Configuring a Linux Server to Connect to an MSSQL Database Using ODBC

Applies To

Zend Server
GNU / Linux (CentOS, RHEL)

Summary

To connect to an MSSQL database from a Linux server via PHP ODBC, along with the PHP extensions **odbc** and **mssql**, you must also install and configure additional libraries on your server - FreeTDS and unixODBC.

Instructions

Roughly, these are the steps you need to complete:

1. Installing FreeTDS and unixODBC

> **Note:**
>
> You may need to install a third party repository such as EPEL in case your distribution's repository doesn't contain these packages.

To install unixODBC and FreeTDS libraries:

```
# yum install unixodbc freetds
```

2. Registering the ODBC driver with freeTDS

Locate the path for the *libtdsodbc.so* library on your server:

```
$ ldconfig -p | grep libtdsodbc
libtdsodbc.so.0 (libc6,x86-64) => /lib64/libtdsodbc.so.0
```

Create and edit files */etc/odbcinst.ini* and */etc/odbc.ini* with following contents:

/etc/odbcinst.ini

```
[FreeTDS]
Description = Freetds v 0.95
Driver = /lib64/libtdsodbc.so.0
```

(**Driver** must be the exact path from the output of the command *ldconfig*)

/etc/odbc.ini

```
[MSSQLServer]
Driver = FreeTDS
Description = Any description
Trace = No
Server = 192.168.0.30
Port = 1433
TDS version = 0.95
Database = ApplicationDB
```

(use the correct values of **Server IP**, **MSSQL Port** and **Database name**)

> **Note:**
>
> The name in square brackets is the Data Source Name (DSN) that you should use in your PHP script.

3. Testing MSSQL connection via command line

Test the connection to the MSSQL database (use the correct values of **Data Source Name**, **Database user** and **Database password**):

```
$ isql -v MSSQLServer <DBuser> <DBpass>
```

This should open an SQL prompt where you can try some queries.

4. Creating symlinks to the .ini files

Create the following symlinks in Zend Server's *etc* directory to make the ODBC configuration work with PHP. Execute the following commands:

```
# ln -s /etc/odbc.ini /usr/local/zend/etc/odbc.ini
# ln -s /etc/odbcinst.ini /usr/local/zend/etc/odbcinst.ini
```

5. Testing MSSQL connection via PHP

Following is the sample PHP code to test the MSSQL connection using ***odbc_connect ()***:

```
<?php

// Replace the value's of these variables with your own data:
    $dsn = "MSSQLServer"; // Data Source Name (DSN) from the file /usr/local/zend/etc/odbc.ini
    $user = "DBuser"; // MSSQL database user
    $password = "DBpass"; // MSSQL user password

$connect = odbc_connect($dsn, $user, $password);

//Verify connection
if ($connect) {
    echo "Connection established.";
    odbc_close($connect);
} else {
    die("Connection could not be established.");
}
```