



The Project Management Software – for Outlook, Web and Smartphone

InLoox PM 10.x configuration guide for Microsoft SQL Server

An InLoox Whitepaper

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General Information

This document describes the steps to successfully configure and start-up a Microsoft SQL Server 2014 or 2016. Moreover, a suitable system configuration for the use of InLoox PM is described.

SQL Server Installation

Obtain a SQL Servers 2014 or 2016 Edition

1. If you neither have a Microsoft SQL Server 2014 or 2016 licence nor an appropriate installation medium, **Microsoft SQL Server 2014 or 2016 Express Edition** is available free of charge under following address:

<http://www.microsoft.com/en-US/download/details.aspx?id=42299>

2. Install the Microsoft SQL Server 2014 or 2016. You can find a step by step guide under:

<http://technet.microsoft.com/en-US/library/ms143219.aspx>



Important: Please note that offline replication is not possible with Microsoft SQL Server 2014 or 2016 Express Edition. If you want to use the Microsoft SQL Server offline replication, a **Workgroup**, **Standard** or **Enterprise Edition** of Microsoft SQL Server is necessary. You find an overview of the SQL Server versions' capability characteristics under:

<http://www.microsoft.com/sql/prodinfo/features/compare-features.msp>

This does not affect InLoox offline availability, which you can use with Microsoft SQL Server 2014 or 2016 and Microsoft SQL Express Edition.

3. Create an InLoox PM database according to the whitepaper *InLoox PM 10.x Server Installation Guide*. You can find this whitepaper at:

<https://www.inloox.com/support/knowledge-base/white-papers/>

Use the steps described in the section for the Workgroup/Enterprise Server (Network version).

Check installation

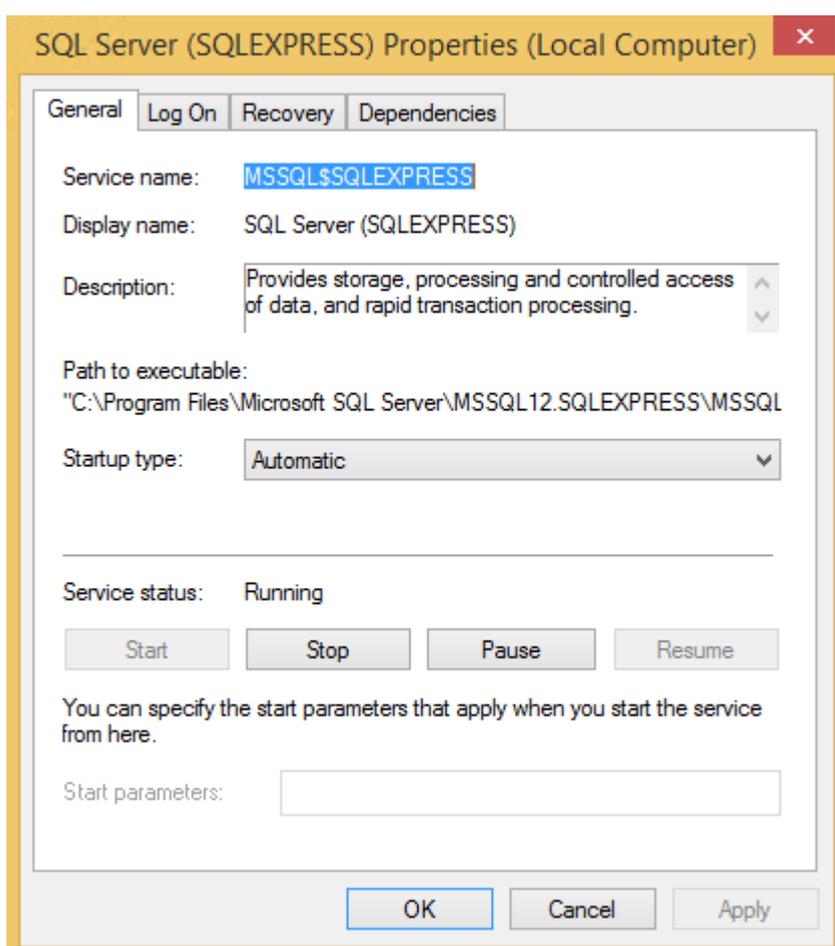
After the installation, make sure the SQL Server Service and the SQL Server Browser Server is being executed:

1. Double click on **Computer Management** in the **Control Panel >> Administrative Tools**
2. Click on **Services and Application >> Services**
3. Look for the indicator name of the appropriate services.

