
IBM Infoprint Manager Linux client

This section describes the installation, configuration, and use of the IBM Infoprint Manager Linux client.

Using the Infoprint Manager Linux client

The IBM Infoprint Manager Linux client enables users of Linux on Intel-based machines to issue Infoprint commands over a TCP/IP-connected network to an Infoprint Manager for AIX or an Infoprint Manager for Windows server. Using a UNIX command line or shell script, you can query server, printer, and print job status; change the state of a server, printer, or print job; create, delete, or reorder a print job on the server. "Commands you can use from the Infoprint Linux client" on page 2 provides a complete list of Infoprint commands available on the command line.

Note: The Infoprint Manager Linux client was built on a RedHat Linux 7.3 system and tested on RedHat Linux 7.3, RedHat Linux 9.0, and SuSe Linux 8.2. The Infoprint Manager Linux client requires library `libstdc++-libc6.2-2.so.3`.

Installing the IBM Infoprint Manager Linux client

To install the IBM Infoprint Manager Linux client, follow these steps:

1. Log onto the Linux system as **root**.
2. If you are installing from the Infoprint Manager Common Clients CD:
 - a. Insert the CD into the drive.
 - b. Mount the file system by typing:

```
mount /mnt/cdrom
```
 - c. Type:

```
cd /mnt/cdrom/linux
```
 - d. Install the Linux Client package by typing:

```
rpm -i ipr-cmd-1.0-0.i386.rpm
```
 - e. Unmount the file system.
 - f. Remove the CD-ROM.
3. If you are installing from the Web:
 - a. Download the Linux Client package.
 - b. Install the Linux client package by typing:

```
rpm -i ipr-cmd-1.0-0.i386.rpm
```
4. The following environment variables must be set for the Infoprint Manager client to work. The install process puts two shell configuration files (`ipr-cmd.csh` and `ipr-cmd.sh`) in the `/etc/profile.d` directory to set them. Edit these files and provide values for:
 - PDHOST**
The name of the host where the Infoprint Manager server resides.
 - PD_SOCKET**
The TCP/IP socket number of the port for the Infoprint Manager server. The default socket is **6874**. Use **6874** unless your system has been specifically set up differently or you have more than one Infoprint Manager server running on the host.

PDPRINTER (optional)

The default logical destination in the Infoprint Manager server that you want to use. The commands use this value if you do not specify a logical destination on the command line.

Note: Users can override these settings with their own settings.

5. Test the system:
 - a. Log off and log back on to pickup the changes.
 - b. Issue one of the commands, followed by the **-h** flag to display the syntax of that command and verify the installation.

For example:

```
pdls -h
```

Uninstalling the Linux client

1. Log in as **root**.
2. Type:

```
rpm -e ipr-cmd-1.0-0
```

Commands you can use from the Infoprint Linux client

This client supports the following Infoprint Manager commands:

pdaccount	Collects summary accounting information for a specified time period in a comma delimited format about actual destinations on one or more servers. This information can be filed and imported into a spread sheet to calculate the cost of consumables, the usage rate of printers, the cost for each user, and so forth.
pdclean	Removes all jobs from a server, logical destination, queue, or actual destination.
pdcreate	Creates logical destinations, queues, actual destinations, default jobs, default documents, media, auxiliary sheets, and resource contexts.
pddelete	Deletes servers, logical destinations, queues, actual destinations, default jobs, default documents, media, auxiliary sheets, resource contexts, and jobs.
pddisable	Prevents destinations from accepting jobs and logs from logging.
pdenable	Enables destinations to accept jobs and logs to log.
pdls	Lists selected attribute values for a job, destination, or other Infoprint object.
pdmod	Modifies the attributes of submitted jobs or of the documents in them.
pdpause	Pauses a job, actual destination, queue, or all the queues and actual destinations in a server.
pdpr	Submits a job to a logical destination.
pdpromote	Advances a job to the head of the queue.
pdq	Queries the status of selected jobs, of all jobs submitted to a logical destination, or of all jobs assigned to an actual destination.
pdreorder	Reassigns a job to an actual destination or to the unassigned jobs

area in the same server or in another server, and allows you to schedule it immediately before or after another job.

pdresubmit	Resubmits a job, all the jobs submitted to a logical destination, or all the jobs in a queue to another logical destination.
pdresume	Enables paused objects to resume operation.
pdrm	Deletes jobs
pdset	Sets or changes the values of attributes that describe Infoprint objects.
pdshutdown	Stops servers or actual destinations.
pdspace	Backspaces or forward spaces a PSF physical printer.

