

# TSI® FMS 5 SOFTWARE DATABASE SPOOLING ERRORS WHEN USING WINDOWS® OS IN A LOCAL LANGUAGE

TECHNICAL BULLETIN-TCC-158 (A4)  
(7/17/2024) Rev B

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## Description

Since release of FMS 5.2, we have seen an increase of certain database error messages occurring on an irregular basis. These messages are not harmful but cause a reaction in FMS (spooling) that may lead the customer to believe otherwise. This problem is exaggerated on systems where the Windows® Operating System is installed with a local language (i.e., Spanish, etc.). This document will detail how to change the language that a database uses for its error messages.

While many database error messages can occur, at present, only one database error message is handled by FMS so that it will not cause a FMS Database Spooling error to occur. This message is caused when the FMS Software attempts to insert a duplicate record into the database. This is not allowed in most cases. This error is not harmful and does not warrant database spooling by FMS. The problem at present is FMS only looks for the English version of the message.

This **Database Error** message DOES NOT block the storing of sample point data, however it is annoying for the end user to see so many alarm messages. To prevent this behavior on a localized Operating System (non-English), it is **required** to modify the database engine so that all Database Server Error Messages will be in English. This also prevents any further database messages from being ignored by FMS.

The following procedure applies to FMS 5.2 or above, and can be applied on a **live system**. Once this procedure is complete, **only** the Database Windows service will need to be restarted.

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## Requirements

- Windows User Account used during this procedure is required to have full access rights to the computer or server on which FMS is installed.
- PostgreSQL version 8.1 or above must be installed along with the Administrative Console **pgAdmin III** or **pgAdmin 4** that is usually installed together with PostgreSQL.
- MySQL Version 5.1 must be installed along with the administrative console **MySQL Workbench 6.0.9**.

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## Prerequisites

The following prerequisites must be met:

1. If Administrator Console **MySQL Workbench version 6.09** for MySQL version 5.1 is not installed prior to starting this procedure, refer to Technical Note **TCC-153** to implement it.

MySQL Workbench version 6.09 can be downloaded from:

<https://dev.mysql.com/downloads/workbench/6.0.html>

2. If Administrator Console **pgAdmin III** is not installed, it will need to be downloaded.

PgAdmin III version 1.22.2 (x86) can be downloaded from:

<https://www.postgresql.org/ftp/pgadmin/pgadmin3/v1.22.2/win32/>

3. Microsoft® SQL Server Management **MSSM** prior to version 17.2 can be used for this procedure. If **MSSM** is not installed, the latest version will need to be downloaded.

MSSM version 17.2 can be downloaded from:

<https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms/>

**MSSM** can manage one or more SQL Server databases which reside on different computers or servers, and therefore can be installed on a desktop computer allowing connection to distant Microsoft® SQL databases instances.

### Note

- Microsoft® SQL Server Management Studio version 17.2 is fully compatible with Microsoft® SQL Express and Microsoft® SQL Server version 2008 and higher.
- **PgAdmin III** is valid for PostgreSQL prior version 10.

## List of Code Page Identifiers

To change database Error Messages for PostgreSQL, it is required during this procedure to select the Code Page Identifier for the configured language used by Windows® Operating System. From the list below, please select the one referring to the Windows® Operating System language installed.

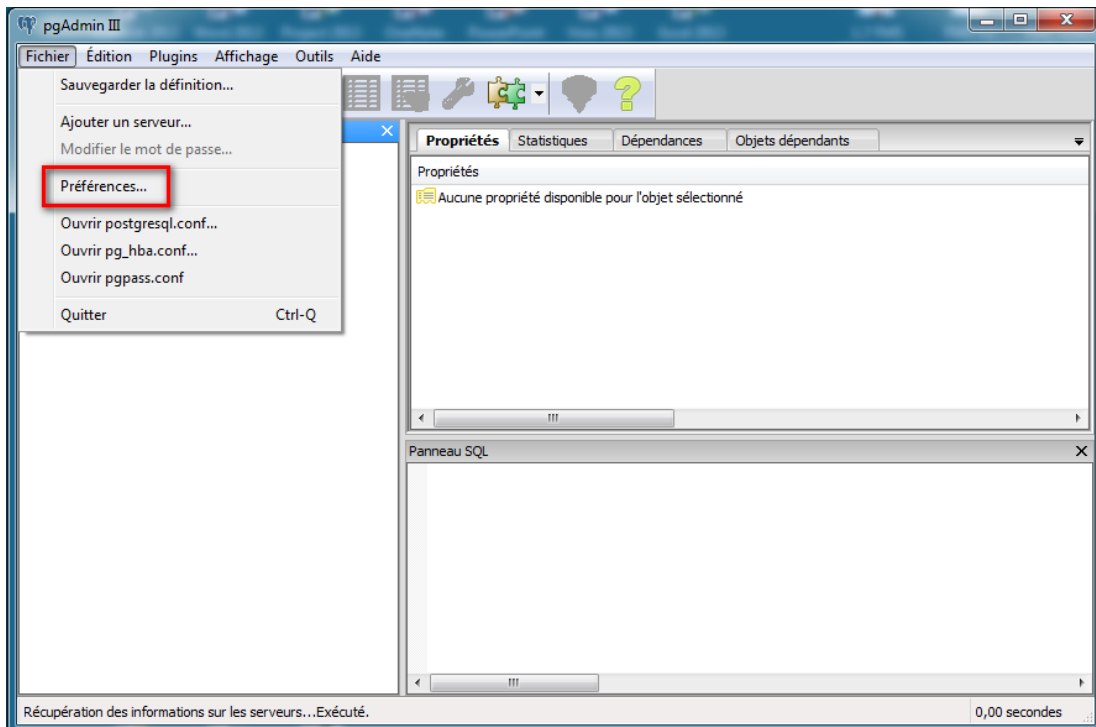
Identifier	Additional information
874	Thailand
932	ANSI/OEM Japanese
936	ANSI/OEM Simplified Chinese (PRC, Singapore); Chinese Simplified
949	ANSI/OEM Korean
950	ANSI/OEM Traditional Chinese (Taiwan; Hong Kong SAR, PRC); Chinese Traditional
1250	ANSI Central European; Central European (Windows)
1251	ANSI Cyrillic; Cyrillic (Windows)
1252	ANSI Latin 1; replace old Code Page 850 for Western European (Windows),
1253	ANSI Greek; Greek (Windows)
1254	ANSI Turkish; Turkish (Windows)
1255	ANSI Hebrew; Hebrew (Windows)
1256	ANSI Arabic; Arabic (Windows)
1257	ANSI Baltic; Baltic (Windows)
1258	ANSI/OEM Vietnamese; Vietnamese (Windows)

# Modifying pgAdmin User Interface Language for PostgreSQL 8.1 up to Version 9.3

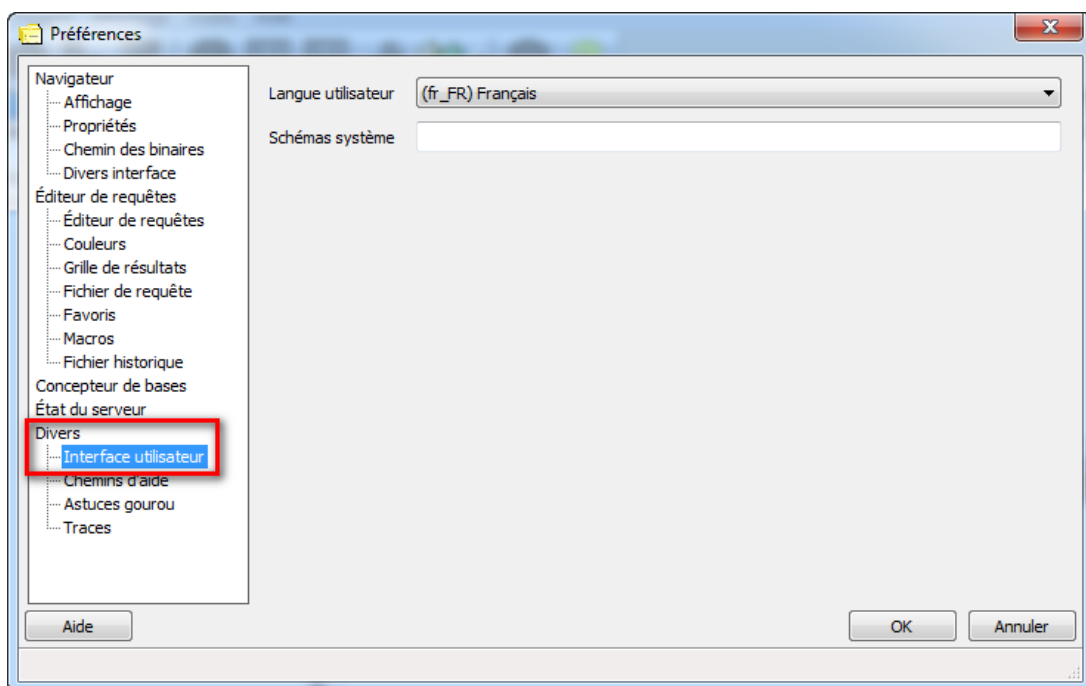
## Selecting User Interface Language in pgAdmin III

**Note:** First screens shown below will probably be in the Local Operating System language and will likely need to be changed.

