
Subject: my_sql's charset in linux

Posted by [nicomesas](#) on Fri, 15 Sep 2006 16:49:15 GMT

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I have been two days proving MySQL and have had a serious problem with charset.
I have a series of tables utf8 codified, and in principle it must not have very normal problems with

This is the sample:

```
#include <Core/Core.h>
#include <MySql/MySql.h>

CONSOLE_APP_MAIN
{
    String s = "SELECT nombre, refcontable FROM actividades_clases" ;

    MySqlSession sesion ;
    if (sesion.Connect( "root", "mundoflapi", "skorg_dsrlllo_v3", "localhost" ))
    {
        Sql q(sesion) ;
        q.Execute(theSelect) ;
        int row = 0;
        while(q.Fetch())
        {
            String resp =  ;
            Cout() << "[" << row << "]" " << resp << (String)q[0] << " " << (String)q[1] << "\r\n" ;
            row++ ;
        }
        sesion.Close() ;
    }
}
```

There are a script to create the table:

```
CREATE TABLE `actividades_clases` (
  `code` varchar(22) collate utf8_spanish_ci NOT NULL default "",
  `nombre` varchar(30) collate utf8_spanish_ci default NULL,
  `dAdmin` varchar(2) collate utf8_spanish_ci default NULL,
  `isVentas` int(11) default NULL,
  `refContable` varchar(30) collate utf8_spanish_ci default NULL,
  PRIMARY KEY (`code`)
) ENGINE=MyISAM DEFAULT CHARSET=utf8 COLLATE=utf8_spanish_ci;
```

```
('007000000000000004','DOCENCIA','F',0,'DOCENCIA'),
('007000000000000005','VOLUNTARIADO','?F',0,'VOLUNTARIADO'),
```

```
('00700000000000006','RESIDENCIA','?F',0,'CONVIVENCIA'),  
('00700000000000007','COMEDOR','?F',0,'CONVIVENCIA'),  
  
('0706401e10216c0f1c6100','ARTICULOS DEL REFUGIO','F',1,'REFUGIO');
```

After thinking much, to prove it in Windows (and it works correctly), to spend to me all the day of yesterday reading documentation of MySQL.com, and mainly, to dive by the code of the UPP, I believe that I have found the solution.

By some reason my MySQL does not return the characters to me in UTF, although I hoped that I took root outside. Possibly he would have to change the configuration in the server.

But the case is that there is a function of the API of MySQL that serves to change the codification of a given connection. This function is `mysql_set_character_set`.

Simply it would have to call to that function after establishing the connection

```
MySqlSession session ;  
if (session.Connect( "root", "mundoflapi", "skorg_dsrlllo_v3", "localhost" ))  
{  
    mysql_set_character_set( session, "utf8" ) ;  
  
    Sql q(session) ;  
    q.Execute(theSelect) ;  
}
```

Perhaps the MySQLSession object would have to be in charge to compare the codification that comes by defect in the server with defined by the system or the present language, that we can obtain with this code:

```
String sysCharSetName = CharSetName(GetDefaultCharset());  
Nico
```

Subject: Re: my_sql's charset in linux
Posted by [mirek](#) on Fri, 15 Sep 2006 16:57:38 GMT
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Can you try that?

Well, In fact, I would feel even safer with MySql set to fixed encoding (most likely "utf-8") and perform conversion in U++ ("ToCharset").

Mirek

Subject: Re: my_sql's charset in linux
Posted by [nicomesas](#) on Fri, 15 Sep 2006 17:17:58 GMT
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OK, today and tomorrow I will continue testing the database and will try to use the function "ToCharset"
Nico

Subject: Re: my_sql's charset in linux
Posted by [nicomesas](#) on Fri, 15 Sep 2006 18:23:41 GMT
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Hello,

Already I have test it and seems that it works well.

The problem is that don't know how to change the codification of my system very well. What I have done has been to say to him to the TheIDE that that charset is another one (for example iso8859-15) and at the beginning of the program to establish the codification by hand.

Nico

```
#include <Core/Core.h>
#include <MySql/MySql.h>
```

```
CONSOLE_APP_MAIN
```

```
{
    // GetDefaultCharset() ; allways returns CHARSET_UTF8 in my pc
    // If I want to change the codification I must make it in TheIDE and in addition establish
    // it by hand to see if the result is correct.
    //SetDefaultCharset(CHARSET_ISO8859_15) ;
    // if you uncomment this line, you must change in the ide the default char set, and then
    // the result is ok
```

```
int charSet = GetDefaultCharset() ;
Cout() << "charset:" <<CharsetName( charSet ) << "\n" ;
String s = "SELECT nombre, refcontable FROM actividades_clases" ;
```

```
MySqlSession sesion ;
if (sesion.Connect( "root", "mundoflapi", "skorg_dsrll0_v3", "localhost" ))
{
    mysql_set_character_set( sesion, "utf8" ) ;
```

```
Sql q(sesion) ;
q.Execute(s) ;
```

```
int row = 0;
while(q.Fetch())
{
String f0 = ToCharset(charSet, (String)q[0], CHARSET_UTF8, '?') ;
String f1 = ToCharset(charSet, (String)q[1], CHARSET_UTF8, '?') ;

Cout() << "[" << row << " source]" << (String)q[0] << " " << (String)q[1] << "\r\n" ;
Cout() << "[" << row << " encoded]" << f0 << " " << f1 << "\r\n" ;
row++ ;
}
sesion.Close() ;
}
}
```

Subject: Re: my_sql's charset in linux

Posted by [mirek](#) on Fri, 15 Sep 2006 18:53:44 GMT

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nicomesas wrote on Fri, 15 September 2006 14:23

The problem is that don't know how to change the codification of my system very well. What I have done has been to say to him to the TheIDE that that charset is another one (for example iso8859-15) and at the beginning of the program to establish the codification by hand.

I guess it is understandable - compiled code cannot know anything about TheIDE setting. So changing in both places is actually the right thing.

Mirek

Subject: Re: my_sql's charset in linux

Posted by [nicomesas](#) on Fri, 15 Sep 2006 19:15:54 GMT

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I believe that my English is every time worse.

I am going away to try to explain.

To the console program I have established him in Run Options stdout to a file.

When doing this, I believe that TheIde creates a file with codification that it has defined, for that reason to see if it changes well I must establish the DefaultCharset by hand, (I think)

Nico

Subject: Re: my_sql's charset in linux

Posted by [mirek](#) on Fri, 15 Sep 2006 19:31:24 GMT

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nicomesas wrote on Fri, 15 September 2006 15:15I believe that my English is every time worse.

Actually, I am afraid you are right. But I will try (to undestand).

Quote:

To the console program I have established him in Run Options stdout to a file.

When doing this, I believe that Thelde creates a file with codification that it has defined, for that reason to see if it changes well I must establish the DefaultCharset by hand, (I think)

No, IDE just does stdout redirection, it does not filter characters in any way. At least I believe so....

Subject: Re: my_sql's charset in linux

Posted by [nicomesas](#) on Sat, 16 Sep 2006 14:32:02 GMT

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I believe that already I understand it...

It is clear that who creates the file stdout is the console program, and she builds it in the codification that we say to him. I explained myself bad.

What wanted to express is that to see this result correctly we must put the IDE in the same codification.

Nico
