical-destinations-ready**.

logical-printers-supported

See **logical-destinations-supported**.

managers

See **list-of-managers**.

maximum-barco-rips

This **resettable, single-valued** attribute indicates the maximum number of PostScript jobs that Infoprint can RIP at one time for printing on a 3170 physical printer.

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

Default Value: **4**

Usage Guidelines

For good performance, this value should be the same as the number of AIX systems specified as values of the **rip-server** actual destination attribute.

Infoprint reads this value the first time that a job is RIPped after the server is started. Therefore, whenever you change this value, you must restart the server.

maximum-non-raster-rips

This **resettable, single-valued** attribute indicates the maximum number of jobs other than TIFF, GIF, or JPEG jobs that Infoprint can RIP at one time for printing on a PSF physical printer.

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

Default Value: No default value.

Usage Guidelines

You can limit the number of concurrent RIPs to improve performance.

Infoprint reads this value the first time that a job is RIPped after the server is started. Therefore, whenever you change this value, you must restart the server.

maximum-raster-rips

This **resettable, single-valued** attribute indicates the maximum number of TIFF, GIF, and JPEG jobs that Infoprint can RIP at one time for printing on a PSF physical printer.

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

Default Value: No default value.

Usage Guidelines

You can limit the number of concurrent RIPs to improve performance.

Infoprint reads this value the first time that a job is RIPped after the server is started. Therefore, whenever you change this value, you must restart the server.

message

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

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

Default Value: No default value.

modify-individual-document-supported

This **non-settable, single-valued** attribute indicates whether this server is capable of modifying individual documents within a multiple document job.

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

Default Value: **true**

multiple-documents-supported

This **non-settable, single-valued** attribute indicates whether this server supports multiple documents in a single job.

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

Default Value: **true**

notification-delivery-methods-supported

This **non-settable, multi-valued** attribute identifies the methods this server supports for sending messages to the person specified to receive the messages.

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

> **electronic-mail**
> **message**
> **file**
> **file-add-to**
> **sapcb**
> **none**

Default Values: No default values.

Usage Guidelines: The **sapcb** notification method causes the SAP callback daemon to return messages about job events to the SAP database. It is used only for jobs submitted by SAP users.

notification-profile

This **resettable, multi-valued complex** attribute designates which users Infoprint notifies of specific events related to this server, 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={events-identifiers=class-server-status
   delivery-address=Tom@master delivery-method=message
   event-comment='Too much data' 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 person receives messages. You can enter any of the values listed for the **events-supported** attribute. The default values for this component are:

    internal-server-error
    object-cleaned
    object-deleted
    server-shutdown-complete

delivery-address: This **single-valued** component specifies the address of the person who receives event messages concerning this server or the directory location and file name where Infoprint stores messages. You can enter a text string that contains the login ID and node or the path to the directory and file name. The default value for this component is the login ID of the user who created this server.

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

Fixed Value	_Input Synonym_
electronic-mail	**e-mail**, **email**
message	
file	
file-add-to	
none	

The default value for this component is **message**.

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

event-comment: This **single-valued, optional** component provides a text string of 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 server.

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

npm-server-ip-address

This **resettable, single-valued** attribute identifies the Internet Protocol address (IP Address parameter) of the system where the Network Print Manager (NPM) server is running.

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**

Usage Guidelines: You must enter a value in order to display the Simple Network Management Protocol (SNMP) Printer Status dialog from the Infoprint job and printer management GUI.

npm-server-port-number

This **resettable, single-valued** attribute identifies the Port Number parameter on the system where the NPM server is running.

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

Default Value: **6795**

Usage Guidelines: You must enter a value in order to display the SNMP Printer Status dialog from the Infoprint job and printer management GUI.

object-class

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

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

Default Value: **server**

object-classes-supported

This **non-settable, multi-valued** attribute lists the object classes that this server supports.

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

auxiliary-sheet
destination
document
initial-value-document
initial-value-job
job
log
medium
queue
resource-context
server

Default Values: No default values.

physical-printers-ready

See **actual-destinations-ready**.

physical-printers-supported

See **actual-destinations-supported**.

printer-states-supported

See **destination-states-supported**.

problem-child

This **non-settable, single-valued** attribute identifies whether one of the objects that this server manages has a problem or not.

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

true
false

Default Value: No default value.

Usage Guidelines: The Infoprint administrator's GUI uses this attribute value to determine the problem status of this server.

protected-attributes

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

Allowed Values: You can enter one or more server attribute names.