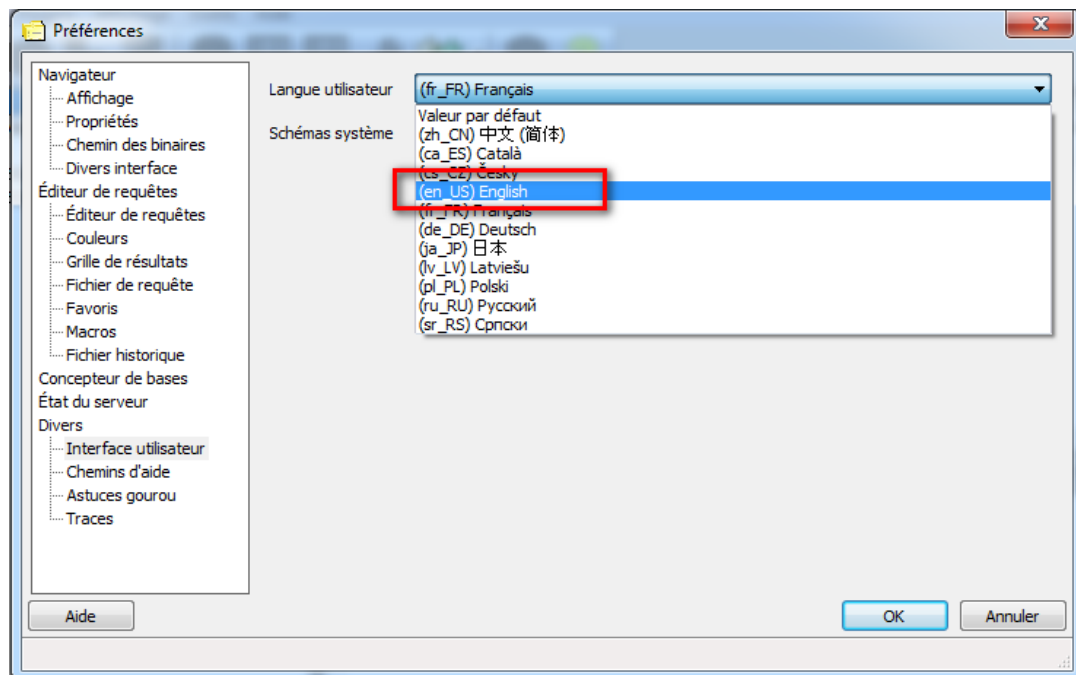
1. Start **pgAdmin III** from the Start Program Menu.
2. From the menu File, select **Preferences**.



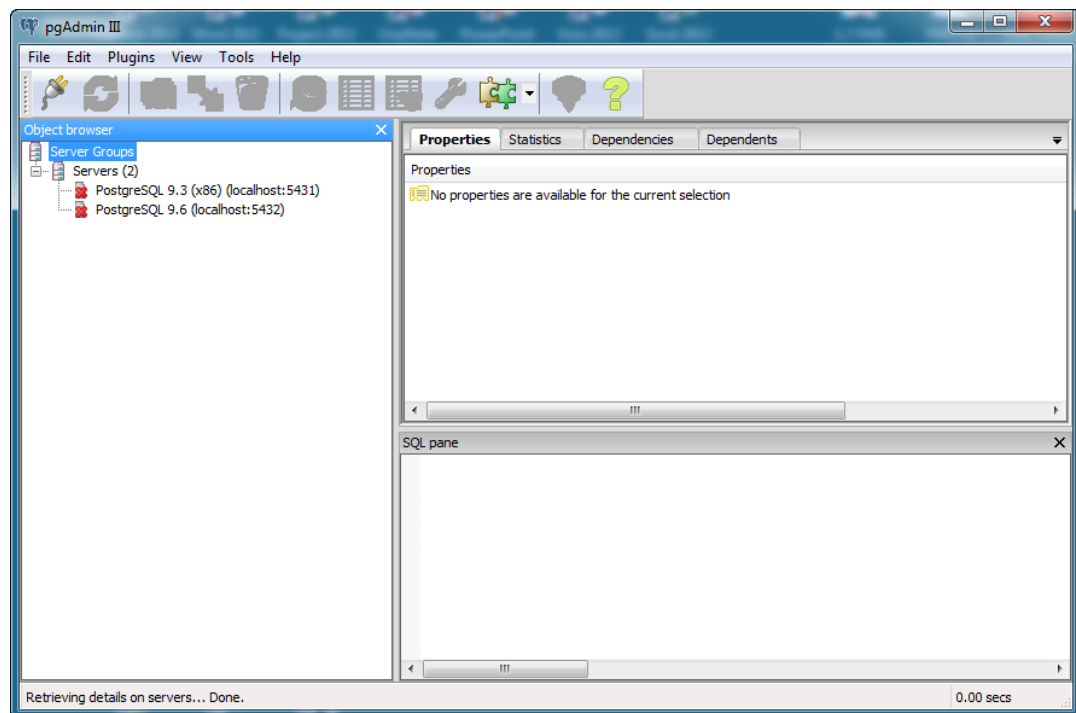
3. On the left side of the **Preferences** window under **Various**, select **User Interface**



