48a - Drucken (BSD)(Drucker am Parallel Port)

Packet lprold Serie n

`lpr [-P`*`Gruckerschlange`*`] `*`Datei`*

`lpq -l [-P`*`Gruckerschlange`*`]`

`lprm [-P`*`Gruckerschlange`*`] [`*`JobNummer`*`] [`*`Benutzer`*`]`

`lpc status`

`mit YaST: Administration des Systems -`

Hardware in System integrieren - Drucker konfigurieren

Ghostscript, apsfilter Datei `/etc/printcap`

lprsetup:

ENTRY	Add/Overwrite/Delete an apsfilter entry
DEVICE	Which printer interface
PARALLEL	Parallel printer interface -> /dev/lp0 (Port 1)
PRINTER	Which printer driver -> POSTCRIPT oder OTHER
PAPER	Which paper type -> a4
COLOR	Monochrome/colorfull -> MONO Mono printer
ADD	add the printer definition

48b - Drucken im Netzwerk

Auf dem Server: Rechnername des Clients in der Datei /etc/hosts.lpd einfügen

Auf dem Client: Befehl lrpsetup aufrufen:

ENTRY	Add/Overwrite/Delete an apsfilter entry
DEVICE	Which printer interface
REMOTE	Printer forwarding queue
What's the host name of your remote printer?	*Rechnername*
What's the name of your remote printer?	*Druckername (lp)*
ADD	add the printer definition

DEVICE	Which printer interface
PREFILTER	To another queue (bypass)
remote	remote=*Rechnername* queue=*Druckername* -> OK
PRINTER	Which printer driver -> POSTCRIPT oder OTHER
PAPER	Which paper type -> a4
COLOR	Monochrome/colorfull -> MONO Mono printer
ADD	add the printer definition

`lpr -Pascii` (oder wahrscheinlich lp2) *Dateiname*

CUPS Printer Driver Installation(SuSE)

Server and Client installation

1 - Kill the Daemon : **lpd** and deinstall the **lprold/lprng** using YaST on CD/DVD.

2 - Install the following cups software from the SuSE CD:

```
cups
cups-client
cups-drivers
cups-drivers-stp
cups-libs
```

3 - Edit the file: `/etc/cups/cupsd.conf` and change the following lines for the proper local network addresses:

```
BrowseAddress 192.168.100.255
BrowsePoll 192.168.100.233:631
BrowsePoll 192.168.100.133:631
<Location />
  Order Deny,Allow
  Deny From All
  #Allow From 127.0.0.1
  Allow from 192.168.100.0/24
</Location>
```

4 - **Add a printer name for each printer connected on the server via the browser:**

`http://localhost:631`

or via `lpadmin` program:

```
/usr/lib/lpadmin -p <MyPrinterName> \
                 -m <printername.ppd> -v parallel:/dev/lp0 -E
```

<MyPrinterName>	is any name you want to give this queue
<printername.ppd>	is the name of the ppd file for your printer.
<parallel:/dev/lp0>	is the physical location:/device of the printer

----------ON Client(s) only----------

5 - Edit the file: **`/etc/cups/clients.conf`** and add the following line:

`ServerName <servername.domain>`

<servername.domain>	is FQDN name or IP of the CUPS server.

6 - Execute the following command:

`/etc/init.d/cups restart` or `rccups restart`

Administration and status of Print Queues

Prints the file to the default print queue.
`lpr filename` or `lp filename`

Prints the file to the specific print queue.
`lpr -Pprintqueue filename` **or** `lp -o Printername filename`

Displays the current full status of all available printers and their print queues.
`lpc status`
or `lpstat -t`

Displays all printer drivers available to cups:
`lpinfo -m`

Displays the current default print queue status.
`lpstat -p`
eg. printer laserjet is idle.

Displays the current default print queue.
`lpstat -d printqueue`
eg. system default destination: `laserjet`

Dispalys the list of current print queues and their attributes
`lpq [-Pprintqueue] (no arguments defaults to default queue)`

eg.

