
Subject: Cannot compile MYSQL project
Posted by [forlano](#) on Sun, 19 Jan 2020 14:20:14 GMT
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Hello,

I have a project linked with the MySql library in windows and works as expected.
Now I need to port it under MaC OSX (Mojave).

I have installed the library and set the path but it keep saying
error: unknown type name 'MYSQL'
and many other similar error.

What am I missing? I have even set the flag .MYSQLDLL but I am not sure it should appear under Mac.

Thanks,
Luigi

Subject: Re: Cannot compile MYSQL project
Posted by [forlano](#) on Wed, 22 Jan 2020 11:01:21 GMT
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The same package compiled and run without problems under Linux (ubuntu 18.10). No need of .MYSQLDLL flag.

On Mac I have followed many discussion about mysql and installed several library but none solved the problem.

Luigi

Subject: Re: Cannot compile MYSQL project
Posted by [mirek](#) on Thu, 23 Jan 2020 07:35:55 GMT
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That sounds like mysql.h does not get included.

Check MySql/MySql.h

```
#ifndef __mysql_h__  
#define __mysql_h__
```

```
// debian: sudo apt-get install libmysqlclient-dev
```

```
#ifndef flagNOMYSQL

#include <Sql/Sql.h>

#ifdef PLATFORM_WIN32
#ifndef IPPROTO_IP
#include <winsock2.h>
#endif
#include <MySql.h>
#endif

#ifdef PLATFORM_POSIX
#include <mysql/mysql.h>
#endif
```

Perhaps PLATFORM_POSIX is not defined? You can check by removing that last PLATFORM_POSIX....

Is there any guide you have used to install mysql? (I would like to follow it to resolve this issue...

Mirek

Subject: Re: Cannot compile MYSQL project
Posted by [forlano](#) on Thu, 23 Jan 2020 16:39:33 GMT
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Hello Mirek,

thanks for the reply.

I already tried to remove the PLATFORM_POSIX but no success.

This is the full error message:

```
/Users/mac/upp.src/uppsrc/mysql/mysql.h (18): warning: non-portable path to file
'<MySql/MySql.h>'; specified path differs in case from file name on disk
[-Wnonportable-include-path]
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (1): In file included from
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp:1:
(): #include <mysql/mysql.h>
(): <MySql/MySql.h>
/Users/mac/upp.src/uppsrc/mysql/mysql.h (46): error: unknown type name 'MYSQL'
/Users/mac/upp.src/uppsrc/mysql/mysql.h (75): error: unknown type name 'MYSQL'
/Users/mac/upp.src/uppsrc/mysql/mysql.h (68): error: use of undeclared identifier 'MYSQL_PORT'
/Users/mac/upp.src/uppsrc/mysql/mysql.h (84): error: cannot initialize object parameter of type
'Upp::SqlSession' with an expression of type 'Upp::MySqlSession'
```

```
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (24): error: unknown type name 'MYSQL'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (26): error: unknown type name 'MYSQL_RES'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (27): error: unknown type name 'MYSQL_ROW'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (39): error: unknown type name 'MYSQL'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (50): error: use of undeclared identifier  
'mysql_library_init'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (54): error: use of undeclared identifier  
'mysql_library_end'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (59): error: expected expression  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (59): error: use of undeclared identifier 'MYSQL'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (64): error: no matching constructor for initialization  
of 'Upp::Sql'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (103): error: use of undeclared identifier  
'MYSQL_PORT'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (142): error: cannot initialize object parameter of  
type 'Upp::SqlSession' with an expression of type 'Upp::MySqlSession'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (172): error: out-of-line definition of 'Begin' does not  
match any declaration in 'Upp::MySqlSession'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (216): error: no matching constructor for initialization  
of 'Upp::Sql'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (225): error: no matching constructor for initialization  
of 'Upp::Sql'  
/Users/mac/upp.src/uppsrc/MySql/MySql.cpp (234): error: no matching constructor for initialization  
of 'Upp::Sql'
```

You get the same if you try to compile the mysql package test case coming with U++.

