

VMI AB

SpectraPro ©

SLQ Server databases



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SpectraPro® - SQL Server databases

1. Introduction

SpectraPro can create a machine database in any existing SQL Server installation.

This paper explains in detail how the user can create and populate a SQL Server database.

2. Requirement

The computer where the SpectraPro is installed must be connected in the same network with a Server running SQL Server.

SpectraPro license must be Network Route (blue color HASP protection key)

3. Preliminary testing

Before creating a SQL Server database check the following:

3.1. SpectraPro license.

Click **Start -> Programs -> SpectraPro -> Protection key Test**

The Protection Key test application will start:



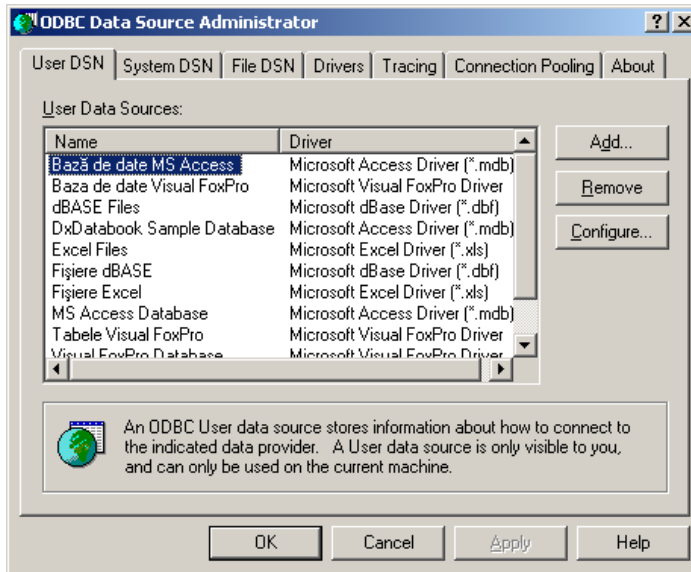
Press **Test key** button, you must then see the above on the screen.

If not, contact VMI AB to receive a suitable license for your SpectraPro.

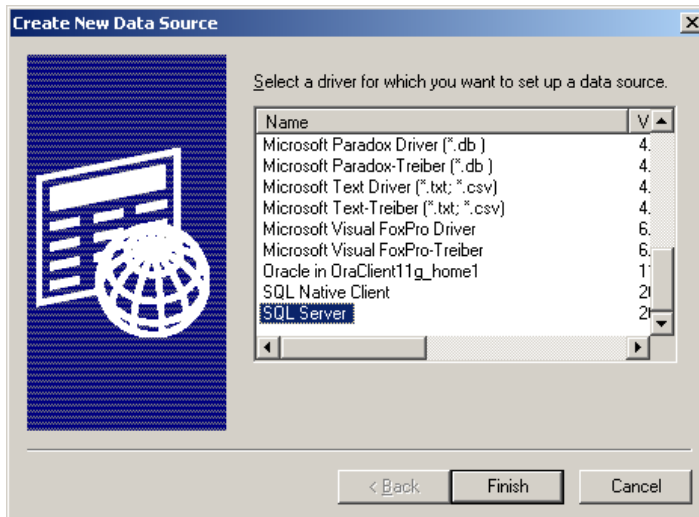
3.2. Test connection with the SQL Server

An easy way to test the connection with the SQL Server is to create an ODBC User DSN.

To do this, open **Start -> Settings -> Control Panel -> Administrative Tools** and select **Data Source (ODBC)**:

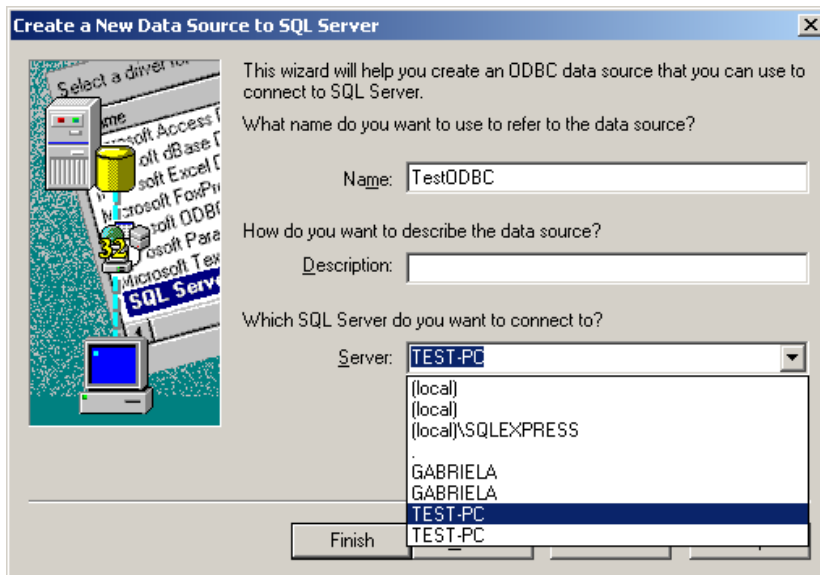


Press **Add** button:



From the list, select SQL Server item and press **Finish**.

