

NAME

CURLOPT_OPEN_SOCKET_FUNCTION – set callback for opening sockets

SYNOPSIS

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

```
typedef enum {
    CURLSOCKTYPE_IPCXN, /* socket created for a specific IP connection */
    CURLSOCKTYPE_ACCEPT, /* socket created by accept() call */
    CURLSOCKTYPE_LAST /* never use */
} curlsocktype;
```

```
struct curl_sockaddr {
    int family;
    int socktype;
    int protocol;
    unsigned int addrlen;
    struct sockaddr addr;
};
```

```
curl_socket_t opensocket_callback(void *clientp,
                                  curlsocktype purpose,
                                  struct curl_sockaddr *address);
```

```
CURLcode curl_easy_setopt(CURL *handle, CURLOPT_OPEN_SOCKET_FUNCTION, opensocket_callback);
```

DESCRIPTION

Pass a pointer to your callback function, which should match the prototype shown above.

This callback function gets called by libcurl instead of the *socket(2)* call. The callback's *purpose* argument identifies the exact purpose for this particular socket: *CURLSOCKTYPE_IPCXN* is for IP based connections and *CURLSOCKTYPE_ACCEPT* is for sockets created after *accept()* - such as when doing active FTP. Future versions of libcurl may support more purposes.

The *clientp* pointer contains whatever user-defined value set using the *CURLOPT_OPEN_SOCKET_DATA(3)* function.

The callback gets the resolved peer address as the *address* argument and is allowed to modify the address or refuse to connect completely. The callback function should return the newly created socket or *CURL_SOCKET_BAD* in case no connection could be established or another error was detected. Any additional *setsockopt(2)* calls can of course be done on the socket at the user's discretion. A *CURL_SOCKET_BAD* return value from the callback function will signal an unrecoverable error to libcurl and it will return *CURLE_COULDNT_CONNECT* from the function that triggered this callback. This return code can be used for IP address blacklisting.

If you want to pass in a socket with an already established connection, pass the socket back with this callback and then use *CURLOPT_SOCKOPT_FUNCTION(3)* to signal that it already is connected.

DEFAULT

The default behavior is the equivalent of this:

```
return socket(addr->family, addr->socktype, addr->protocol);
```

PROTOCOLS

All

CURLOPT_OPEN_SOCKETFUNCTION(3) curl_easy_setopt options CURLOPT_OPEN_SOCKETFUNCTION(3)

EXAMPLE

AVAILABILITY

Added in 7.17.1.

RETURN VALUE

Returns CURLE_OK if the option is supported, and CURLE_UNKNOWN_OPTION if not.

SEE ALSO

CURLOPT_OPEN_SOCKETDATA(3), CURLOPT_SOCKETFUNCTION(3), CURLOPT_CLOSE_SOCKETFUNCTION(3),