



Server Installation / Client Installation

It is also possible to have only on Database for several measuring stations or viewing stations, if all clients are permanent connected to one server.

To achieve this the installation process is a bit different to the normal installation and not everything works automatically

Before starting the installation process you have to make sure, that all files that are necessary for the normal installation are available for every client Pc and also for the server. You also have to install an SQL-Management Studio on the PC.

Server Installation

I. Installing and SQLEXPRESS Instance (This step can be skipped if there is already an SQL Instance):

1. Start the "SQLEXP_x86_ENU.exe / SQLEXP_x64_ENU.exe" from the Installation CD or from your download location. (Sometimes the file is not visible on the CD, Change it in your explorer settings)
2. Please select new Installation



New SQL Server stand-alone installation or add features to an existing installation

Launch a wizard to install SQL Server 2012 in a non-clustered environment or to add features to an existing SQL Server 2012 instance.

3. Include SQL Updates (If internet connection is available) an click next

Include SQL Server product updates

Name	Size (MB)	More Information
SQL Server 2012 SP1 GDR Produc...	145	KB 2793634

1 updates (145 MB) found online.
The Product updates (145 MB) will be installed when the SQL Server features are installed.



4. Select the point "new Installation"

Perform a new installation of SQL Server 2012

Select this option if you want to install a new instance of SQL Server or want to install shared components such as SQL Server Management Studio or Integration Services.

5. Select all Features

Features:

Instance Features

Database Engine Services

SQL Server Replication

Shared Features

SQL Client Connectivity SDK

Redistributable Features

6. Please give the SQL Database the name "SQLEXPRESSMEE"

Named instance:

7. Please select the account name and make sure both "Startup Types" are set to automatic

Microsoft recommends that you use a separate account for each SQL Server service.

Service	Account Name	Password	Startup Type
SQL Server Database Engine	NT Service\MSSQL\$SQLEXPRES!		Automatic
SQL Server Browser	NT AUTHORITY\LOCALSERVICE		Automatic

8. Please select the "Mixed Mode" and create a Password for the connection
Make sure you memorize the password!
We will need it later and for future service.

Specify the authentication mode and administrators for the Database Engine.

Authentication Mode

Windows authentication mode

Mixed Mode (SQL Server authentication and Windows authentication)

Specify the password for the SQL Server system administrator (sa) account.

Enter password:

Confirm password:

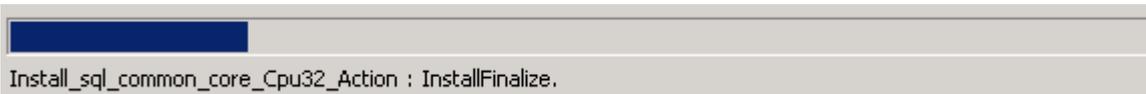
Specify SQL Server administrators

MEE\MEE\$ALBERT (Simon Albert)	SQL Server administrators have unrestricted access to the Database Engine.
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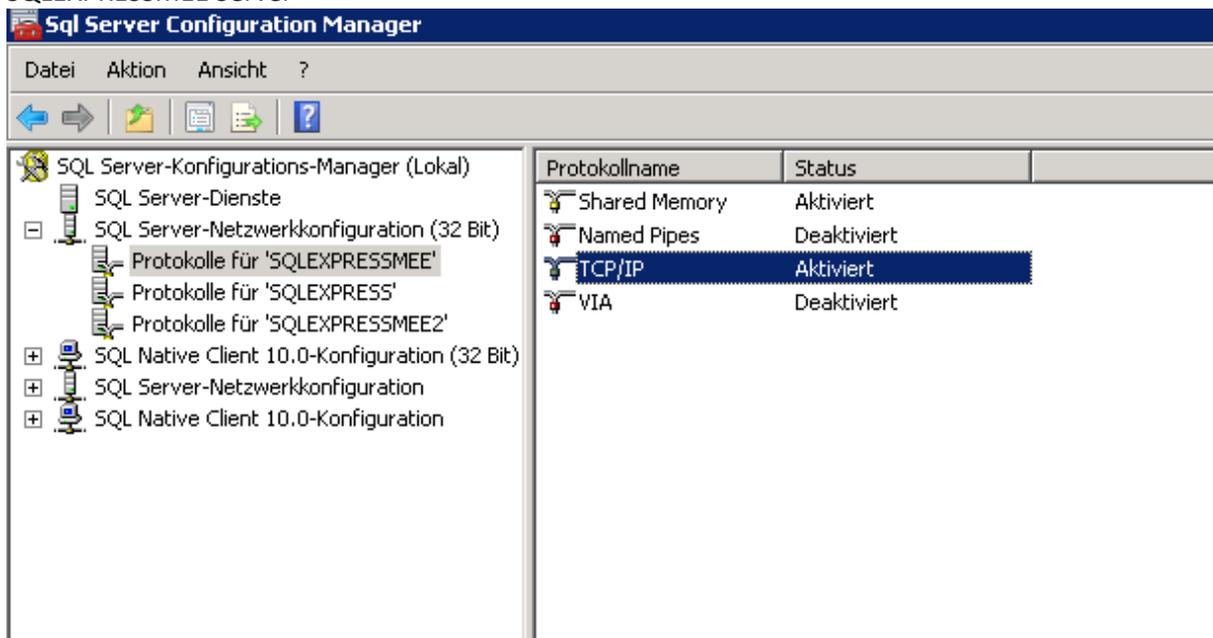
Add Current User Add... Remove