In the next windows do the followings:

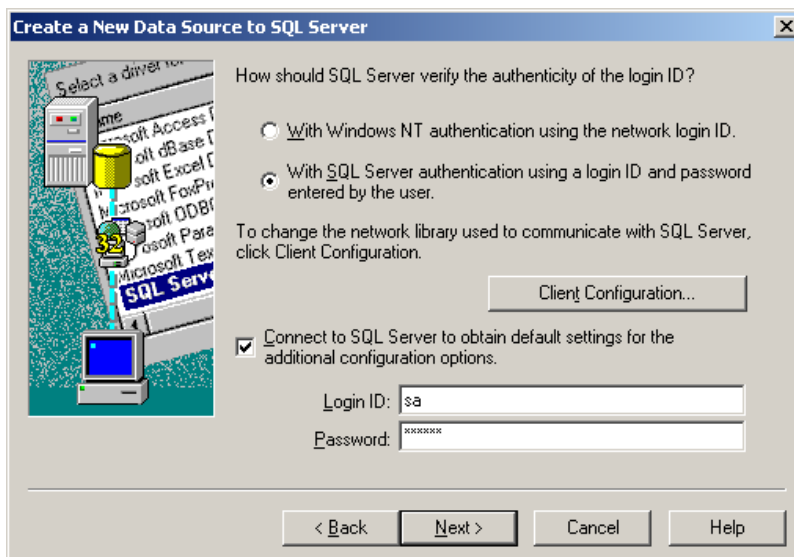


Enter a name for your User DSN (Example: TestODBC)

From the Server list select the server name where SQL Server is installed (In above example it is TEST-PC).

Press **Next** to continue.

In the next window, select "With SQL Server authentication..."

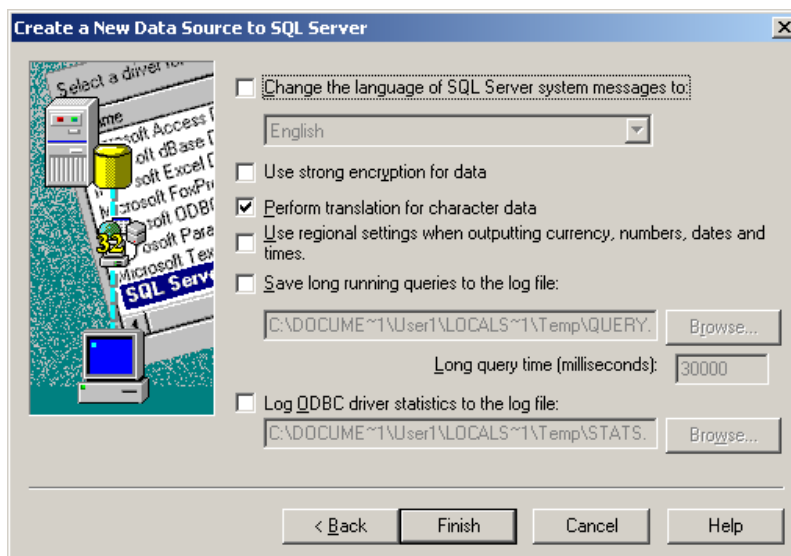
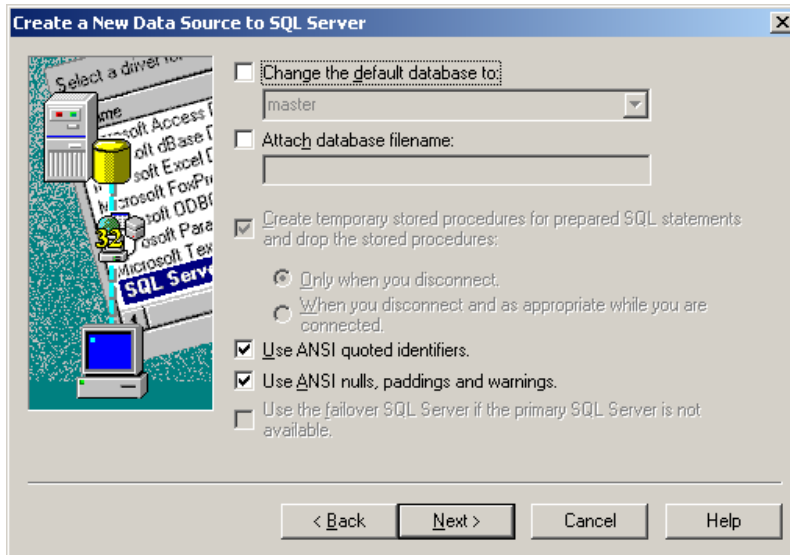


