

NAME

curl_multi_assign – set data to associate with an internal socket

SYNOPSIS

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

```
CURLMcode curl_multi_assign(CURLM *multi_handle, curl_socket_t sockfd,  
                             void *sockptr);
```

DESCRIPTION

This function creates an association in the multi handle between the given socket and a private pointer of the application. This is designed for *curl_multi_socket_action(3)* uses.

When set, the *sockptr* pointer is passed to all future socket callbacks for the specific *sockfd* socket.

If the given *sockfd* is not already in use by libcurl, this function returns an error.

libcurl only keeps one single pointer associated with a socket, so calling this function several times for the same socket makes the last set pointer get used.

It is acceptable to call this function from your multi callback functions.

PROTOCOLS

This functionality affects all supported protocols

EXAMPLE

```
int main(void)
{
    CURLM *multi = curl_multi_init();
    int private = 123;
    curl_socket_t fd = 0; /* file descriptor to associate our data with */

    /* make our struct pointer associated with socket fd */
    CURLMcode mresult = curl_multi_assign(multi, fd, &private);
    if(mresult)
        printf("error: %s\n", curl_multi_strerror(mresult));
}
```

TYPICAL USAGE

In a typical application you allocate a struct or at least use some kind of semi-dynamic data for each socket that we must wait for action on when using the *curl_multi_socket_action(3)* approach.

When our socket-callback gets called by libcurl and we get to know about yet another socket to wait for, we can use *curl_multi_assign(3)* to point out the particular data so that when we get updates about this same socket again, we do not have to find the struct associated with this socket by ourselves.

AVAILABILITY

Added in curl 7.15.5

RETURN VALUE

This function returns a CURLMcode indicating success or error.

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

SEE ALSO

curl_multi_setopt(3), *curl_multi_socket_action(3)*