4. From the **User language** drop down list, select **(en\_Us) English**.



5. Click **OK**.
6. Close **pgAdmin III**.
7. Restart **pgAdmin III** (the User Interface is shown in English).

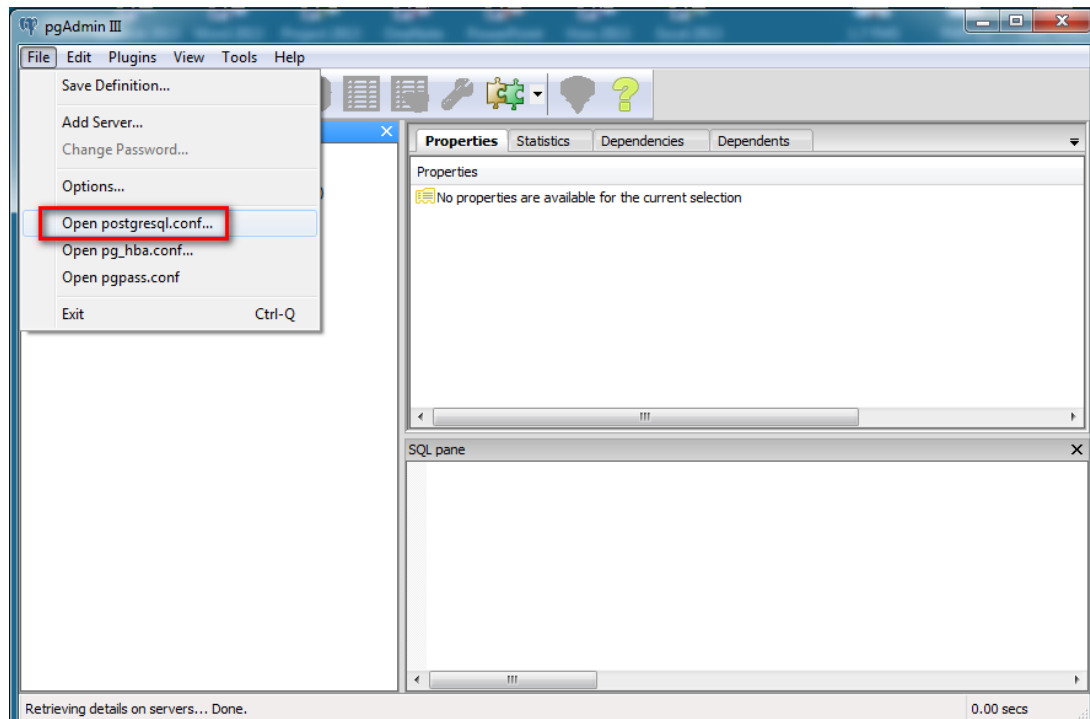


8. Continue this Procedure from next [section](#).

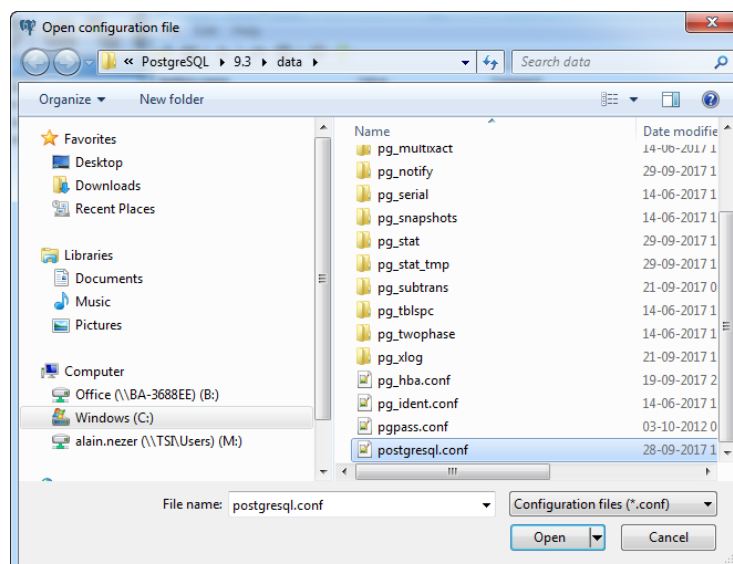
# Modifying Database Error Message Language in PostgreSQL 8.1 up to version 9.3

## Using pgAdmin III

1. Start **pgAdmin III** from the Start Program Menu.
2. From the File menu, select **Open postgresql.conf**.

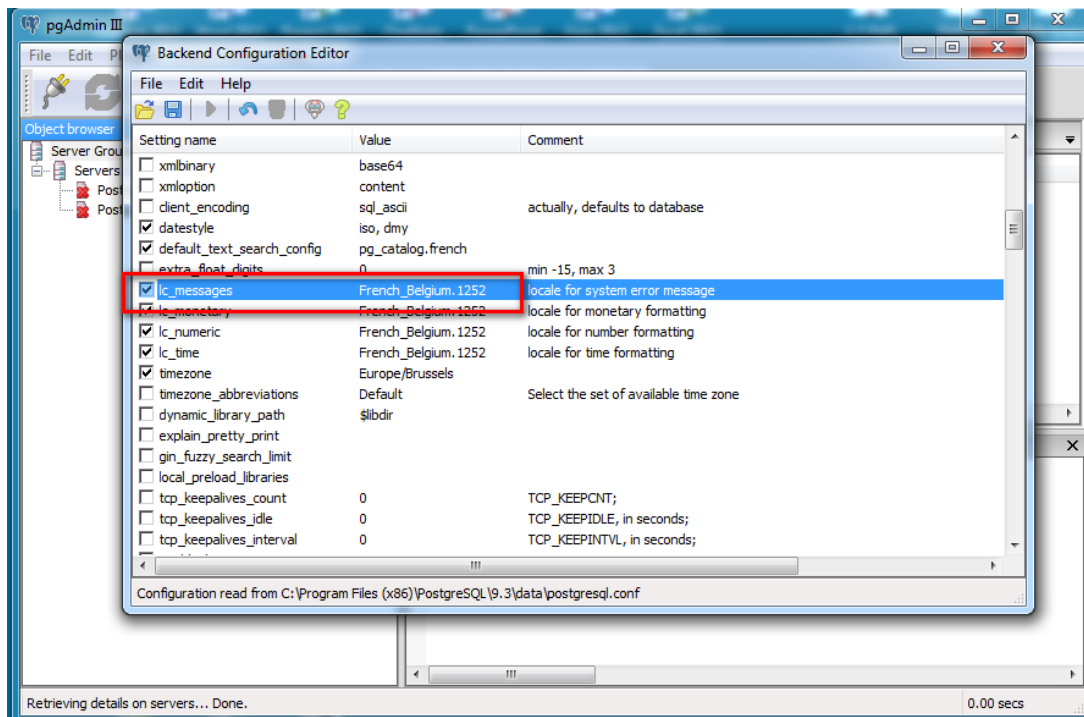


3. A window opens to locate the **postgresql.conf** file. Navigate to *PostgreSQLInstallationFolder\PostgreSQL version\Data\*.

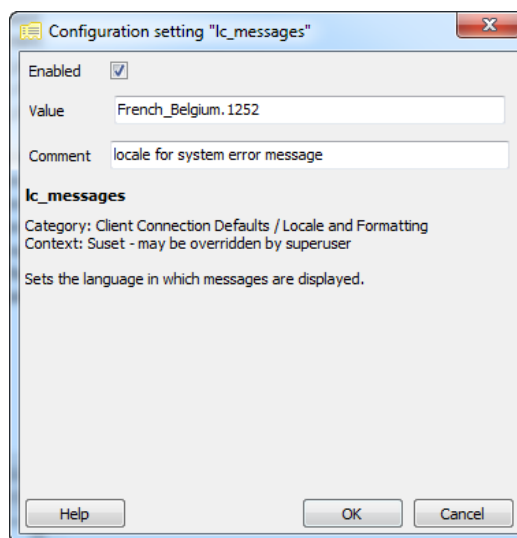


4. Select the file and click **Open**.

5. The **Backend Configuration Editor** opens.
6. Scroll down till you find the setting **lc\_messages**.



7. Double click **Lc\_messages**.

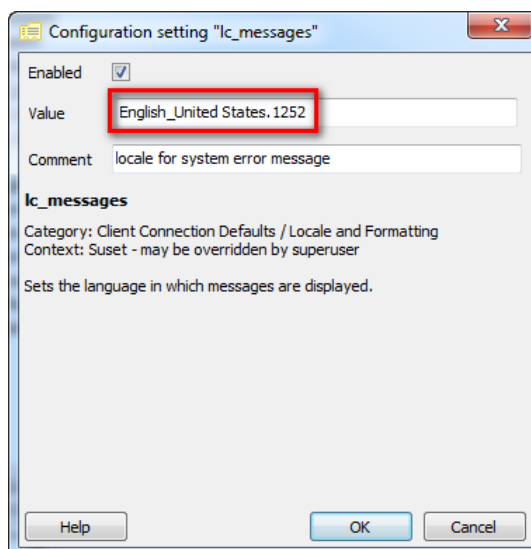




8. Replace the field **value** by:

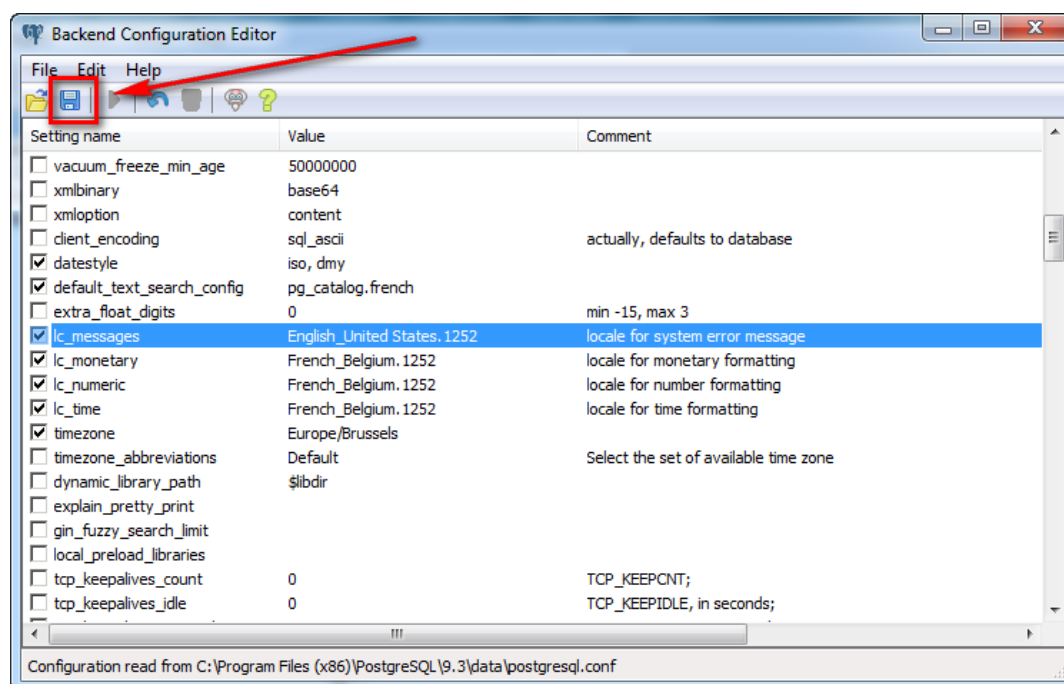
**English\_United States.YourCountryCodePage**