Enter a valid SQL Server Administrator ID and the correct password.

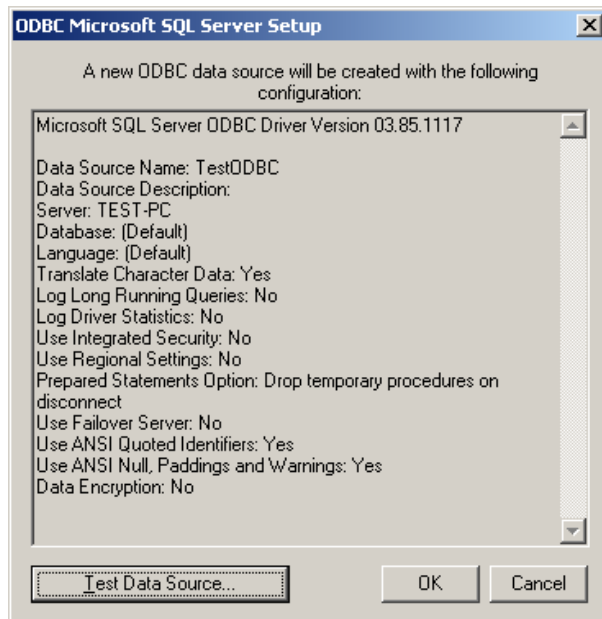
(Support from your local IT department may be necessary).

Press **Next** to continue.

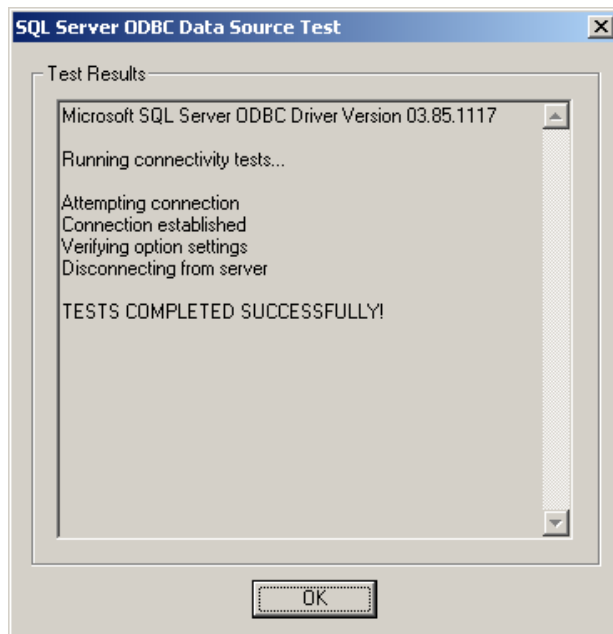
In the next two screens no change is required, just press **Next** and **Finish**.



To test the connection with the SQL Server, press **Test Data Source** button:



If the connection is OK, you must see something as below:



Press **OK** and **Cancel** (several times, to exit).

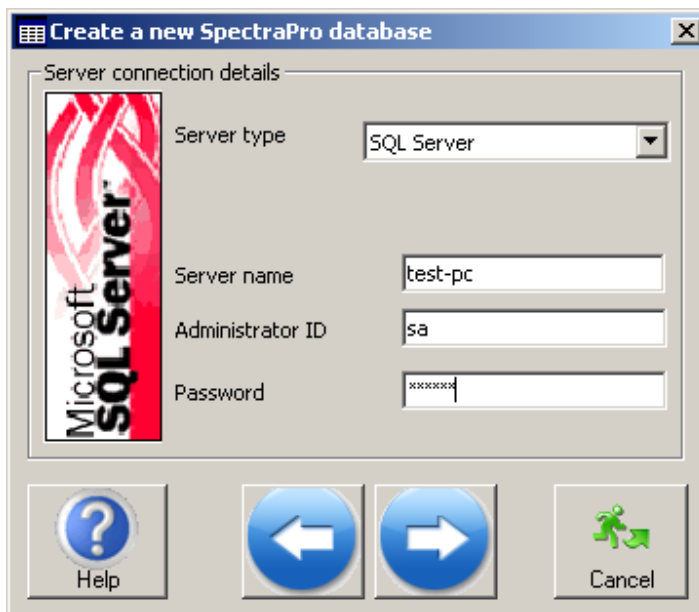
If the message **TESTS COMPLETED SUCCESSFULLY** not appears, and instead an error message is shown, the problem is in the network connection and you will

