

NAME

CURLOPT_TLS13_CIPHERS – ciphers suites to use for TLS 1.3

SYNOPSIS

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

```
CURLcode curl_easy_setopt(CURL *handle, CURLOPT_TLS13_CIPHERS, char *list);
```

DESCRIPTION

Pass a char pointer, pointing to a null-terminated string holding the list of cipher suites to use for the TLS 1.3 connection. The list must be syntactically correct, it consists of one or more cipher suite strings separated by colons.

For setting TLS 1.2 (1.1, 1.0) ciphers see *CURLOPT_SSL_CIPHER_LIST(3)*.

A valid example of a cipher list is:

```
"TLS_AES_128_GCM_SHA256:TLS_CHACHA20_POLY1305_SHA256"
```

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 restore to internal default.

DEFAULT

NULL, use internal built-in

PROTOCOLS

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

This option works only with the following TLS backends: OpenSSL, Rustls, 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_TLS13_CIPHERS,
            "TLS_CHACHA20_POLY1305_SHA256");
        result = curl_easy_perform(curl);
        curl_easy_cleanup(curl);
    }
}
```

HISTORY

OpenSSL support added in 7.61.0, available when built with OpenSSL >= 1.1.1. LibreSSL support added in 8.3.0, available when built with LibreSSL >= 3.4.1. wolfSSL support added in 8.10.0. mbedTLS support added in 8.10.0, available when built with mbedTLS >= 3.6.0. Rustls support added in 8.10.0.

Before curl 8.10.0 with mbedTLS or wolfSSL, TLS 1.3 cipher suites were set by using the *CURLOPT_SSL_CIPHER_LIST(3)* option.

AVAILABILITY

Added in curl 7.61.0

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_SSLVERSION(3), CURLOPT_PROXY_SSL_CIPHER_LIST(3), CURLOPT_PROXY_TLS13_CIPHERS(3), CURLOPT_SSLVERSION(3), CURLOPT_SSL_CIPHER_LIST(3), CURLOPT_USE_SSL(3)