**YourCountryCodePage** is the value selected in the [List of Code page Identifiers](#)



9. Click **OK**.

10. Click **Save** icon from the toolbar.



11. Close **Backend Configuration Editor** Window.

12. Close **pgAdmin III**.

13. Restart **postgresql** service.

14. ALL Error messages generated by PostgreSQL Database will no longer be translated to a foreign language.

# Modifying Database Error Message Language in PostgreSQL version 10 and above

## Using Notepad+++

1. Start **Notepad+++** from the Start Program Menu.
2. Navigate with Explorer to the folder where PostgreSQL is installed i.e.: **C:\Program Files\PostgreSQL\16\**
3. Goto Folder **data**
4. From the File menu, Open **postgresql.conf**.

```
1 # -----
2 # PostgreSQL configuration file
3 # -----
4 #
5 # This file consists of lines of the form:
6 #
7 #   name = value
8 #
9 # (The "-" is optional.) Whitespace may be used. Comments are introduced with
10 # "#" anywhere on a line. The complete list of parameter names and allowed
11 # values can be found in the PostgreSQL documentation.
12 #
13 # The commented-out settings shown in this file represent the default values.
14 # Re-commenting a setting is NOT sufficient to revert it to the default value;
15 # you need to reload the server.
16 #
17 # This file is read on server startup and when the server receives a SIGHUP
18 # signal. If you edit the file on a running system, you have to SIGHUP the
19 # server for the changes to take effect, run "pg_ctl reload", or execute
20 # "SELECT pg_reload_conf()". Some parameters, which are marked below,
21 # require a server shutdown and restart to take effect.
22 #
23 # Any parameter can also be given as a command-line option to the server, e.g.,
24 # "postgres -c log_connections=on". Some parameters can be changed at run time
25 # with the "SET" SQL command.
26 #
27 # Memory units: B = bytes          Time units: us = microseconds
28 #               kB = kilobytes     ms = milliseconds
29 #               MB = megabytes      s = seconds
30 #               GB = gigabytes      min = minutes
31 #               TB = terabytes      h = hours
32 #                                   d = days
33 #
34 # -----
35 # FILE LOCATIONS
36 # -----
37 #
38 # The default values of these variables are driven from the -D command-line
39 # option or PGDATA environment variable, represented here as ConfigDir.
40 #
41
```

5. Search for the string **lc\_messages**.

```
#createrole_self_grant = ''      # set and/or inherit

# - Locale and Formatting -

datestyle = 'iso, mdy'
#intervalstyle = 'postgres'
timezone = 'Europe/Paris'
#timezone_abbreviations = 'Default'      # Select the set of available time zone
# abbreviations.  Currently, there are
#   Default
#   Australia (historical usage)
#   India
# You can create your own file in
# share/timzone/sets/.
#extra_float_digits = 1          # min -15, max 3; any value >0 actually
# selects precise output mode
#client_encoding = sql_ascii     # actually, defaults to database
# encoding

# These settings are initialized by initdb, but they can be changed.
lc_messages = 'English_United_States.1252' # locale for system error message
# strings
lc_monetary = 'English_United_States.1252' # locale for monetary formatting
lc_numeric = 'English_United_States.1252' # locale for number formatting
lc_time = 'English_United_States.1252' # locale for time formatting

#icu_validation_level = warning    # report ICU locale validation
# errors at the given level

# default configuration for text search
default_text_search_config = 'pg_catalog.english'

# - Shared Library Preloading -

#local_preload_libraries = ''
#session_preload_libraries = ''
#shared_preload_libraries = ''     # (change requires restart)
#jit_provider = 'llvmljit'         # JIT library to use
```

15. Replace the field **value** of **lc\_messages** by:

**English\_United\_States.YourCountryCodePage**

**YourCountryCodePage** is the value selected in the [List of Code page Identifiers](#)

16. Save **postgresql.conf**.

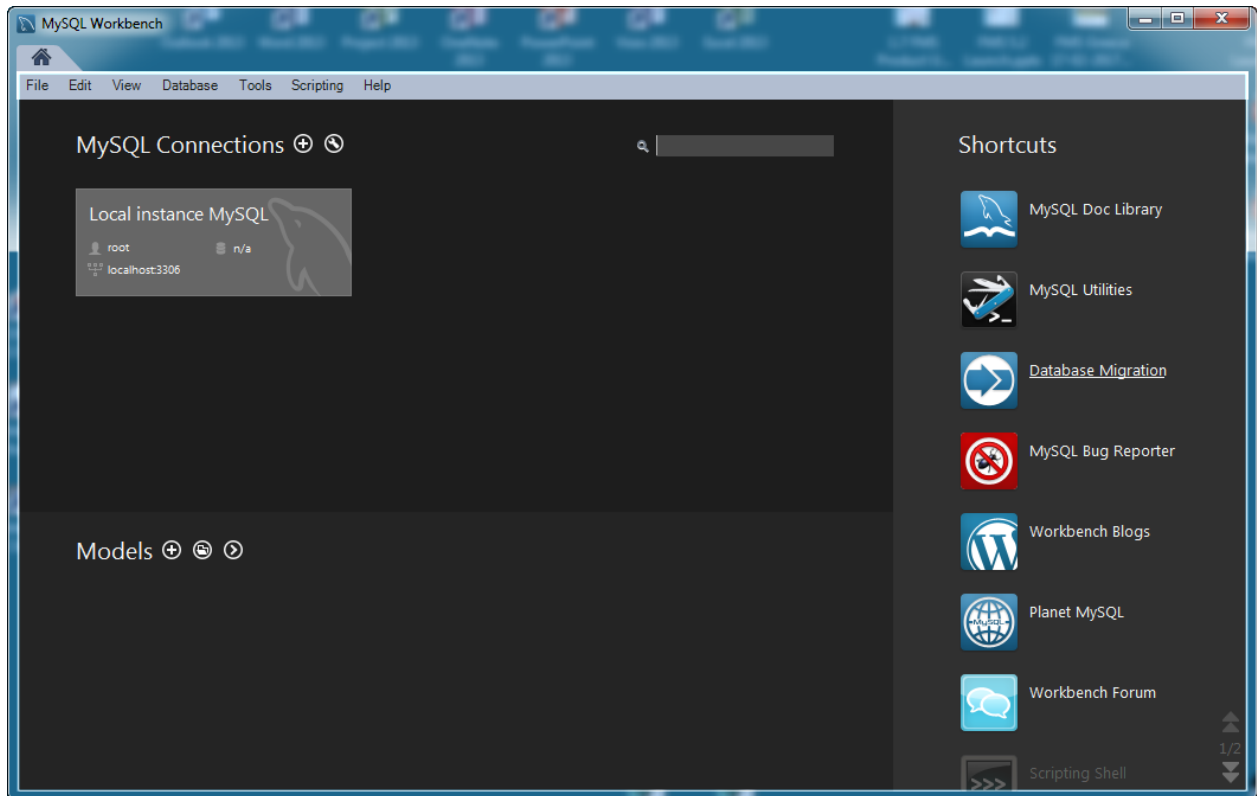
17. Close **Notepad+++**.

