

NAME

debuginfod-client-config – debuginfod client environment variables, cache control files and etc.

SYNOPSIS

Several environment variables and control files control the behaviour of debuginfod client applications.

The following information is generic. Some debuginfod clients may internally override defaults listed here.

ENVIRONMENT VARIABLES

\$TMPDIR

This environment variable points to a file system to be used for temporary files. The default is /tmp.

\$DEBUGINFOD_URLS

This environment variable contains a list of URL prefixes for trusted debuginfod instances. Alternate URL prefixes are separated by space. This environment variable may be set by /etc/profile.d scripts reading /etc/debuginfod/*.urls files.

This environment variable can also contain policy defining tags which dictate the response policy for verifying per-file IMA signatures in RPMs. As the space separated list is read left to right, upon encountering a tag, subsequent URLs up to the next tag will be handled using that specified policy. All URLs before the first tag will use the default policy, *ima:ignore*. For example:

```
DEBUGINFOD_URLS="https://foo.com ima:enforcing https://bar.ca http://localhost"
```

Where foo.com and baz.org use the default *ignore* policy and bar.ca and localhost use an *enforcing* policy. The policy tag may be one of the following:

ima:enforcing Every downloaded file requires a valid signature, fully protecting integrity.

ima:ignore Skips verification altogether, providing no protection.

Alerts of validation failure will be directed as specified in \$DEBUGINFOD_VERBOSE.

\$DEBUGINFOD_CACHE_PATH

This environment variable governs the location of the cache where downloaded files and cache-control files are kept. The default directory is chosen based on other environment variables, see below.

\$DEBUGINFOD_PROGRESS

This environment variable governs the default progress function. If set, and if a progressfn is not explicitly set, then the library will configure a default progressfn. This function will append a simple progress message periodically to stderr. The default is no progress function output.

\$DEBUGINFOD_VERBOSE

This environment variable governs the default file descriptor for verbose output. If set, and if a verbose fd is not explicitly set, then the verbose output will be produced on STDERR_FILENO.

\$DEBUGINFOD_RETRY_LIMIT

This environment variable governs the default limit of retry attempts. If a query failed with errno other than ENOENT, will initiate several attempts within the limit.

\$DEBUGINFOD_TIMEOUT

This environment variable governs the download *commencing* timeout for each debuginfod HTTP connection. A server that fails to provide at least 100K of data within this many seconds is skipped. The default is 90 seconds. (Zero or negative means "no timeout".)

\$DEBUGINFOD_MAXTIME

This environment variable dictates how long the client will wait to *complete* the download a file found on a server in seconds. It is best used to ensure that a file is downloaded quickly or be rejected. The default is 0 (infinite time).

\$DEBUGINFOD_MAXSIZE

This environment variable dictates the maximum size of a file to download in bytes. This is best used if the user would like to ensure only small files are downloaded. A value of 0 causes no consideration for size, and the client may attempt to download a file of any size. The default is 0 (infinite size).

\$DEBUGINFOD_HEADERS_FILE

This environment variable points to a file that supplies headers to outbound HTTP requests, one per line. The header lines shouldn't end with CRLF, unless that's the system newline convention. Whitespace-only lines are skipped.

\$DEBUGINFOD_IMA_CERT_PATH

This environment variable contains a list of absolute directory paths holding X.509 certificates for RPM per-file IMA-verification. Alternate paths are separated by colons.

CACHE

Before each query, the debuginfod client library checks for a need to clean the cache. If it's time to clean, the library traverses the cache directory and removes downloaded debuginfo-related artifacts and newly empty directories, if they have not been accessed recently.

Control files are located directly under the cache directory. They contain simple decimal numbers to set cache-related configuration parameters. If the files do not exist, the client library creates the files with the default parameter values as content.

After each query, the debuginfod client library deposits newly received files into a directory & file that is named based on the build-id. A failed query is also cached by a special file. The naming convention used for these artifacts is deliberately **undocumented**.

\$XDG_CACHE_HOME/debuginfod_client/

Default cache directory, if \$XDG_CACHE_HOME is set.

\$HOME/.cache/debuginfod_client/

Default cache directory, if \$XDG_CACHE_HOME is not set.

\$HOME/.debuginfod_client_cache/

Deprecated cache directory, used only if preexisting.

cache_clean_interval_s

This control file gives the interval between cache cleaning rounds, in seconds. The default is 86400, one day. 0 means "immediately".

max_unused_age_s

This control file sets how long unaccessed debuginfo-related files are retained, in seconds. The default is 604800, one week. 0 means "immediately".

cache_miss_s

This control file sets how long to remember a query failure, in seconds. New queries for the same artifacts within this time window are short-circuited (returning an immediate failure instead of sending a new query to servers). This accelerates queries that probably would still fail. The default is 600, 10 minutes. 0 means "forget immediately".

metadata_retention_s

This control file sets how long to remember the results of a metadata query. New queries for the same artifacts within this time window are short-circuited (repeating the same results). This accelerates queries that probably would probably have the same results. The default is 3600, 1 hour. 0 means "do not retain".