9. Run the Installation



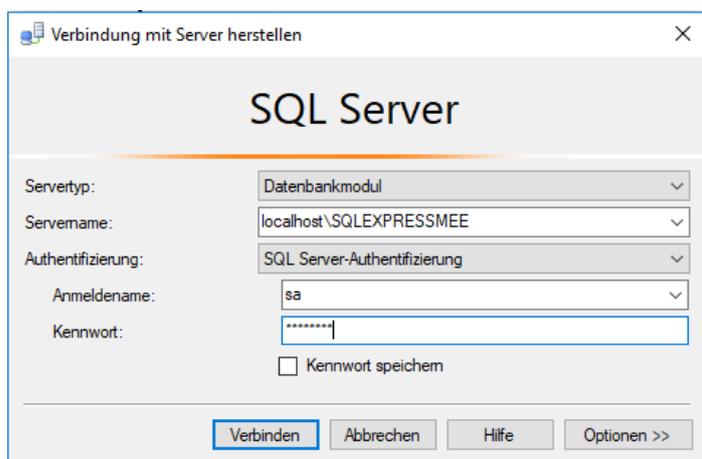
10. Please open the SQL Server Configuration Manager and activate the TCP/IP for the SQLEXPRESSMEE Server



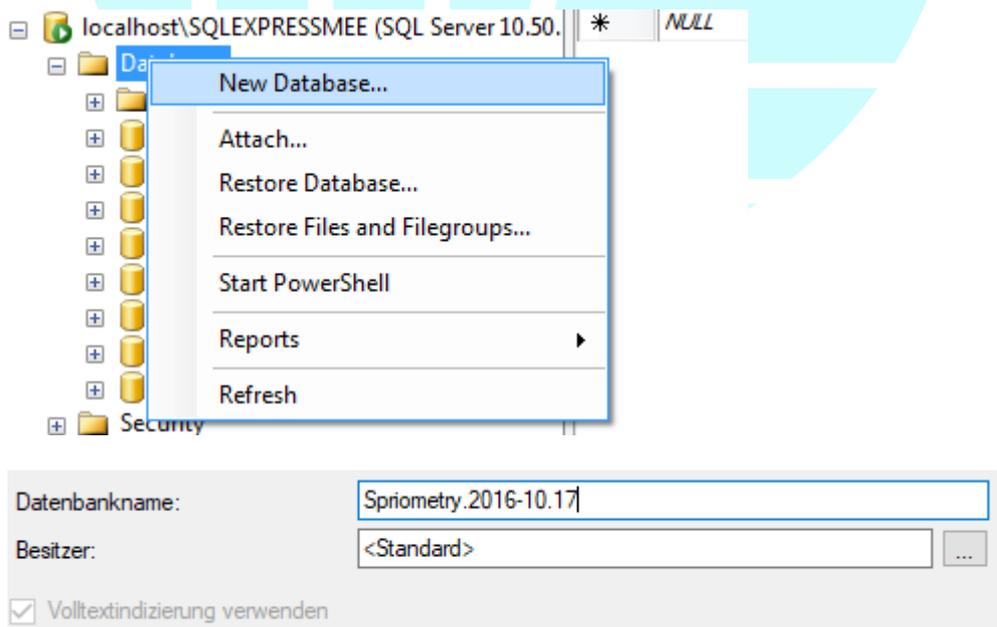


II. Installing and SQLEXPRESS Instance (This step can be skipped if there is already an SQL Instance):

11. Copy the Folder DBScript from one Client PC to the Server. The folder path is normally "C:\MEE\smartSOFTmee\DBScript"
12. Open the SQL Management Studio and connect to the "SQLEXPRESSMEE" Server. Select SQL Server-Authentication and use the username "sa" and the password you set during the installation of the instance.