18. Restart **postgresql** service.

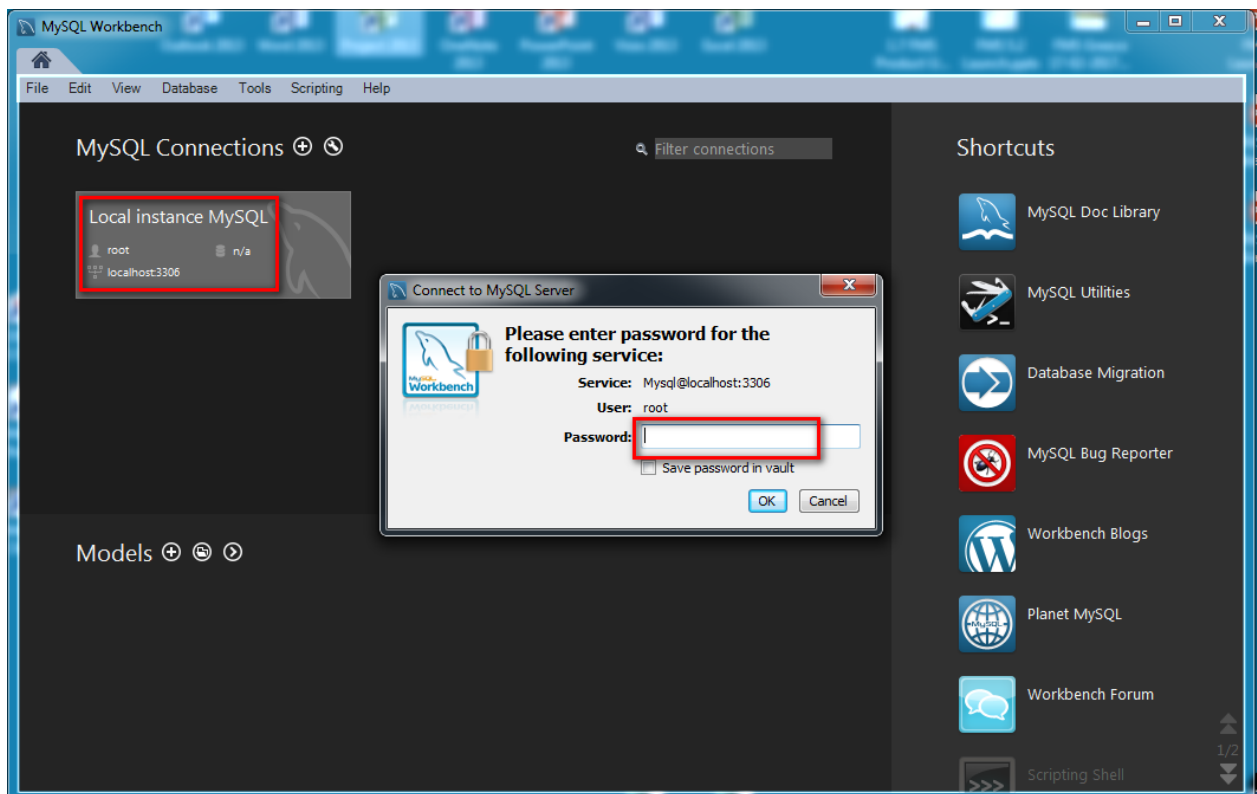
ALL Error messages generated by PostgreSQL Database will no longer be translated to a foreign language.

# Modifying Database Error Message Language in MySQL 5.1 Using MySQL Workbench 6.0 CE

1. Start **MySQL Workbench 6.0 CE** from the Start Program Menu.

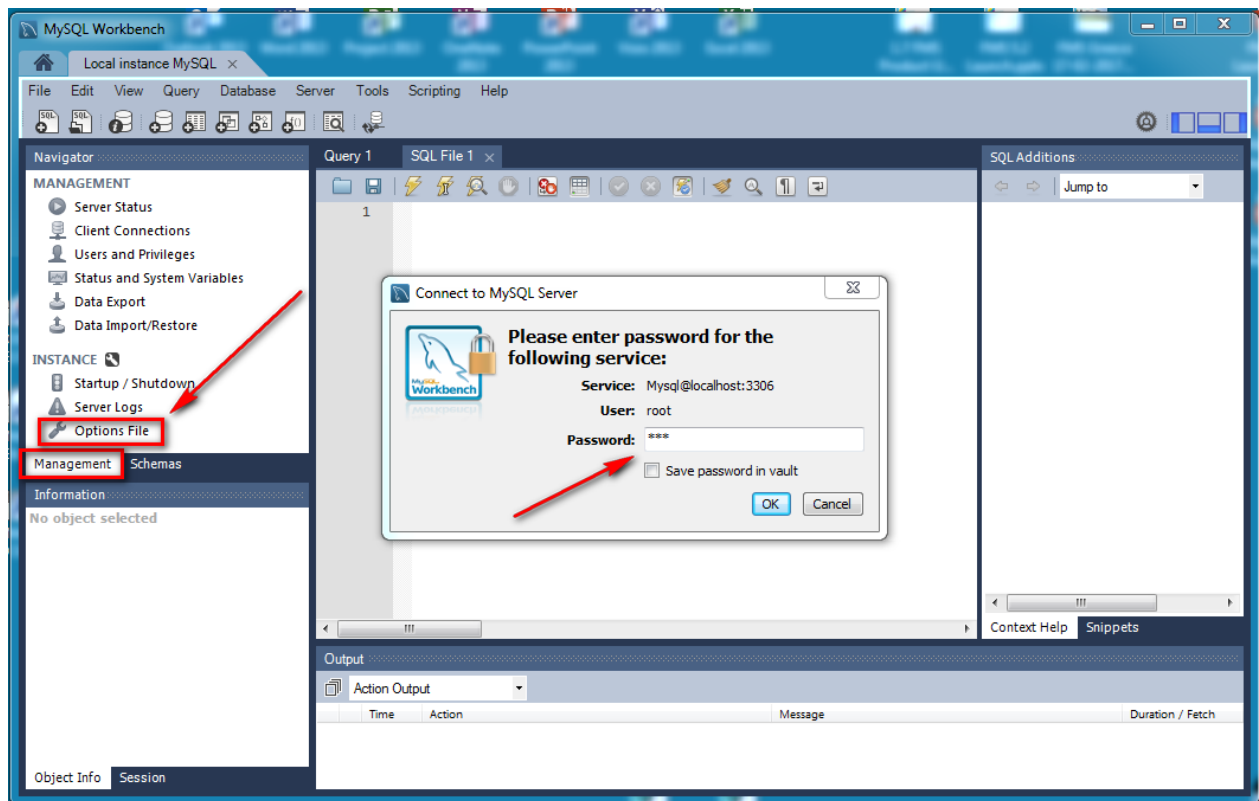


2. From the MySQL Workbench windows. double click on the MySQL Instance you want to change the language for.



3. Enter password for MySQL **root** user name.
4. Click **OK**

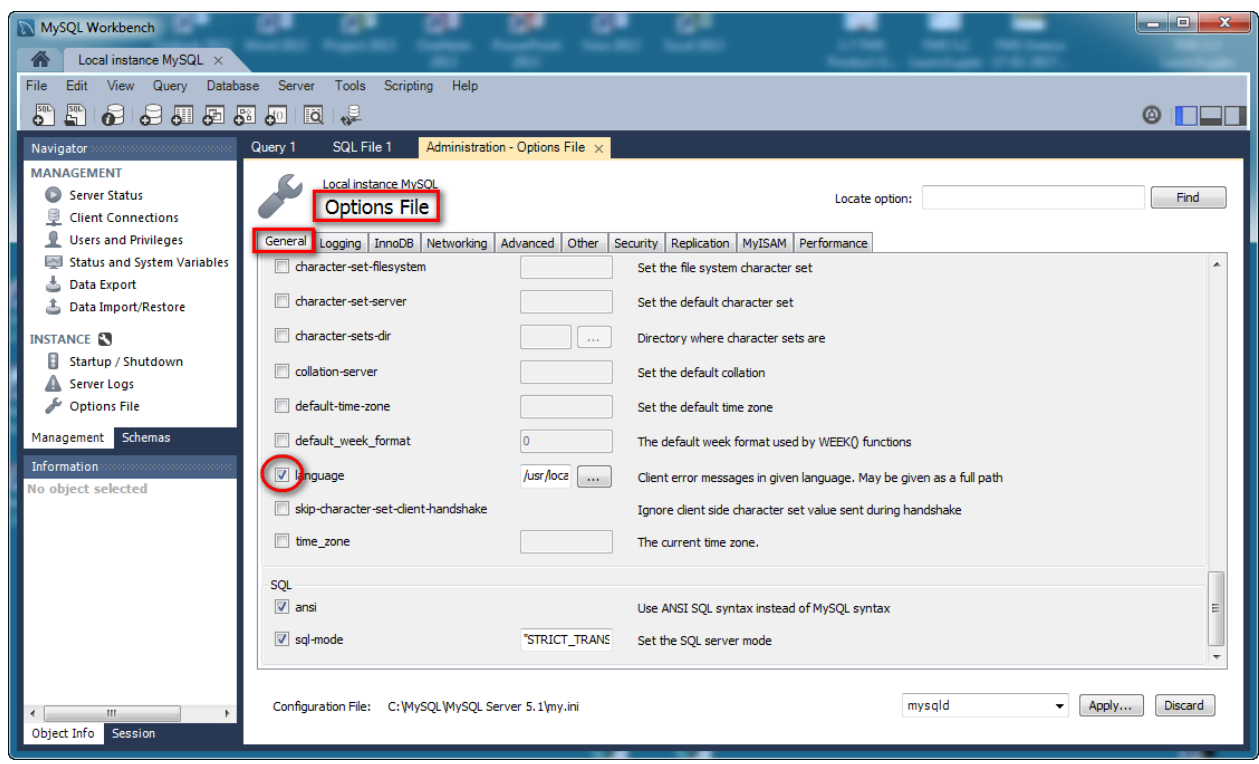
5. Click **Options File** and enter MySQL password for User Name root when requested.