Rank	Pri	Owner	Job	Files	Total Size
active	50	root	8	(stdin)	49152 bytes

Removes a print job (cancels) from the default print queue
`lprm jobNr.` or `cancel jobNr.`

Removes a print job (cancels) from a specific print queue.
`lprm -P printqueue jobNr.` or
`cancel -d printqueue jobNr.`

Cancels all print jobs of default print queue
`cancel -a`

Accepts jobs to a print queue
`accept printqueue`
Note: This print queue status is written to the file `/etc/cups/printers.conf`

Rejects jobs from being sent to the print queue
`reject printqueue`
Note: This print queue status is written to the file `/etc/cups/printers.conf`

Enables the printer to print from queue
`/usr/bin/enable printqueue`
Note: This print queue status is written to the file `/etc/cups/printers.conf`

Disables the printer from printing from queue
`/usr/bin/disable printqueue`
Note: This print queue status is written to the file /etc/cups/printers.conf

Very good CUPS Graphic interfaces:

`kups` - To configure CUPS Printers
`qtcups` or `kprinter` - To print documents
and `gtklp`
eg. replace the command

```
lp -d document      by
gtklp document      or
kprinter  --stdin
```

Extra information and tips

Printer resolution:
The printer resolution and page size need to be changed by editing the .ppd file of the installed printer in `/etc/cups/ppd/` directory. If the ppd files contained in the /usr/share/cups/model/ are also changed, it will affect only the future printer queues installed

The change is done by changing the value of the lines:
(Example taken from `/etc/cups/ppd/laserjet.ppd`)

Around line 61 *DefaultPageSize: A4
" line 79 *DefaultPageRegion: A4
" line 128 *DefaultResolution: 600dpi

Printer Drivers are available for CUPS and LPRng, LPD, etc from :
`http://www.linuxprinting.org/show_driver.cgi?driver=stp`
Instructions:

1 - Get the PPD file from this above address using the PPD-O-Matic and save it in the directory:
`/usr/share/cups/model/`

2 - Get the cupsomatic '`foomatic-current.tar.gz`' from:
`http://www.linuxprinting.org/download/foomatic/`
and after unpacking, save the file `cupsomatic` in:
`/usr/lib/cups/filter/`
make it `chmod 755`

Help and print queues status:
To view the full users/administrators manual as well as all the printers, print queues and print jobs status from any host via a browser use the following URL in browser:

http://*printservername*:631

Files locations created automatically during installation:

```
/etc/init.d/cups              - Script to start/stop CUPS
/etc/rc.d/cups                - Link to /etc/init.d/cups
/etc/rc.d/rc3.d/S12cups       - Link to /etc/init.d/cups
/etc/rc.d/rc3.d/K12cups       - Link to /etc/init.d/cups
/usr/sbin/rccups  - Link to /etc/software/init.d/cups
/usr/share/cups
```

Broadcasting the Print server services to other networks:

Edit the file /var/cups/conf/cupsd.conf and at around line 254 add the following network broadcasting address for every network you want to offer the print services to:

eg.
The Cups print server has one Ethernet card at address 192.168.10.20
and the following networks are connected via routers to this card

```
192.168.11.0  192.168.12.0
```

To give access to the server's printer from these other networks enter the following lines:

```
BrowseAddress 192.168.10.255    (broadcast to its own network)
BrowseAddress 192.168.11.255    (broadcast to foreign network 11.x)
BrowseAddress 192.168.12.255    (broadcast to foreign network 12.x)
```

lpadmin

22 September 1999 Common UNIX Printing System

NAME

lpadmin - configure cups printers and classes

SYNOPSIS

lpadmin [-h server] -d destination
lpadmin [-h server] -p printer option(s)
lpadmin [-h server] -x destination

DESCRIPTION

lpadmin configures printer and class queues provided by CUPS. It can also be used to set the system default printer or class.

The first form of the command sets the default printer or class to destination. Subsequent print jobs submitted via the **lp**(1) or **lpr**(1) commands will use this destination unless the user specifies otherwise.

The second form of the command configures the named printer. The additional options are described below.

The third form of the command deletes the printer or class destination. Any jobs that are pending for the destina tion will be removed and any job that is currently printed will be aborted.

CONFIGURATION OPTIONS

The following options are recognized when configuring a printer queue:

-c *class*
Adds the named printer to class. If class does not exist it is created automatically.

-i *interface*
Sets a System V style interface script for the printer. This option cannot be specified with the -P option (PPD file) and is intended for providing sup port for legacy printer drivers.

-m *model*
Sets a standard System V interface script or PPD file from the model directory.

-r *class*
Removes the named printer from class. If the result ing class becomes empty it is removed.

-v *device-uri*
Sets the device-uri attribute of the printer queue. If device-uri is a filename it is automatically con verted to the form file:/file/name.

-D *info*
Provides a textual description of the printer.

-E
Enables the printer and accepts jobs; this is the same as running the accept(8) and enable(8) programs on the printer.