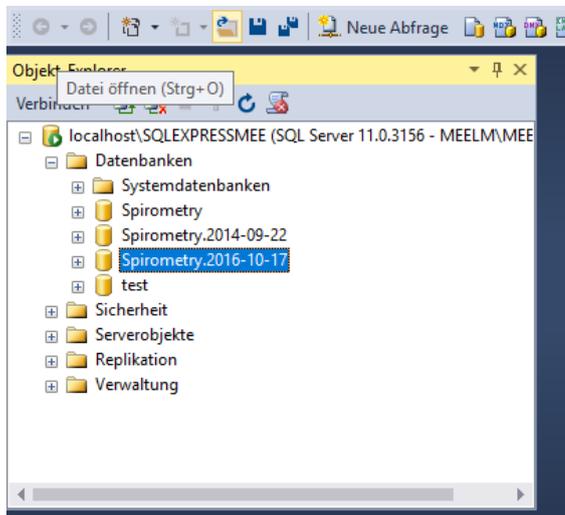


13. Make a right mouse click to "Database" and select "new Database". Then enter the name "Spriometry.2016-10-17" and press ok.

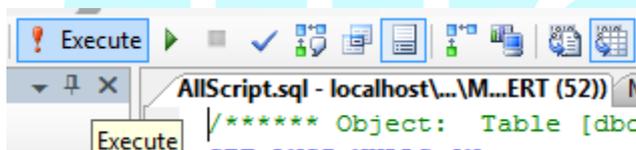




14. Select the new created Database, press the open Icon and search for the DBScript folder. In the DBScript folder select the file "ALLScript".



15. After the file "AllScript" was opened successfully press the execute button.

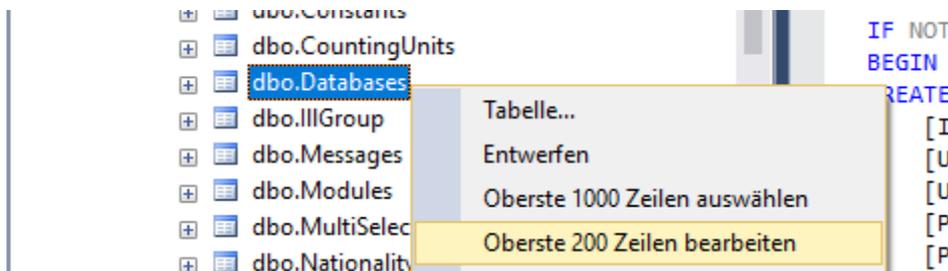


Wait until :





16. Open now your Database, go to “Tabeln”, “dbo.Databases” and select “Edit top 200 Rows”

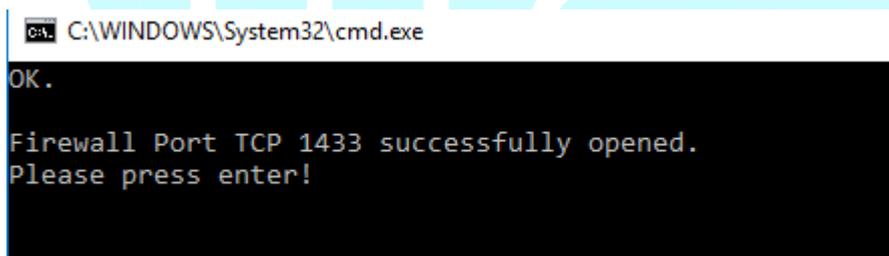


17. Copy this Connection string to Connection String in the first two lines and change the Server Name and the Password. Make a click to “Null” to save the changes and close the management Studio.