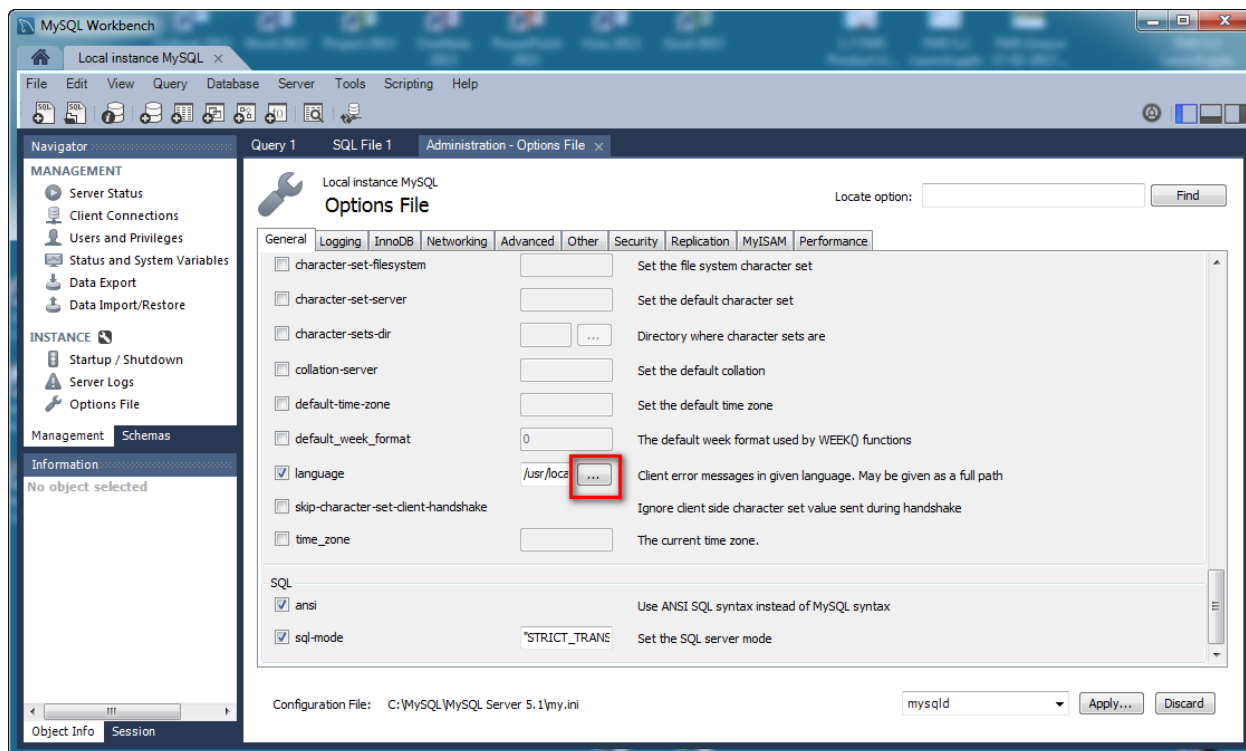
6. Click **OK**.

7. On the **Options File** window, navigate on the **General** Tab till the end and search for **Language**.

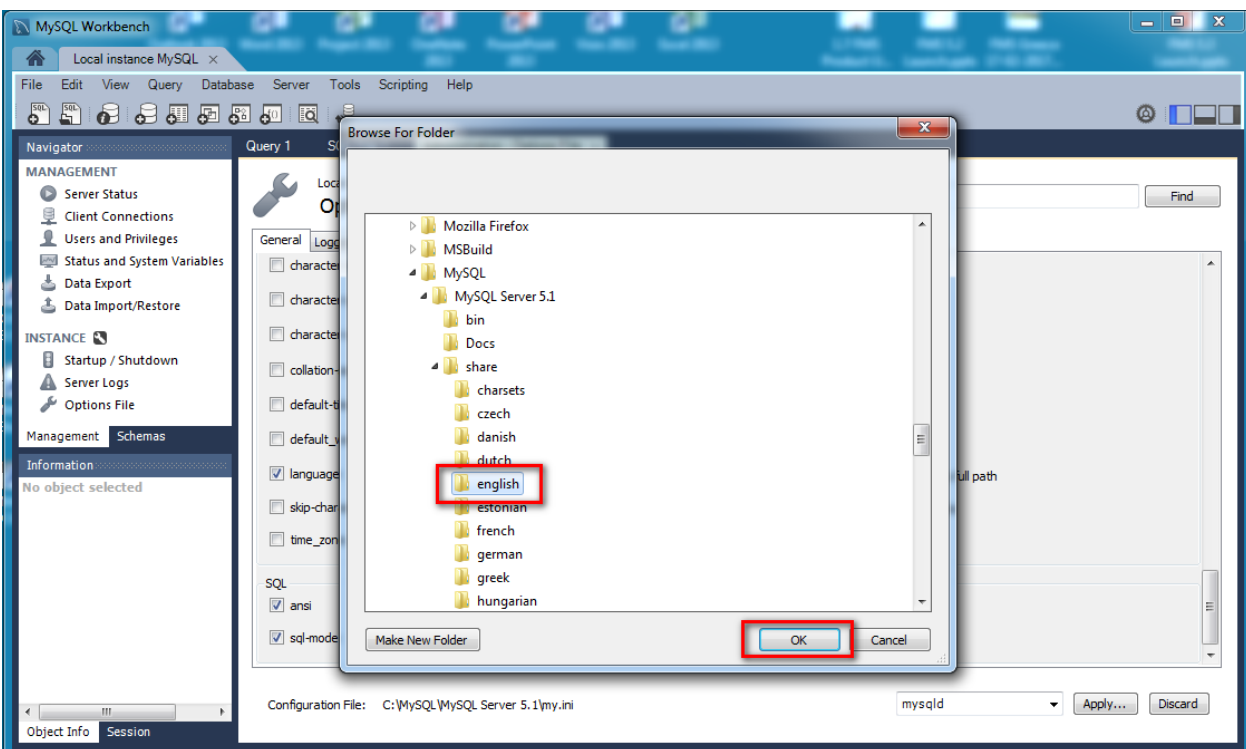
8. Check **Language**.



