

NAME

cupsd-logs – cupsd log files (access_log, error_log, and page_log)

DESCRIPTION

cupsd(8) normally maintains three log files: *access_log* to track requests that are submitted to the scheduler, *error_log* to track progress and errors, and *page_log* to track pages that are printed. Configuration directives in **cupsd.conf**(5) and **cups-files.conf**(5) control what information is logged and where it is stored.

ACCESS LOG FILE FORMAT

The *access_log* file lists each HTTP resource that is accessed by a web browser or client. Each line is in an extended version of the so-called "Common Log Format" used by many web servers and web reporting tools:

```
host group user date-time "method resource version" status bytes
 ipp-operation ipp-status
```

For example:

```
10.0.1.2 - - [01/Dec/2005:21:50:28 +0000] "POST / HTTP/1.1" 200 317
  CUPS-Get-Printers successful-ok-ignored-or-substituted-attributes
localhost - - [01/Dec/2005:21:50:32 +0000] "GET /admin HTTP/1.1"
 200 0 - -
localhost - - [01/Dec/2005:21:50:32 +0000] "POST / HTTP/1.1"
 200 157 CUPS-Get-Printers
  successful-ok-ignored-or-substituted-attributes
localhost - - [01/Dec/2005:21:50:32 +0000] "POST / HTTP/1.1"
 200 1411 CUPS-Get-Devices -
localhost - - [01/Dec/2005:21:50:32 +0000] "GET /admin HTTP/1.1"
 200 6667 - -
```

The *host* field will normally only be an IP address unless you have enabled the `HostNameLookups` directive in the *cupsd.conf* file or if the IP address corresponds to your local machine.

The *group* field always contains "-".

The *user* field is the authenticated username of the requesting user. If no username and password is supplied for the request then this field contains "-".

The *date-time* field is the date and time of the request in local time and is in the format "[DD/MON/YYYY:HH:MM:SS +ZZZZ]".

The *method* field is the HTTP method used: "GET", "HEAD", "OPTIONS", "POST", or "PUT". "GET" requests are used to get files from the server, both for the web interface and to get configuration and log files. "HEAD" requests are used to get information about a resource prior to a "GET". "OPTIONS" requests are used to upgrade connections to TLS encryption. "POST" requests are used for web interface forms and IPP requests. "PUT" requests are used to upload configuration files.

The *resource* field is the filename of the requested resource.

The *version* field is the HTTP specification version used by the client. For CUPS clients this will always be "HTTP/1.1".

The *status* field contains the HTTP result status of the request, as follows:

```
200 Successful operation.
201 File created/modified successfully.
304 The requested file has not changed.
```

- 400 Bad HTTP request; typically this means that you have a malicious program trying to access your server.
- 401 Unauthorized, authentication (username + password) is required.
- 403 Access is forbidden; typically this means that a client tried to access a file or resource they do not have permission to access.
- 404 The file or resource does not exist.
- 405 URL access method is not allowed; typically this means you have a web browser using your server as a proxy.
- 413 Request too large; typically this means that a client tried to print a file larger than the MaxRequestSize allows.
- 426 Upgrading to TLS-encrypted connection.
- 500 Server error; typically this happens when the server is unable to open/create a file - consult the error_log file for details.
- 501 The client requested encryption but encryption support is not enabled/compiled in.
- 505 HTTP version number not supported; typically this means that you have a malicious program trying to access your server.

The *bytes* field contains the number of bytes in the request. For POST requests the bytes field contains the number of bytes of non-IPP data that is received from the client.

The *ipp-operation* field contains either "-" for non-IPP requests or the IPP operation name for POST requests containing an IPP request.

The *ipp-status* field contains either "-" for non-IPP requests or the IPP status code name for POST requests containing an IPP response.

ERROR LOG FILE FORMAT

The *error_log* file lists messages from the scheduler - errors, warnings, etc. The LogLevel directive in the **cupsd.conf(5)** file controls which messages are logged:

level date-time message

For example:

```
I [20/May/1999:19:18:28 +0000] [Job 1] Queued on 'DeskJet' by 'mike'.
D [20/May/1999:19:18:28 +0000] [Job 1] argv[0]="DeskJet"
D [20/May/1999:19:18:28 +0000] [Job 1] argv[1]="1"
D [20/May/1999:19:18:28 +0000] [Job 1] argv[2]="mike"
D [20/May/1999:19:18:28 +0000] [Job 1] argv[3]="myjob"
D [20/May/1999:19:18:28 +0000] [Job 1] argv[4]="1"
D [20/May/1999:19:18:28 +0000] [Job 1] argv[5]="media=
na_letter_8.5x11in sides=one-sided"
D [20/May/1999:19:18:28 +0000] [Job 1] argv[6]="/var/spool/cups/
d000001-001"
I [20/May/1999:19:21:02 +0000] [Job 2] Queued on 'DeskJet' by 'mike'.
I [20/May/1999:19:22:24 +0000] [Job 2] Canceled by 'mike'.
```

The *level* field contains the type of message:

- A Alert message (LogLevel alert)
- C Critical error message (LogLevel crit)

- D Debugging message (LogLevel debug)
- d Detailed debugging message (LogLevel debug2)
- E Normal error message (LogLevel error)
- I Informational message (LogLevel info)
- N Notice message (LogLevel notice)
- W Warning message (LogLevel warn)
- X Emergency error message (LogLevel emerg)

The *date-time* field contains the date and time of when the page started printing. The format of this field is identical to the data-time field in the *access_log* file.

The *message* field contains a free-form textual message. Messages from job filters are prefixed with "[Job NNN]" where "NNN" is the job ID.

PAGE LOG FILE FORMAT

The *page_log* file lists the total number of pages (sheets) that are printed. By default, each line contains the following information:

```
printer user job-id date-time total num-sheets job-billing
job-originating-host-name job-name media sides
```

For example the entry for a two page job called "myjob" might look like:

```
DeskJet root 1 [20/May/1999:19:21:06 +0000] total 2 acme-123
localhost myjob na_letter_8.5x11in one-sided
```

The PageLogFormat directive in the **cupsd.conf(5)** file can be used to change this information.

The *printer* field contains the name of the printer that printed the page. If you send a job to a printer class, this field will contain the name of the printer that was assigned the job.

The *user* field contains the name of the user (the IPP requesting-user-name attribute) that submitted this file for printing.

The *job-id* field contains the job number of the page being printed.

The *date-time* field contains the date and time of when the page started printing. The format of this field is identical to the data-time field in the *access_log* file.

The *num-sheets* field provides the total number of pages (sheets) that have been printed on for the job.

The *job-billing* field contains a copy of the job-billing or job-account-id attributes provided with the IPP Create-Job or Print-Job requests or "-" if neither was provided.

The *job-originating-host-name* field contains the hostname or IP address of the client that printed the job.

The *job-name* field contains a copy of the job-name attribute provided with the IPP Create-Job or Print-Job requests or "-" if none was provided.

The *media* field contains a copy of the media or media-col/media-size attribute provided with the IPP Create-Job or Print-Job requests or "-" if none was provided.

The *sides* field contains a copy of the sides attribute provided with the IPP Create-Job or Print-Job requests or "-" if none was provided.

SEE ALSO

cupsd(8), **cupsd.conf(5)**, **cups-files.conf(5)**, CUPS Online Help (<http://localhost:631/help>)

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