Googling on internet I did several things (there is no unanimous agreement)

1) upgrade brew

```
brew update --verbose
```

it may takes some minute to upgrade everything (at least on my Mac mini)

2) installed several libraries, one by one because each of them didn't work

```
brew install mysql-connector-cc  
brew install mysql-connector-c  
brew install mysql-client
```

At the end I had a MYSQL folder in

```
/usr/local/Cellar/mysql  
/usr/local/Cellar/mysql-client  
/usr/local/Cellar/mysql-connector-c++  
/usr/local/opt/mysql
```

each one with their include and lib folder.

I tried to point theide in all includes but with no luck.
I hope this info can be useful.

thanks,
Luigi

Subject: Re: Cannot compile MYSQL project
Posted by [mirek](#) on Thu, 23 Jan 2020 17:31:53 GMT
[View Forum Message](#) <> [Reply to Message](#)

forlano wrote on Thu, 23 January 2020 17:39Hello Mirek,

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thanks,
Luigi

I think that clang cannot find the right include and for that reason replaces it with a wrong one.

What are your include paths in the build method? I bet it will be one level off. Include paths must at some point pick mysql/mysql.h from the client library you have installed.

Mirek

Subject: Re: Cannot compile MYSQL project
Posted by [forlano](#) on Thu, 23 Jan 2020 22:12:26 GMT
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mirek wrote on Thu, 23 January 2020 18:31

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Mirek

I thought the same and tried several time. I tried once more at several folder level to help clang to locate the mysql.h. Here is my include

The marked row is where I see a mysql.h file. In both opt and cellar seems to be the same files.

Luigi

File Attachments

1) [Schermata 2020-01-23 alle 23.06.01.jpg](#), downloaded 795 times

PATH - executable directories	INCLUDE directories	LIB directories
/usr/local/include		
/usr/local/opt/mysql		
/usr/local/opt/mysql/include/mysql	██████████	
/usr/local/opt/mysql/include/mysql/mysql		
/usr/local/Cellar/mysql/8.0.19/include/mysql	██████████	
/usr/local/Cellar/mysql/8.0.19/include/mysql/mysql		
/usr/local/Cellar/mysql/8.0.19/include		

Subject: Re: Cannot compile MYSQL project
Posted by [mirek](#) on Fri, 24 Jan 2020 08:09:23 GMT
[View Forum Message](#) <> [Reply to Message](#)

forlano wrote on Thu, 23 January 2020 23:12mirek wrote on Thu, 23 January 2020 18:31

I think that clang cannot find the right include and for that reason replaces it with a wrong one.

What are your include paths in the build method? I bet it will be one level off. Include paths must at some point pick mysql/mysql.h from the client library you have installed.

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The marked row is where I see a mysql.h file. In both opt and cellar seems to be the same files.

Luigi

IMO should be /usr/local/opt/mysql/include

(The include is <mysql/mysql.h> so the include path must be relative to it)

Mirek

Subject: Re: Cannot compile MYSQL project
Posted by [forlano](#) on Fri, 24 Jan 2020 18:51:00 GMT
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mirek wrote on Fri, 24 January 2020 09:09
IMO should be /usr/local/opt/mysql/include

(The include is <mysql/mysql.h> so the include path must be relative to it)

Mirek

I tried but without success .
This task is beyond my capability. I do not know if I missed the correct library or there is something wrong in some flag.

Thanks,
Luigi

Subject: Re: Cannot compile MYSQL project
Posted by [mirek](#) on Wed, 29 Jan 2020 13:05:34 GMT
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This was tricky one.

The problem is that CLANG treats include files case insensitive. Thus <mysql/mysql.h> in fact included the package's MySql.h recursively...

I have fixed it by redoing the code to:

```
#ifdef PLATFORM_POSIX
#ifdef PLATFORM_OSX
#include <mysql.h>
#else
#include <mysql/mysql.h>
#endif
#endif
```

so with MacOS you will need to point to inside that mysql folder. Not nice, but for now it will do.

