NAME

CURLOPT_SSL_CIPHER_LIST − ciphers to use for TLS

SYNOPSIS

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

CURLcode curl_easy_setopt(CURL *handle, CURLOPT_SSL_CIPHER_LIST, char *list);
```

DESCRIPTION

Pass a char pointer, pointing to a null−terminated string holding the list of cipher suites to use for the TLS 1.2 (1.1, 1.0) connection. The list must be syntactically correct, it consists of one or more cipher suite strings separated by colons.

For setting TLS 1.3 ciphers see *CURLOPT_TLS13_CIPHERS(3)*.

A valid example of a cipher list with OpenSSL is:
"ECDHE-ECDSA-AES128-GCM-SHA256:ECDHE-RSA-AES128-GCM-SHA256:"
"ECDHE-ECDSA-CHACHA20-POLY1305:ECDHE-RSA-CHACHA20-POLY1305"

For Schannel, you can use this option to set algorithms but not specific cipher suites. Refer to the ciphers lists document for algorithms.

GnuTLS has the concept of a [priority string](https://gnutls.org/manual/html_node/Priority−Strings.html) which has its own syntax and keywords. The string set via *CURLOPT_SSL_CIPHER_LIST(3)* directly influences the priority setting.

Find more details about cipher lists on this URL:

https://curl.se/docs/ssl−ciphers.html

The application does not have to keep the string around after setting this option.

Using this option multiple times makes the last set string override the previous ones. Set it to NULL to disable its use again.

DEFAULT

NULL, use built−in list

PROTOCOLS

This functionality affects all TLS based protocols: HTTPS, FTPS, IMAPS, POP3S, SMTPS etc.

This option works only with the following TLS backends: GnuTLS, OpenSSL, Rustls, Schannel, mbedTLS and wolfSSL

EXAMPLE

```
int main(void)
{
 CURL *curl = curl_easy_init();
 if(curl) {
  CURLcode result;
  curl_easy_setopt(curl, CURLOPT_URL, "https://example.com/");
  curl_easy_setopt(curl, CURLOPT_SSL_CIPHER_LIST,
                   "ECDHE-ECDSA-CHACHA20-POLY1305:"
                   "ECDHE-RSA-CHACHA20-POLY1305");
  result = curl_easy_perform(curl);
  curl_easy_cleanup(curl);
 }
```

```
}
```

HISTORY

OpenSSL support added in 7.9. wolfSSL support added in 7.53.0. Schannel support added in 7.61.0. mbedTLS support added in 8.8.0. Rustls support added in 8.10.0.

Since curl 8.10.0 returns CURLE_NOT_BUILT_IN when not supported.

AVAILABILITY

Added in curl 7.9

RETURN VALUE

curl_easy_setopt(3) returns a CURLcode indicating success or error.

CURLE_OK (0) means everything was OK, non−zero means an error occurred, see *libcurl−errors(3)*.

SEE ALSO

CURLOPT_PROXY_SSL_CIPHER_LIST(3), **CURLOPT_PROXY_TLS13_CIPHERS**(3), **CURLOPT_SSLVERSION**(3), **CURLOPT_TLS13_CIPHERS**(3), **CURLOPT_USE_SSL**(3)