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

Usage Guidelines: Normally, anyone with DCE **write** permission for server can set values for server attributes. By default, the **pd_admin** and **pd_operator** DCE groups both have **write** permission. Once you define a server 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 has modified the default permissions for that group.

queues-supported

This **non-settable, multi-valued** attribute identifies the queues contained in this server.

Allowed Values: Infoprint sets and resets this value when you create or delete queues.

Default Values: No default values.

save-rip-files

This **resettable, single-valued** attribute indicates whether this server saves the output files from jobs converted to raster image patterns.

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

Fixed Value	*Input Synonym*
true	yes
false	no

Default Value

Basic	**true**
Advanced	**false**

Usage Guidelines

If you move a RIPped job from a server with **save-rip-files=true** to one with **save-rip-files=false**, the new server keeps the RIP files only until the job is printed, then discards them.

RIPped files are saved in the directory specified by the **PDBASE** environment variable or in one of its subdirectories. No single user can create a file larger than the amount of free space in the file system containing this directory. If many users are submitting RIPped jobs, the directory may fill up and prevent all users from successfully RIPping files.

security-level

This **resettable, single-valued** attribute identifies the security level for this server.

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

none   AIX clients can execute all commands if the user has **read** permission for the command file in the **acl** subdirectory of the directory defined by the **PDNAMESP** environment variable. No security checking is performed for workstation clients.

low   Clients can execute all commands if the client and server are in the same namespace. If they are not in the same namespace, the client can execute only the **pdls**, **pdpr**, and **pdq** commands.

In either case, AIX users must have **read** permission for the command file in the **acl** subdirectory of the directory defined by the **PDNAMESP** environment variable. Workstation clients can execute commands only if the command file in the **acl** subdirectory of the directory defined by the **PDNAMESP** environment variable has universal **read** permission.

medium   DCE controls access to objects. Clients can execute all commands if the client and server are in the same namespace. If they are not in the same namespace, the client can execute only the **pdls**, **pdpr**, and **pdq** commands.

Default Value

Without DCE   **low**
With DCE   **medium**

server-hostname

This **non-settable**, **single-valued** attribute identifies the name of the host processor on which this server is running.

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

Allowed Values: Infoprint sets this value to the host name of the processor where this server is created.

Syntax

node.node.node

For example:

```
boxer.denver.gym.
```

server-ip-address

This **non-settable**, **single-valued** attribute identifies the Internet Address of the host processor on which this server is running.

Input Synonyms: You can use the synonym **ip-address** or **i-p-address**.

Allowed Values: Infoprint sets this value to the IP address of the host on which this server is created. The value is in the format of integers in series within the range of 0 to 255. A period, **.** , separates each integer from the others in the format

```
nn.nn.nn.nn
```

For example:

```
9.99.9.143
```

server-name

This **non-settable**, **single-valued** attribute uniquely identifies this server.

Allowed Values: Infoprint sets this value to the name you enter when you create this server.

server-state

This **non-settable, single-valued** attribute identifies the current state of this server.

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

initializing
ready
terminating
unavailable

Default Value: No default value.

snmp-aix-printer-models

This **non-settable, multi-valued** attribute identifies the SNMP descriptive printer model names that the AIX DSS recognizes.

Allowed Values: Infoprint sets this value to a list of recognized SNMP printer models.

Default Values: A list of recognized SNMP printer models.

snmp-normal-poll-interval

This **resettable, single-valued** attribute indicates the number of seconds that the server should wait between polling output devices that use SNMP and that are not known to have a problem.

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

Default Value: 300

Usage Guidelines

When normal polling finds that an output device has a problem, Infoprint disables the actual destination if necessary and transfers the device to the list of devices to be polled at the problem interval.

Output devices with which the server has not established, or has lost, SNMP communication, are polled at the normal interval, not the problem interval.

Set a value of **0** to disable normal polling.

snmp-problem-poll-interval

This **resettable, single-valued** attribute indicates the number of seconds that the server should wait between polling output devices that use SNMP and that are known to have a problem.

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

Default Value: 60

Usage Guidelines

When problem polling finds that an output device no longer has a problem, Infoprint reenables the actual destination if necessary and transfers the device to the list of devices to be polled at the normal interval. To prevent Infoprint from reenabling the actual destination, manually disable it.

Output devices with which the server has not established, or has lost, SNMP communication, are polled at the normal interval, not the problem interval.

Set a value of **0** to disable problem polling.

transfer-methods-supported

This **non-settable, multi-valued** attribute identifies the transfer methods that this server supports.

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

pipe-pull
with-request

Default Values: **pipe-pull**, **with-request**

Usage Guidelines: Infoprint compares the document attribute **transfer-method** to this attribute for validation.