Note: For more information about Infoprint commands and attributes, refer to *Infoprint Manager: Reference*. You can also specify *commandname -h* to access help on each command.

Security Considerations

Access to the Infoprint Manager server and to the Infoprint Manager commands is controlled on the system where the server is installed. If you are using Infoprint Manager for AIX and your Infoprint Manager server uses DCE security, you can only use the **pdpr**, **pdl**s, and **pdq** commands. Otherwise, for information about providing access, refer to the following books:

- *Infoprint Manager for AIX: Procedures*, G544-5815
- *Infoprint Manager for Windows: Procedures*, G544-5814

Note: These books can be found in the product library at <http://www.ibm.com/printers/ipmaixlib> for Infoprint Manager for AIX or <http://www.ibm.com/printers/ipmwinlib> for Infoprint Manager for Windows.

National Language Support Considerations

Infoprint Manager servers are available in the following languages:

- English
- French
- German
- Italian
- Japanese
- Spanish

You should associate (using PDHOST and PD_SOCKET) the Linux client with an Infoprint Server running in your language. If you are running in a language not listed in this section, associate the Linux client with an Infoprint Server running in English.

Examples using the Infoprint Linux client

The *Infoprint Manager: Reference* contains several examples of each command that you can issue from the Infoprint Linux client. This section contains examples using the commands to perform some common tasks.

Filtering destinations

To find a destination near you that can print two-sided PostScript jobs, enter:

```
pdls -c destination -f "destination-realization==actual &&
document-format-supported==postscript && sides-supported==2"
-r "destination-location" *:
```

The **-f** flag specifies that you want to either filter on or list only actual destinations that support PostScript format and two-sided printing.

The **-r** flag specifies that you want to request where the actual destinations reside.

The asterisk means that you want to check every server.

The blank after the colon means that you want to check every destination in every server.

Infoprint returns information similar to the following:

```
caxton: destination-location = 3rd floor E
elzevir: destination-location =
morris: destination-location = 1st floor W
```

You decide to print your job on `morris`. To determine a logical destination that routes jobs to `morris`, enter:

```
pdls -c destination -f "destination-associated-destinations==morris" &&
destination-realization==logical *:
```

Querying destination attributes

To determine whether `morris` is ready to receive jobs, enter:

```
pdls -c destination morris
```

The `enabled` and `destination-state` values indicate whether `morris` is ready to receive jobs.

Submitting a print job

To submit the file `myjob` to the logical destination `london`, requesting two-sided printing on the actual destination `morris`, enter:

```
pdpr -d london -x "destination-name-requested=morris sides=2" myjob
```

Submitting a fax job

To submit the cover sheet `faxcover` and the file `Memo1` to the logical destination `faxout` for transmission to fax number 1-709-123-4567, enter:

```
pdpr -d faxout -x "fax-number=17091234567 document-type=cover-sheet"
-f faxcover -x "document-type=printable" Memo1
```

Querying jobs

To list all the jobs that you submitted to logical destination `london`, enter:

```
pdq -d london
```

Infoprint Manager returns information similar to the following:

Job ID	Name	Intervening State	Destination Jobs	Destination Requested	Destination Assigned
13	Serv1:1104221000	printing	0	london	caxton
14	Serv1:1104221023	pending	8	london	morris

Modifying job attributes

After submitting `myjob`, you decide that you want to print two copies and that you want to retain it for one hour after it prints. When you queried the jobs submitted

to london, you saw that the local **Job ID** is **14** and that the job is still pending, so it can be modified. To change the number of copies to two and add a retention period of one hour, enter:

```
pdmod -n 2 -x "job-retention-period=1:00" 14
```

Modifying destination attributes

To restrict the Printer3 actual destination so that it does not accept very large jobs, complete the following:

1. Before you can modify the attributes of the Printer3 actual destination, you must disable it by entering the following:

```
pddisable Printer3
```

2. To specify a new maximum job size of 5 meg for Printer3, enter:

```
pdset -c destination -x "job-size-range-ready=0:500000" Printer3
```

3. To reenable the actual destination, enter:

```
pdenable Printer3
```

Shutting down an actual destination

The printer device represented by the actual destination caxton is out of order. To shut down caxton until the printer device can be repaired and to associate a message with caxton, enter:

```
pdshutdown -c destination -m "Service called Tuesday at 3PM" caxton
```

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