Mirek

Subject: Re: Cannot compile MYSQL project
Posted by [forlano](#) on Wed, 29 Jan 2020 22:14:34 GMT
[View Forum Message](#) <> [Reply to Message](#)

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#else
#include <mysql/mysql.h>
#endif
#endif
```

so with MacOS you will need to point to inside that mysql folder. Not nice, but for now it will do.

Mirek

Thank you very much!

Now I was able to overcome the include problem... but unfortunately I stopped again at the lib. Below are the new complains.

Can I ask you which library you have installed and where point your path lib? I tried with all the library I have but nothing happened. Perhaps I need to set some flag or compiler option.

Luigi

Undefined symbols for architecture x86_64:

"_mysql_affected_rows", referenced from:
 Upp::MySqlConnection::Execute() in MySql.a(MySql.o)

"_mysql_close", referenced from:
 Upp::MySqlSession::DoConnect() in MySql.a(MySql.o)
 Upp::MySqlSession::Close() in MySql.a(MySql.o)
 Upp::MySqlSession::Reconnect() in MySql.a(MySql.o)
 Upp::MySqlSession::~~MySqlSession() in MySql.a(MySql.o)

"_mysql_errno", referenced from:
 Upp::MySqlSession::DoConnect() in MySql.a(MySql.o)
 Upp::MySqlSession::MysqlQuery(char const*) in MySql.a(MySql.o)

"_mysql_error", referenced from:
 Upp::MySqlSession::DoConnect() in MySql.a(MySql.o)
 Upp::MySqlSession::MysqlQuery(char const*) in MySql.a(MySql.o)

"_mysql_fetch_field_direct", referenced from:
 Upp::MySqlConnection::Execute() in MySql.a(MySql.o)

"_mysql_fetch_lengths", referenced from:
 Upp::MySqlConnection::Fetch() in MySql.a(MySql.o)

"_mysql_fetch_row", referenced from:
 Upp::MySqlConnection::Fetch() in MySql.a(MySql.o)

"_mysql_free_result", referenced from:
 Upp::MySqlConnection::Fetch() in MySql.a(MySql.o)
 Upp::MySqlConnection::FreeResult() in MySql.a(MySql.o)
 Upp::MySqlConnection::Cancel() in MySql.a(MySql.o)

"_mysql_init", referenced from:
 Upp::MySqlSession::DoConnect() in MySql.a(MySql.o)

"_mysql_insert_id", referenced from:
 Upp::MySqlConnection::Execute() in MySql.a(MySql.o)

"_mysql_more_results", referenced from:
 Upp::MySqlConnection::Execute() in MySql.a(MySql.o)

"_mysql_next_result", referenced from:
 Upp::MySqlConnection::Execute() in MySql.a(MySql.o)

"_mysql_num_fields", referenced from:
 Upp::MySqlConnection::Execute() in MySql.a(MySql.o)

"_mysql_query", referenced from:
 Upp::MySqlSession::MysqlQuery(char const*) in MySql.a(MySql.o)

"_mysql_real_connect", referenced from:
 Upp::MySqlSession::DoConnect() in MySql.a(MySql.o)

"_mysql_real_escape_string", referenced from:
 Upp::MySqlConnection::EscapeString(Upp::String const&) in MySql.a(MySql.o)

"_mysql_server_end", referenced from:

```
Upp::s__s53_fn() in MySql.a(MySql.o)
"_mysql_server_init", referenced from:
  __GLOBAL__sub_I_MySql.cpp in MySql.a(MySql.o)
"_mysql_set_character_set", referenced from:
  Upp::MySqlSession::DoConnect() in MySql.a(MySql.o)
"_mysql_store_result", referenced from:
  Upp::MySqlConnection::Execute() in MySql.a(MySql.o)
ld: symbol(s) not found for architecture x86_64
clang: error: linker command failed with exit code 1 (use -v to see invocation)
```

Subject: Re: Cannot compile MYSQL project
Posted by [mirek](#) on Fri, 31 Jan 2020 13:16:11 GMT
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It was a problem in MySql package, missing OSX libraries requirement...

Fixed in trunk.

Subject: Re: Cannot compile MYSQL project
Posted by [forlano](#) on Fri, 31 Jan 2020 19:48:54 GMT
[View Forum Message](#) <> [Reply to Message](#)

mirek wrote on Fri, 31 January 2020 14:16: It was a problem in MySql package, missing OSX libraries requirement...

Fixed in trunk.

It works!
Thanks a lot!

Luigi
