Forum:Hack Forums

Thread: a value of type "const char *" cannot be used to initialize an entity of type "char *

F.A.S.T - *July 23, 2018, 11:17 am*

I'm finally beginning to understand the Networking on Winsock. I was following this tutorial ;
https://www.binarytides.com/winsock-socket-programming-tutorial/
But the way I'm doing is taking on reference and writing my own version of it.

I've came across a problem.

a value of type "const char " cannot be used to initialize an entity of type "char

Error Line :
PHP Code
<?php
char* msg = "GET / HTTP/1.1\r\n\r\n";

And this is the part where that Variable is being used :
PHP Code
<?php
// Send Data
cout << "Sending Get request.." << endl;

if (send(sock, msg, strlen(msg), 0) < 0) {
cout << "Failed to Send.. " << endl;
getchar();
return 1;
}
cout << "Request Sent yo!" << endl;
getchar();
return 0;

Other Information :
- IDE : Visual Studio Community.
- OS : Windows 10.

3DES - *July 23, 2018, 11:46 am*

change Code char* msg = "GET / HTTP/1.1\r\n\r\n"; to Code const char* msg = "GET / HTTP/1.1\r\n\r\n";
const means the variable is not going to get modified during the execution of program, it will be read only.

vmcall - *July 23, 2018, 12:27 pm*

Because the variable is const (constant at after initialization, but unlike constexpr doesn't have to be compile-time constant), trying to pass it to a function that takes a non-const variable would essentially remove said constant protection.

You can either call const_cast<char*>(var) to remove the respective const modifier, or simply define the original value as const char* ('auto' would do that)

F.A.S.T - *July 23, 2018, 1:14 pm*

(Jul 23, 2018 11:46 AM)3DES Wrote: [CITE] change
Code char* msg = "GET / HTTP/1.1\r\n\r\n"; to
Code const char* msg = "GET / HTTP/1.1\r\n\r\n";
const means the variable is not going to get modified during the execution of program, it will be read only.Dang I already tried that when the Error Occurred. It does not send the data then.

FULL CODE (Click to View)
PHP Code

```
<?php
#include "stdafx.h"
#include <iostream>
#include <string>
#include <Windows.h>
#include <stdio.h>
#include <winsock.h>

#pragma comment(lib, "ws2_32.lib")

using namespace std;

int main()
{
 WSADATA wsa;
 SOCKET sock;
 struct sockaddr_in server;
 const char* msg = "GET / HTTP/1.1\r\n\r\n";

 // Start up Winsock
 cout << "Starting Winsock" << endl;

 if (WSAStartup(MAKEWORD(2, 2), &wsa) != 0) {
 cout << "Winsock Startup Failed.";
 return 1;
 }

 cout << "Winsock Started." << endl;

 // Create a Network Socket.
 if (sock = socket(AF_INET, SOCK_STREAM, 0) == INVALID_SOCKET)
 {
 cout << "Server Socket was unable to start." << endl;
 }
 cout << "Socket created!" << endl;

 server.sin_addr.s_addr = inet_addr("www.google.com");
 server.sin_family = AF_INET;
 server.sin_port = htons(80);

 // Try to Connect to Server, Server data is defined above.
 if (connect(sock, (struct sockaddr*)&server, sizeof(server)) < 0) {
```

```
 cout << "Connection Failure" << endl;
 }
 cout << "Connected yo!" << endl;

 // Send Data
 cout << "Sending Get request.." << endl;

 if (send(sock, msg, strlen(msg), 0) < 0) {
 cout << "Failed to Send.. " << endl;
 getchar();
 return 1;
 }
 cout << "Request Sent yo!" << endl;
 getchar();
 return 0;
}
```

Mr. Kim - *July 23, 2018, 4:35 pm*

(Jul 23, 2018 01:14 PM)F.A.S.T Wrote: *[CITE]* Dang I already tried that when the Error Occurred. It does not send the data then.

FULL CODE (Click to View)

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 cout << "Starting Winsock" << endl;

 if (WSAStartup(MAKEWORD(2, 2), &wsa) != 0) {
 cout << "Winsock Startup Failed.";
 return 1;
 }
```

```
cout << "Winsock Started." << endl;

// Create a Network Socket.
if (sock = socket(AF_INET, SOCK_STREAM, 0) == INVALID_SOCKET)
{
cout << "Server Socket was unable to start." << endl;
}
cout << "Socket created!" << endl;

server.sin_addr.s_addr = inet_addr("www.google.com");
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```

Change this
Code if (connect(sock, (struct sockaddr*)&server, sizeof(server)) < 0) {
 cout << "Connection Failure" << endl;
 }
To

Code if (connect(sock, (struct sockaddr*)&server, sizeof(server)) != SOCK_ERROR) {
 cout << "Connection Failure" << endl;
}
and call WSAGetLastError() to get the actual error

F.A.S.T - *July 24, 2018, 4:43 am*

(Jul 23, 2018 04:35 PM)Mr. Kim Wrote: *[CITE]* Change this
Code if (connect(sock, (struct sockaddr*)&server, sizeof(server)) < 0) {
 cout << "Connection Failure" << endl;
 }
To

Code if (connect(sock, (struct sockaddr*)&server, sizeof(server)) != SOCK_ERROR) {
 cout << "Connection Failure" << endl;

}
and call WSAGetLastError() to get the actual errorNevermind thanks alot I fixed it :) (Click to View)
Thanks Mr.Kim it works. No more Connection error but It still gives an Error when sending Data.
PHP Code
<?php

```
// Send Data
    cout << "Sending Get request.." << endl;

    if (send(sock, msg, strlen(msg), 0) < 0) {
        cout << "Failed to Send.. " << WSAGetLastError() <<  endl;
        getchar();
        return 1;
    }
    cout << "Request Sent yo!" << endl;
```

Also, How do you receive an answer from the server properly.

Hoodie+ - *July 24, 2018, 7:33 am*
C++ requires you to specify const while C doesn't.

aeiro - *July 24, 2018, 3:24 pm*
(Jul 24, 2018 04:43 AM)F.A.S.T Wrote: *[CITE]* Also, How do you receive an answer from the server properly.
define properly