

NAME

filter – cups file conversion filter interface

SYNOPSIS

filter job user title num-copies options [*filename*]

DESCRIPTION

The CUPS filter interface provides a standard method for adding support for new document types to CUPS. Each filter is capable of converting from one or more input formats to another format that can either be printed directly or piped into another filter to get it to a printable format.

Filters **must** be capable of reading from a filename on the command-line or from the standard input, copying the standard input to a temporary file as required by the file format. All output **must** be sent to the standard output.

The command name (argv[0]) is set to the name of the destination printer but is also available in the PRINTER environment variable.

OPTIONS

Options passed on the command-line typically do not include the default choices the printer's PPD file. In addition, some options may be specified in multiple ways - "landscape" is a synonym for "orientation-requested=4", "media" is a synonym for "PageSize", "PageRegion", "InputSlot", and "MediaType", and "sides" is a synonym for the various "Duplex" options. Non-raster filters **must** support both explicit and implicit specification of PPD options - use the `ppdMarkDefaults` and `cupsMarkOptions` functions in the CUPS library to use the correct mapping, and `ppdFindMarkedChoice` to get the user-selected choice.

Raster filters should use option choices set through the raster page header, as those reflect the options in effect for a given page. Options specified on the command-line determine the default values for the entire job, which can be overridden on a per-page basis.

LOG MESSAGES

Messages sent to stderr are generally logged to printer-state-message attribute and the current *ErrorLog*. Each line begins with a standard prefix:

ALERT: message

Sets the printer-state-message attribute and adds the specified message to the current *ErrorLog* using the "alert" log level.

ATTR: attribute=value [attribute=value]

Sets the named job attribute(s). Typically this will be used to set the job-remote-id attribute.

CRIT: message

Sets the printer-state-message attribute and adds the specified message to the current *ErrorLog* using the "critical" log level.

DEBUG: message

Sets the printer-state-message attribute and adds the specified message to the current *ErrorLog* using the "debug" log level.

DEBUG2: message

Sets the printer-state-message attribute and adds the specified message to the current *ErrorLog* using the "debug2" log level.

EMERG: message

Sets the printer-state-message attribute and adds the specified message to the current *ErrorLog* using the "emergency" log level.

ERROR: message

Sets the printer-state-message attribute and adds the specified message to the current *ErrorLog* using the "error" log level.

INFO: message

Sets the printer-state-message attribute. If the current *LogLevel* is set to "debug2", also adds the specified message to the current *ErrorLog* using the "info" log level.

NOTICE: message

Sets the printer-state-message attribute and adds the specified message to the current *ErrorLog* using the "notice" log level.

PAGE: page-number #-copies**PAGE: total #-pages**

Adds an entry to the current *PageLog*. The first form adds #-copies to the job-media-sheets-completed attribute. The second form sets the job-media-sheets-completed attribute to #-pages.

PPD: Keyword=Value ... KeywordN=Value

Sets the named keywords in the printer's PPD file. This is typically used to update default option keywords such as *DefaultPageSize* and the various installable options in the PPD file.

STATE: printer-state-reason [printer-state-reason ...]**STATE: + printer-state-reason [printer-state-reason ...]****STATE: - printer-state-reason [printer-state-reason ...]**

Sets, adds, or removes printer-state-reason keywords to the current queue. Typically this is used to indicate media, ink, and toner conditions on a printer.

WARNING: message

Sets the printer-state-message attribute and adds the specified message to the current *ErrorLog* using the "warning" log level.

ENVIRONMENT VARIABLES

The following environment variables are defined by the CUPS server when executing the filter:

CHARSET

The default text character set, typically utf-8.

CLASS

When a job is submitted to a printer class, contains the name of the destination printer class. Otherwise this environment variable will not be set.

CONTENT_TYPE

The MIME type associated with the file (e.g. application/postscript).

CUPS_CACHEDIR

The directory for semi-persistent cache files can be found.

CUPS_DATADIR

The directory where data files can be found.

CUPS_FILETYPE

The type of file being printed: "job-sheet" for a banner page and "document" for a regular print file.

CUPS_SERVERROOT

The root directory of the server.

DEVICE_URI

The device-uri associated with the printer.

FINAL_CONTENT_TYPE

The MIME type associated with the printer (e.g. application/vnd.cups-postscript).

LANG

The default language locale (typically C or en).

PATH

The standard execution path for external programs that may be run by the filter.

PPD

The full pathname of the PostScript Printer Description (PPD) file for this printer.

PRINTER

The name of the printer.

RIP_CACHE

The recommended amount of memory to use for Raster Image Processors (RIPs).

SOFTWARE

The name and version number of the server (typically CUPS/1.2).

TZ

The timezone of the server.

USER

The user executing the filter, typically "lp" or "root"; consult the *cupsd.conf*(5) file for the current setting.

COMPATIBILITY

While the filter interface is compatible with System V interface scripts, it will only work with the System V interface script as the only filter. Typically the interface script will be provided via the *lpadmin*(8) command using the *-i* option.

SEE ALSO

backend(7), *cupsd(8)*,
<http://localhost:631/help>

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