-L *location*
Provides a textual location of the printer.

-P *ppd-file*
Specifies a PostScript Printer Description file to use with the printer. If specified, this option over rides the -i option (interface script).

COMPATIBILITY

Unlike the System V printing system, CUPS allows printer names to contain any printable character except SPACE and TAB. Also, printer and class names are not case-sensitive. Finally, the CUPS version of lpadmin may ask the user for an access password depending on the printing system con figuration. This differs from the System V version which requires the root user to execute this command.

LIMITATIONS

The CUPS version of lpadmin does not support all of the System V or Solaris printing system configuration options.

SEE ALSO

accept(8), cancel(1), disable(8), enable(8), lp(1), lpstat(1), reject(8), CUPS Software Administrators Manual

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lpr

NAME

lpr - print files

SYNOPSIS

lpr [-P destination] [-# num-copies [-l] [-o option] [-p] [-r] [-C/J/T title] [file(s)]

DESCRIPTION

lpr submits files for printing. Files named on the command line are sent to the named printer (or the system default destination if no destination is specified). If no files are listed on the command-line lpr reads the print file from the standard input.

OPTIONS

The following options are recognized by **lpr**:

-P *destination*
Prints files to the named printer.

-# *copies*
Sets the number of copies to print from 1 to 100.

-C *name*
Sets the job name.

-J *name*
Sets the job name.

-T *name*
Sets the job name.

-l
Specifies that the print file is already formatted for the destination and should be sent without filtering. This option is equivalent to "-oraw".

-o *option*
Sets a job option.

-p
Specifies that the print file should be formatted with a shaded header with the date, time, job name, and page number. This option is equivalent to "-oprettyprint" and is only useful when printing text files.

-r
Specifies that the named print files should be deleted after printing them.

COMPATIBILITY

The "c", "d", "f", "g", "i", "m", "n", "t", "v", and "w" options are not supported by CUPS and will produce a warning message if used.

SEE ALSO

cancel(1), lp(1), lpstat(1), CUPS Software Users Manual

lpstat

NAME

lpstat - print cups status information

SYNOPSIS

lpstat [-a [destination(s)]] [-c [class(es)]] [-d] [-h server] [-o [destination(s)]] [-p [printer(s)]] [-r] [-s] [-t] [-u [user(s)]] [-v [printer(s)]]

DESCRIPTION

lpstat displays status information about the current classes, jobs, and printers.
When run with no arguments, l**pstat** will list jobs queued by the user. Other options include:

-a [printer(s)]
Shows the accepting state of printer queues.
If no printers are specified then all printers are listed.

-c [class(es)]
Shows the printer classes and the printers that belong to them.
If no classes are specified then all classes are listed.

-d
Shows the current default destination.

-h server
Specifies the CUPS server to communicate with.

-o [destination(s)]
Shows the jobs queue on the specified destinations.
If no destinations are specified all jobs are shown.

-p [printer(s)]
Shows the printers and whether or not they are enabled for printing.
If no printers are specified then all printers are listed.

-r
Shows whether or not the CUPS server is running.

-s
Shows a status summary, including the system default destination, a list of classes and their member printers, and a list of printers and their associated devices. This is equivalent to using the "**-d**", "**-c**", and "**-p**" options.

-t
Shows all status information.
This is equivalent to using the "-r", "-d", "-c", "-d", "-v", "-a", "-p", and "-o" options.

-u [user(s)]
Shows a list of print jobs queued by the specified users. If no users are specified, lists the jobs queued by the current user.

-v [printer(s)]
Shows the printers and what device they are attached to. If no printers are specified then all printers are listed.

COMPATIBILITY

Unlike the System V printing system, CUPS allows printer

names to contain any printable character except SPACE and TAB. Also, printer and class names are not case-sensitive.

The "**-h**" option is not a standard System V option.

SEE ALSO

cancel(1), lp(1), CUPS Software Users Manual

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lpc

NAME

lpc - line printer control program

SYNOPSIS

lpc [command [parameter(s)]]

DESCRIPTION

lpc provides limited control over printer and class queues provided by CUPS. It can also be used to query the state of queues.

If no command is specified on the command-line, **lpc** will display a prompt and accept commands from the standard input.

COMMANDS

The lpc program accepts a subset of commands accepted by the Berkeley **lpc** program of the same name:

exit
Exits the command interpreter.

help [command]
Displays a short help message.

quit
Exits the command interpreter.

status [queue]
Displays the status of one or more printer or class queues.