not be able to create a database in SpectraPro. To proceed you first need to solve the network connection problem.

If the above tests succeeded, you are able to create a machine database in the selected SQL Server.

4. Creating database

Start SpectraPro, from the **Database** menu select **Create** command:



Server type must be SQL Server.

Type the Server name (in the above example: test-pc).

You will need the Administrator ID and the password.

You may use the same Administrator ID and password as in paragraph 3.

The User must have Admin privilege.

Press **Next** button.

In this screen, you need to fill in the following information:

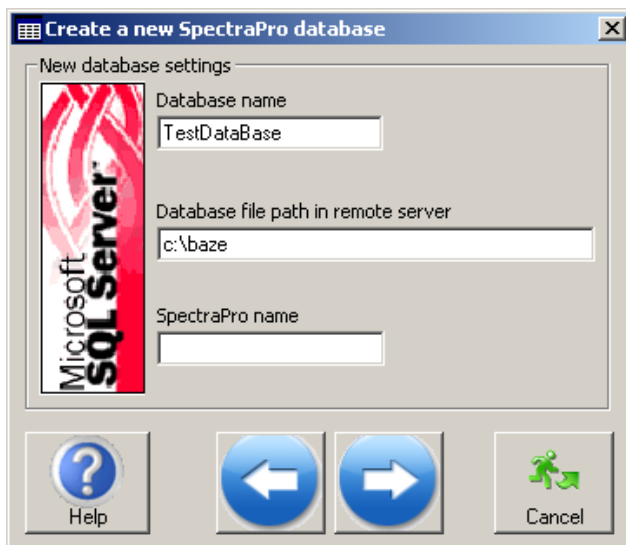
Database name: Any name for your new database (In the below example it is TestDataBase).

Database file path in remote server: Type the directory in the Server where the database will be created.

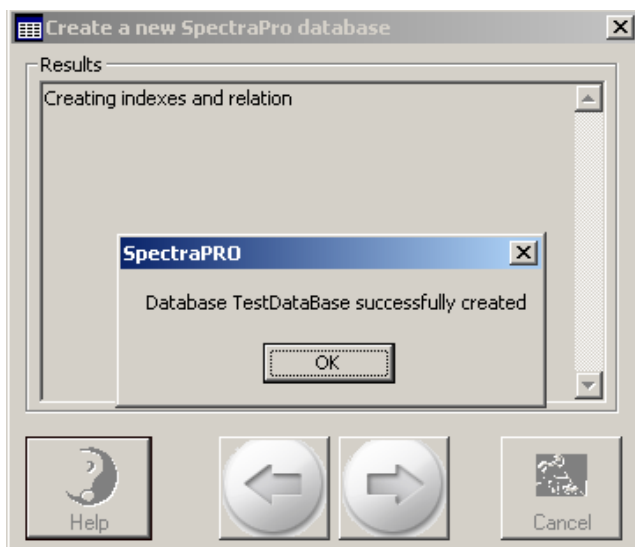
You must type the full path of the directory, as it is in the Server computer.

Note that the directory must exist in the Server!

(Do not type the path as you can see it remotely from your workstation. The path must be the string as it is seen in Windows Explorer on the Server computer).



Press **Next** button twice to continue.



The database is created (normally it only takes a few seconds).