9. Click ... button shown below.

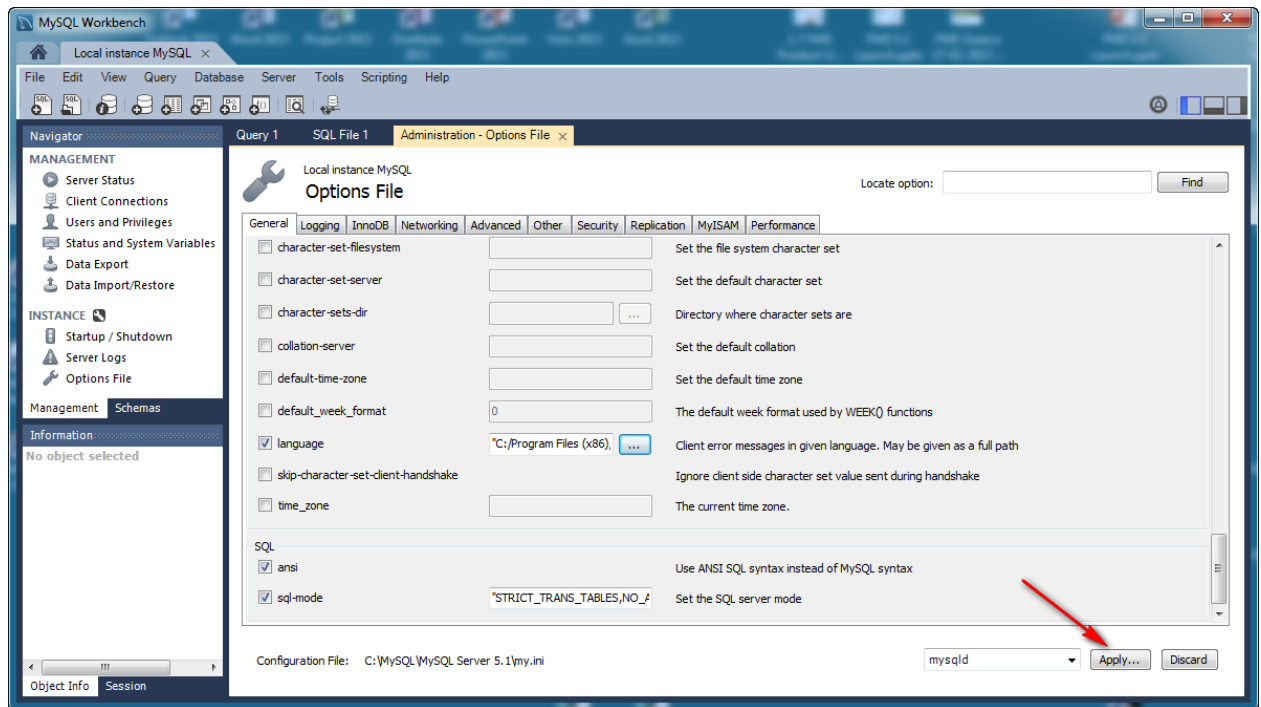


10. **Browse For Folder** window will open, navigate to :  
*MySQLInstallationPath\MySQL Server 5.1\share\* and select folder **English**.

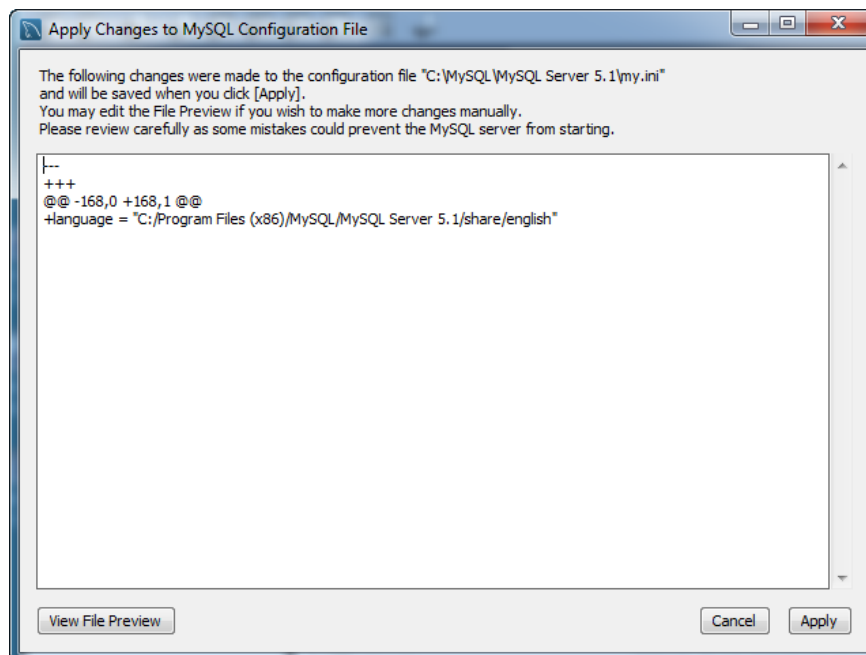


11. Click **OK**.

## 12. Click **Apply**.



## 13. Click **Apply** when **Apply Changes to MySQL Configuration File** window open.



## 14. Close **MySQL Workbench**.

## 15. Restart **MySQL** service.

16. ALL Error messages generated by MySQL Database will no longer be translated to the local language (i.e., Spanish, etc.) used by the Operating System.

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# Modifying Database Error Message Language for Microsoft SQL Server 2008 and above

## Using Microsoft SQL Server Management Studio

Database Error Messages from Microsoft SQL Server databases are handled differently than PostgreSQL or MySQL Server. Error messages generated by such instances depend on the language set to the User Account who logs into the instance and the User Account language default to the local Operating System language. For FMS 5, the language needs to be set for the **Node User Name** and for the **Client User Name**.

Unless other User Names are used for these FMS Accounts, we assume:

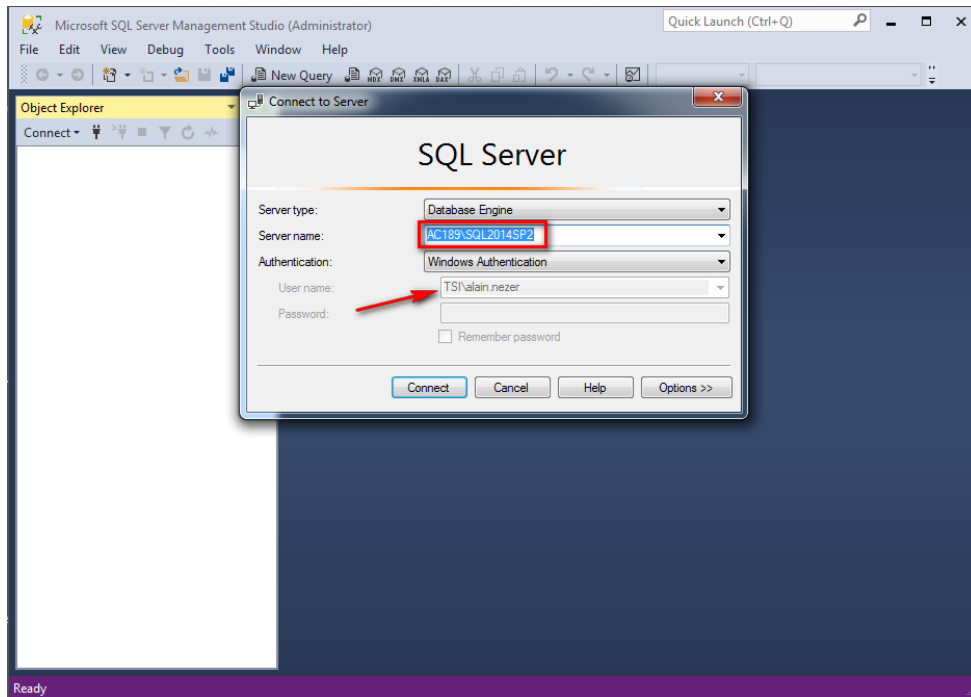
ODBC Client connection is configured as per Technical Notes ([refer to](#))

FMS Database name: **fms01**  
FMS Node User Name: **monitor**  
FMS Client User Name: **client**

