

NAME

curl_easy_getinfo - extract information from a curl handle

SYNOPSIS

```
#include <curl/curl.h>
```

```
CURLcode curl_easy_getinfo(CURL *curl, CURLINFO info, ... );
```

DESCRIPTION

Request internal information from the curl session with this function. The third argument **MUST** be a pointer to a long, a pointer to a char *, a pointer to a struct curl_slist * or a pointer to a double (as this documentation describes further down). The data pointed-to will be filled in accordingly and can be relied upon only if the function returns CURLE_OK. Use this function **AFTER** a performed transfer if you want to get transfer related data.

You should not free the memory returned by this function unless it is explicitly mentioned below.

AVAILABLE INFORMATION

The following information can be extracted:

CURLINFO_EFFECTIVE_URL

Last used URL. See *CURLINFO_EFFECTIVE_URL(3)*

CURLINFO_RESPONSE_CODE

Last received response code. See *CURLINFO_RESPONSE_CODE(3)*

CURLINFO_HTTP_CONNECTCODE

Last proxy CONNECT response code. See *CURLINFO_HTTP_CONNECTCODE(3)*

CURLINFO_FILETIME

Remote time of the retrieved document. See *CURLINFO_FILETIME(3)*

CURLINFO_TOTAL_TIME

Total time of previous transfer. See *CURLINFO_TOTAL_TIME(3)*

CURLINFO_NAMELOOKUP_TIME

Time from start until name resolving completed. See *CURLINFO_NAMELOOKUP_TIME(3)*

CURLINFO_CONNECT_TIME

Time from start until remote host or proxy completed. See *CURLINFO_CONNECT_TIME(3)*

CURLINFO_APPCONNECT_TIME

Time from start until SSL/SSH handshake completed. See *CURLINFO_APPCONNECT_TIME(3)*

CURLINFO_PRETRANSFER_TIME

Time from start until just before the transfer begins. See *CURLINFO_PRETRANSFER_TIME(3)*

CURLINFO_STARTTRANSFER_TIME

Time from start until just when the first byte is received. See *CURLINFO_STARTTRANSFER_TIME(3)*

CURLINFO_REDIRECT_TIME

Time taken for all redirect steps before the final transfer. See *CURLINFO_REDIRECT_TIME(3)*

CURLINFO_REDIRECT_COUNT

Total number of redirects that were followed. See *CURLINFO_REDIRECT_COUNT(3)*

CURLINFO_REDIRECT_URL

URL a redirect would take you to, had you enabled redirects. See *CURLINFO_REDIRECT_URL(3)*

CURLINFO_SIZE_UPLOAD

Number of bytes uploaded. See *CURLINFO_SIZE_UPLOAD(3)*

CURLINFO_SIZE_DOWNLOAD

Number of bytes downloaded. See *CURLINFO_SIZE_DOWNLOAD(3)*

CURLINFO_SPEED_DOWNLOAD

Average download speed. See *CURLINFO_SPEED_DOWNLOAD(3)*

CURLINFO_SPEED_UPLOAD

Average upload speed. See *CURLINFO_SPEED_UPLOAD(3)*

CURLINFO_HEADER_SIZE

Number of bytes of all headers received. See *CURLINFO_HEADER_SIZE(3)*

CURLINFO_REQUEST_SIZE

Number of bytes sent in the issued HTTP requests. See *CURLINFO_REQUEST_SIZE(3)*

CURLINFO_SSL_VERIFYRESULT

Certificate verification result. See *CURLINFO_SSL_VERIFYRESULT(3)*

CURLINFO_SSL_ENGINES

A list of OpenSSL crypto engines. See *CURLINFO_SSL_ENGINES(3)*

CURLINFO_CONTENT_LENGTH_DOWNLOAD

Content length from the Content-Length header. See *CURLINFO_CONTENT_LENGTH_DOWNLOAD(3)*