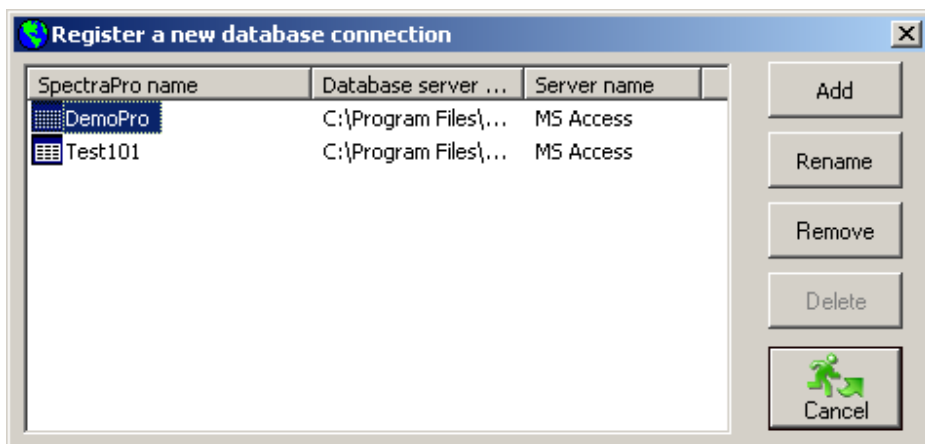
Press **Ok** and **Cancel** to finish.

5. Registering database

If the database is to be used only in the workstation where the database has been created, no manual registration is needed. The registration is done automatically.

However, if you need to have access to the same database in another workstation, before you can use it, you must register it.

In SpectraPro, select Database menu and Registration command:



Press **Add** button.

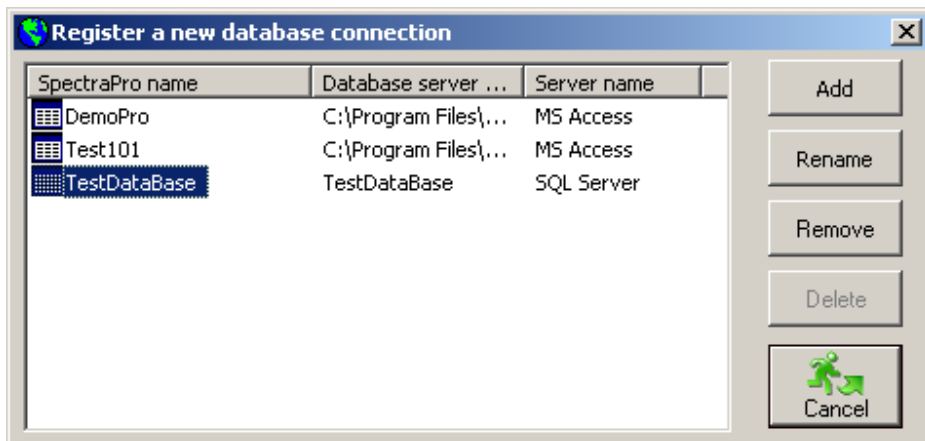
Select *Server type* to be *SQL Server*.

Type the *Server name* (in our example is *test-pc*).

Type correctly the *Database name*.



Press **Test connection** button to test the connection. If the test is successfully, press **OK** and the database will be added to the registration list.



Now you can use the database in your workstation.

6. Problems

Typical problems that can appear during the database creation are:

- Incorrect Administrator ID and password.
- Incorrect Database name during registration
- Restrictive security settings.

To solve these problems you may open the *SQL Server Management Studio*, in the Server where the SQL Server is installed.

Here you can find:

- A proper Administrator ID and password.
- SpectraPro databases that are existing. Any SpectraPro database is owned by VMI User and all has VMI password.

Security problems should be solved by your IT administrator.

7. Create the database from script

7.1. Create the SpectraPro user

This step must be done only a single time.

Use *Microsoft SQL Server Management Studio*.

Go to **Security -> Logins -> New login**

Type:

Login name: **VMI**

Check *SQL Server authentication* check box

Enter and confirm the password: **VMI**

In **Server Roles** tab check: *public* and *sysadmin*.

All others settings are default.

7.2. Create the SpectraPro database

To create the database run the attached script files in the following order:

DatabaseCreation.sql
Plant.sql
Machine.sql
MachDesc.sql
NotePad.sql
Point.sql
Direction.sql
Data.sql
GraphDatabase.sql
GPlant.sql
GMachine.sql
GDirection.sql
Route.sql
RPlant.sql
RMachine.sql
RPoint.sql
RDirection.sql
AlarmStatus.sql
MEData.sql
GMEData.sql
TimeSignalData.sql
EnvelopeData.sql
InfoDB.sql
NarrowBand.sql

7.3. Add VMI user to the database

After the database is successfully created you need to add the VMI user. To do this, select the new database:

Select **Security ->Users->New users**

Type *User name*: **VMI** and *Login Name*: **VMI**.

In the Role members panel check the following items:

-db_accessadmin

-db_owner.

Now the database settings are complete.

In the SpectraPro application, register the new database (See paragraph 5).