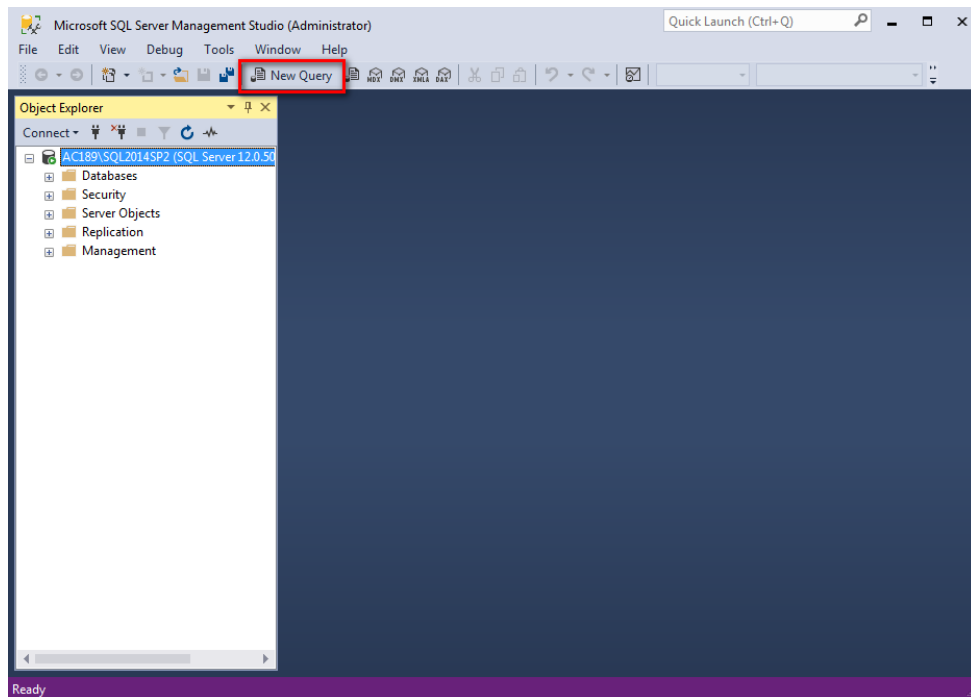
As described in different technical bulletins, the User Name mentioned above must be part of the **Public Role** within the database instance. Be sure before you log into a Microsoft SQL Server instance through MSSM that your User name account has all the administrators' rights to administer this instance. If that's not the case, please refer to the Database Administrator for assistance.



1. Start **MSSM** from Start menu program.
2. Login to SQL Server with a User Name Account which has SQL Administrative credentials.
3. Click **Connect**.



4. Click **New Query** icon.



5. Paste the following SQL Script in the new query window

```
-- Setting default Error Message language for FMS User Account monitor & client
--
-- Assuming FMS Database Name is ""fms01" otherwise change fms01 occurrence by the
Database Name FMS is using
--
-- Assuming FMS User Name are "monitor" and "client" otherwise change any occurrence
by the corresponding
-- user name used by FMS
```

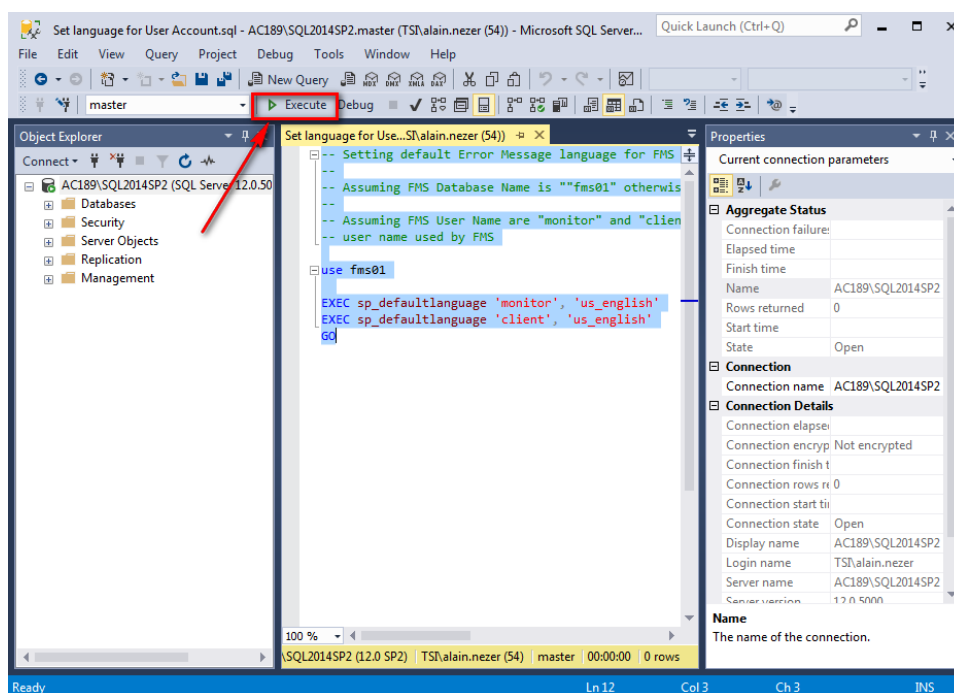
```
USE fms01
```

```
EXEC sp_defaultlanguage 'monitor', 'us_english'
```

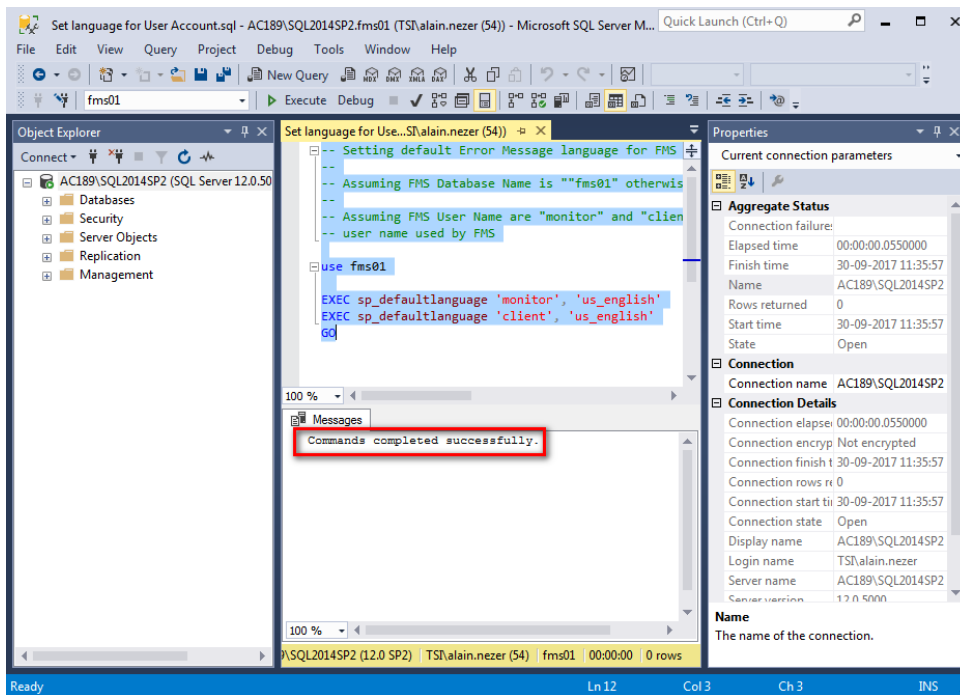
```
EXEC sp_defaultlanguage 'client', 'us_english'
```

```
GO
```

6. Run query by clicking **Execute**.



7. Verify SQL script completed successfully.



8. Default SQL Database Error Messages default now to **English** for both FMS User name **monitor** and **client**.

9. Microsoft SQL Server Windows service DO NOT need to be restarted.

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## References

- TCC-153 How to Create MySQL 5.1 Database on Network Server
- TCC-109 How to Run FMS 5 with Microsoft\_SQL2012 as Main Database
- TCC-111 How to Use Microsoft SQL 2008 FMS Mirror Database
- TCC-112 How to Use Microsoft SQL 2012 FMS Mirror Database
- TCC-131 How to Run FMS5 MSSQL2014 as Main Database
- TCC-149 How to Run FMS5 MSSQL2016 as Main Database
- TCC-186 How to Run FMS5 w Microsoft SQL2019 as Main Database
- TCC-193 How to Install PostgreSQL 10 (x64) and Upgrade from version 9.3.5
- TCC-197 How to Install PostgreSQL 14 (x64) and Upgrade from version 9.3.5
- TCC-206 How to Install PostgreSQL 15 (x64) and Upgrade from version 9.3.5
- TCC-207 How to Run FMS5 w Microsoft SQL2022
- TCC-210 How to Install PostgreSQL 16 (x64) and Upgrade from version 10

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## Revision History

Revision	Released	Description
A	04 October 2017	Initial Release.
B	05 June 2024	Adding validity for: <ul style="list-style-type: none"><li>• PostgreSQL Version 15 and 16</li><li>• Microsoft SQL Server version 2019 and 2022</li></ul>

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