CURLINFO_CONTENT_LENGTH_UPLOAD

Upload size. See *CURLINFO_CONTENT_LENGTH_UPLOAD(3)*

CURLINFO_CONTENT_TYPE

Content type from the Content-Type header. See *CURLINFO_CONTENT_TYPE(3)*

CURLINFO_PRIVATE

User's private data pointer. See *CURLINFO_PRIVATE(3)*

CURLINFO_HTTPAUTH_AVAIL

Available HTTP authentication methods. See *CURLINFO_HTTPAUTH_AVAIL(3)*

CURLINFO_PROXYAUTH_AVAIL

Available HTTP proxy authentication methods. See *CURLINFO_PROXYAUTH_AVAIL(3)*

CURLINFO_OS_ERRNO

The errno from the last failure to connect. See *CURLINFO_OS_ERRNO(3)*

CURLINFO_NUM_CONNECTS

Number of new successful connections used for previous transfer. See *CURLINFO_NUM_CONNECTS(3)*

CURLINFO_PRIMARY_IP

IP address of the last connection. See *CURLINFO_PRIMARY_IP(3)*

CURLINFO_PRIMARY_PORT

Port of the last connection. See *CURLINFO_PRIMARY_PORT(3)*

CURLINFO_LOCAL_IP

Local-end IP address of last connection. See *CURLINFO_LOCAL_IP(3)*

CURLINFO_LOCAL_PORT

Local-end port of last connection. See *CURLINFO_LOCAL_PORT(3)*

CURLINFO_COOKIELIST

List of all known cookies. See *CURLINFO_COOKIELIST(3)*

CURLINFO_LASTSOCKET

Last socket used. See *CURLINFO_LASTSOCKET(3)*

CURLINFO_ACTIVESOCKET

The session's active socket. See *CURLINFO_ACTIVESOCKET(3)*

CURLINFO_FTP_ENTRY_PATH

The entry path after logging in to an FTP server. See *CURLINFO_FTP_ENTRY_PATH(3)*

CURLINFO_CERTINFO

Certificate chain. See *CURLINFO_CERTINFO(3)*

CURLINFO_TLS_SSL_PTR

TLS session info that can be used for further processing. See *CURLINFO_TLS_SSL_PTR(3)*

CURLINFO_CONDITION_UNMET

Whether or not a time conditional was met. See *CURLINFO_CONDITION_UNMET(3)*

CURLINFO_RTSP_SESSION_ID

RTSP session ID. See *CURLINFO_RTSP_SESSION_ID(3)*

CURLINFO_RTSP_CLIENT_CSEQ

RTSP CSeq that will next be used. See *CURLINFO_RTSP_CLIENT_CSEQ(3)*

CURLINFO_RTSP_SERVER_CSEQ

RTSP CSeq that will next be expected. See *CURLINFO_RTSP_SERVER_CSEQ(3)*

CURLINFO_RTSP_CSEQ_RECV

RTSP CSeq last received. See *CURLINFO_RTSP_CSEQ_RECV(3)*

TIMES

An overview of the six time values available from `curl_easy_getinfo()`

`curl_easy_perform()`

```
|
|--NAMELOOKUP
|---CONNECT
|---|---APPCONNECT
|---|---PRETRANSFER
|---|---|---STARTTRANSFER
|---|---|---TOTAL
|---|---|---REDIRECT
```

NAMELOOKUP

CURLINFO_NAMELOOKUP_TIME. The time it took from the start until the name resolving was completed.

CONNECT

CURLINFO_CONNECT_TIME. The time it took from the start until the connect to the remote host (or proxy) was completed.

APPCONNECT

CURLINFO_APPCONNECT_TIME. The time it took from the start until the SSL connect/handshake with the remote host was completed. (Added in in 7.19.0)

PRETRANSFER

CURLINFO_PRETRANSFER_TIME. The time it took from the start until the file transfer is just about to begin. This includes all pre-transfer commands and negotiations that are specific to the particular protocol(s) involved.

STARTTRANSFER

CURLINFO_STARTTRANSFER_TIME. The time it took from the start until the first byte is received by libcurl.

TOTAL

CURLINFO_TOTAL_TIME. Total time of the previous request.

REDIRECT

CURLINFO_REDIRECT_TIME. The time it took for all redirection steps include name lookup, connect, pretransfer and transfer before final transaction was started. So, this is zero if no redirection took place.

RETURN VALUE

If the operation was successful, `CURLE_OK` is returned. Otherwise an appropriate error code will be returned.

SEE ALSO

curl_easy_setopt(3)