

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 [\(Click to View\)](#)

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;
}

```

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 error. Nevermind 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