“Server=**myServerName**\SQLEXPRESSMEE ; Database=SpirometryNetwork ; User Id=sa ; Password=**myPassword**,”

CompanyID	DBID	DBName	DBType	RDBMSType	IssueDate	Issu...	ConnectionString	De	
		PatientInfo	Segal_Spirometry	1	MSSQL	2009-11-01 13:2...	1	Data Source=localhost\SQLEXPRESSMEE;Initial Catalog=Spirometry.2016-10-17	NU
		PatientsTests	Segal_Spirometry	1	MSSQL	2009-11-01 13:2...	1	Integrated Security=SSPI;Persist Security Info=False;Data Source=localhost\S...	NU

18. Copy the File “firewall_ports.bat” from a Client PC to the server. Normally you can find the file under “C:\MEE\smartSOFTmee\Service”. Run the file with administration rights and click enter every time it ask you to do it.





II b. When the file Firewall.bat didn't work

Note

The SQL Server Browser service lets users connect to instances of the Database Engine that are not listening on port 1433, without knowing the port number. To use SQL Server Browser, you must open UDP port 1434. To promote the most secure environment, leave the SQL Server Browser service stopped, and configure clients to connect using the port number.

To open a port in the Windows firewall for TCP access

1. On the **Start** menu, click Run, type WF.msc, and then click OK.
2. In the Windows Firewall with Advanced Security, in the left pane, right-click Inbound Rules, and then click New Rule in the action pane.
3. In the Rule Type dialog box, select Port, and then click Next.
4. In the Protocol and Ports dialog box, select TCP. Select Specific local ports, and then type the port number of the instance of the Database Engine, such as 1433 for the default instance. Click Next.
5. In the Action dialog box, select Allow the connection, and then click Next.
6. In the Profile dialog box, select any profiles that describe the computer connection environment when you want to connect to the Database Engine, and then click Next.
7. In the Name dialog box, type a name and description for this rule, and then click Finish.
8. In the Windows Firewall with Advanced Security, in the left pane, right-click Inbound Rules, and then click New Rule in the action pane.
9. In the Rule Type dialog box, select Port, and then click Next.
10. In the Protocol and Ports dialog box, select UDP. Select Specific local ports, and then type the port number of the instance of the Database Engine, such as 1434 for the default instance. Click Next.
11. In the Action dialog box, select Allow the connection, and then click Next.
12. In the Profile dialog box, select any profiles that describe the computer connection environment when you want to connect to the Database Engine, and then click Next.
13. In the Name dialog box, type a name and description for this rule, and then click Finish.

To open access to SQL Server when using dynamic ports

1. On the **Start** menu, click Run, type WF.msc, and then click OK.
2. In the Windows Firewall with Advanced Security, in the left pane, right-click Inbound Rules, and then click New Rule in the action pane.
3. In the Rule Type dialog box, select Program, and then click Next.
4. In the Program dialog box, select This program path. Click Browse, and navigate to the instance of SQL Server that you want to access through the firewall, and then click Open. By default, SQL Server is at C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Binn\Sqlservr.exe. Click Next.
5. In the Action dialog box, select Allow the connection, and then click Next.
6. In the Profile dialog box, select any profiles that describe the computer connection environment when you want to connect to the Database Engine, and then click Next.
7. In the Name dialog box, type a name and description for this rule, and then click Finish.



III. Settings on the Client PCs:

1. Open the spiro.exe.config file with Editor.
2. Change the connection string to your settings

```
<add key="CustomField1" value="Field 1" /> //  
<add key="CustomField2" value="Field 2" />  
<add key="CustomField3" value="Field 3" />  
<add key="CustomField4" value="Field 4" />  
<add key="CustomField5" value="Field 5" />  
<add key="CustomField6" value="Field 6" />  
<add key="CustomField7" value="Field 7" />  
<add key="CustomField8" value="Field 8" />  
<add key="CustomField9" value="Field 9" />  
<add key="CustomField10" value="Field 10" />  
<add key="CustomField11" value="Field 11" />  
<add key="CustomField12" value="Field 12" />  
<add key="CustomField13" value="Field 13" />  
<add key="CustomField14" value="Field 14" />  
<add key="CustomField15" value="Field 15" />  
<add key="CustomField16" value="Field 16" />  
<add key="CustomField17" value="Field 17" />  
<add key="CustomField18" value="Field 18" />  
<add key="CustomField19" value="Field 19" />  
<add key="CustomField20" value="Field 20" />  
<add key="ConfigDatabaseString" value="Integrated Security=SSPI;Persist Security  
<add key="Version" value="2.08.18" />  
</appSettings>  
'configuration>
```

```
<add key="ConfigDatabaseString" value="Server=myServerName\SQLEXPRESSMEE ;  
Database=Spirometry.2016-10-17 ; User Id=sa ; Password=myPassword;" />
```