? [command]
Display a short help message.

LIMITATIONS

Since **lpc** is geared towards the Berkeley printing system, it is impossible to use **lpc** to configure printer or class queues provided by CUPS. To configure printer or class queues you must use the lpadmin(8) command or another CUPS-compatible client with that functionality.

COMPATIBILITY

The CUPS version of lpc does not implement all of the standard Berkeley commands.

SEE ALSO

accept(8), cancel(1), disable(8), enable(8), lp(1), lpr(1), lprm(1), lpstat(1), reject(8), CUPS Software Administrators Manual

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lpq

NAME

lpq - show printer queue status

SYNOPSIS

lpq [-P dest] [-l] [+interval]

DESCRIPTION

lpq shows the current print queue status on the named printer. Jobs queued on the default destination will be shown if no printer or class is specified on the command-line.

The interval option allows you to continuously report the jobs in the queue until the queue is empty; the list of jobs is show one every interval seconds.

The **-l** option requests a more verbose reporting format.

SEE ALSO

cancel(1), lp(1), lpr(1), lprm(1), lpstat(1)
CUPS Software Users Manual

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accept / reject

NAME

accept/reject - accept/reject jobs sent to a destination

SYNOPSIS

accept destination(s)
reject [-h server] [-r [reason]] destination(s)

DESCRIPTION

accept instructs the printing system to accept print jobs to the specified destinations.

reject instructs the printing system to reject print jobs to the specified destinations. The -r option sets the rea son for rejecting print jobs. If not specified the reason defaults to "Reason Unknown".

COMPATIBILITY

The CUPS versions of accept and reject may ask the user for an access password depending on the printing system configuration. This differs from the System V versions which require the root user to execute these commands.

SEE ALSO

cancel(1), disable(8), enable(8), lp(1), lpadmin(8), lpstat(1), CUPS Software Administrators Manual

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lp / cancel

NAME

lp - print files
cancel - cancel jobs

SYNOPSIS

lp [-c] [-d destination] [-h server] [-m] [-n num-copies [-o option] [-p/q priority] [-s] [-t title] [file(s)]
cancel [-a] [-h server] [id] [destination] [destination-id]

DESCRIPTION

lp submits files for printing.

cancel cancels existing print jobs. The **-a** option will remove all jobs from the specified destination.

OPTIONS

The following options are recognized by lp:

-d destination
Prints files to the named printer.

-h hostname
Specifies the print server hostname. The default is "localhost" or the value of the CUPS_SERVER environment variable.

-m
Send email when the job is completed (ignored in CUPS 1.0.)

-n copies
Sets the number of copies to print from 1 to 100.

-o option
Sets a job option.

-p/q priority
Sets the job priority from 1 (lowest) to 100 (highest). The default priority is 50.

-s
Do not report the resulting job IDs (silent mode.)

-t name
Sets the job name.

COMPATIBILITY

Unlike the System V printing system, CUPS allows printer names to contain any printable character except SPACE and TAB. Also, printer and class names are not case-sensitive.

The "**m**" option is not functional in CUPS 1.0.

lprm

NAME

lprm - cancel print jobs

SYNOPSIS

lprm [-] [-P destination] [job ID(s)]

DESCRIPTION

lprm cancels print jobs that have been queued for printing. The **-P** option specifies the destination printer or class.

If no arguments are supplied, the current job on the default destination is cancelled. You can specify one or more job ID numbers to cancel those jobs, or use the **-** option to cancel all jobs.

COMPATIBILITY

The CUPS version of lprm is compatible with the standard Berkeley lprm command.

SEE ALSO

cancel(1), lp(1), lpstat(1), lpr(1), CUPS Software Users Manual

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disable / enable

NAME

disable, **enable** - stop/start printers and classes

SYNOPSIS

disable [-c] [-h server] [-r [reason]] destination(s)
enable destination(s)

DESCRIPTION

enable starts the named printers or classes.

disable stops the named printers or classes. The following options may be used:

-c
Cancels all jobs on the named destination.

-r [reason]
Sets the message associated with the stopped state. If no reason is specified then the message is set to "Reason Unknown".

COMPATIBILITY

The CUPS versions of disable and enable may ask the user for an access password depending on the printing system configuration. This differs from the System V versions which require the root user to execute these commands.

SEE ALSO

accept(8), cancel(1), lp(1), lpadmin(8), lpstat(1), reject(8), CUPS Software Administrators Manual

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