By default, the SQL Server Service has the name 'SQL Server (MSSQLSERVER)' or 'SQL Server (SQLEXPRESS)'

The standard SQL Server Browser Service name is 'SQL Server-Browser'.

4. If one of these is not running, set the Startup type to automatic und start the service.



Opening Ports

Please note that opening ports can lead to a **safety risk** in your network. Check the necessary safety precautions in advance!

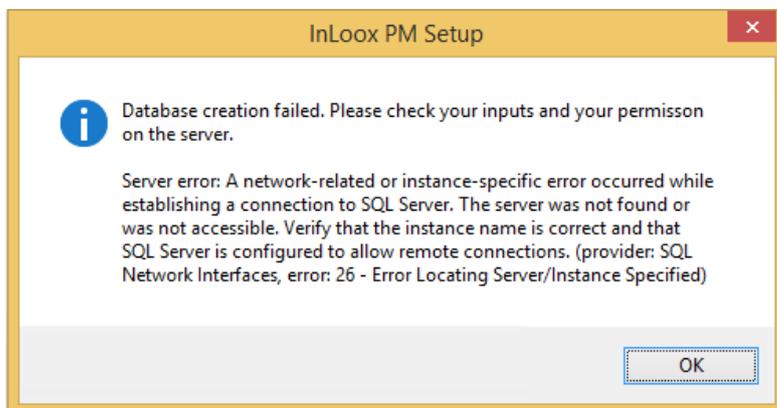


Make sure that the database server ports are *not blocked*. Examine the firewall properties of the server as well as the network hardware.

The standard port of Microsoft SQL Server is: **1433**

SQL Server Configuration

If you try to connect to an instance of Microsoft SQL Server 2014 or 2016 from a remote computer or a client, an error message might appear:

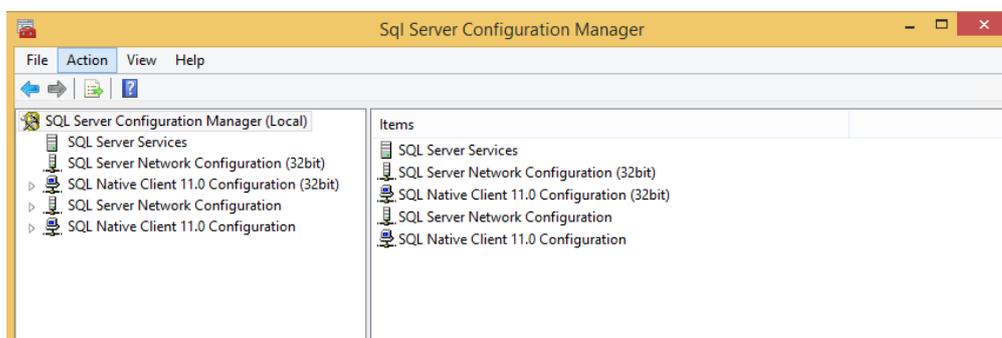


This problem can occur with any program you use to connect to the SQL Server. Follow this guide in order to solve the problem.

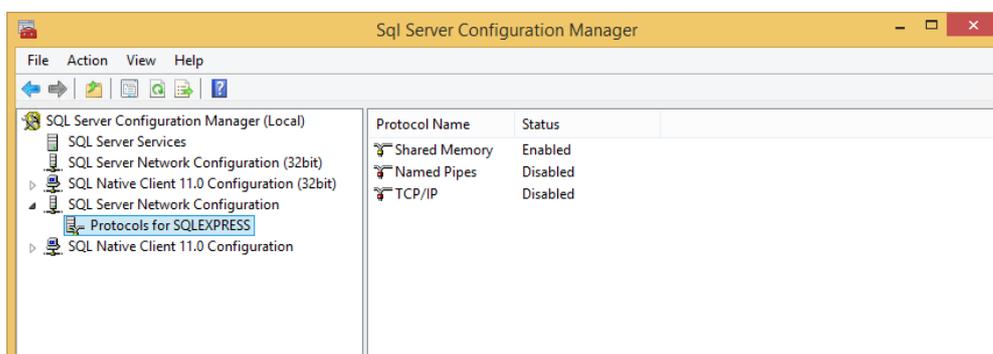
Check the SQL Server Configuration Manager settings

In order to reach the the SQL Server instance from the network, you have to configure and, if necessary switch on the network protocols. Proceed as follows:

1. Click on **Start >> Programs >> Microsoft SQL Server 2014 or 2016 >> Configuration Tools**
2. Afterwards click on **SQL Server Configuration Manager**



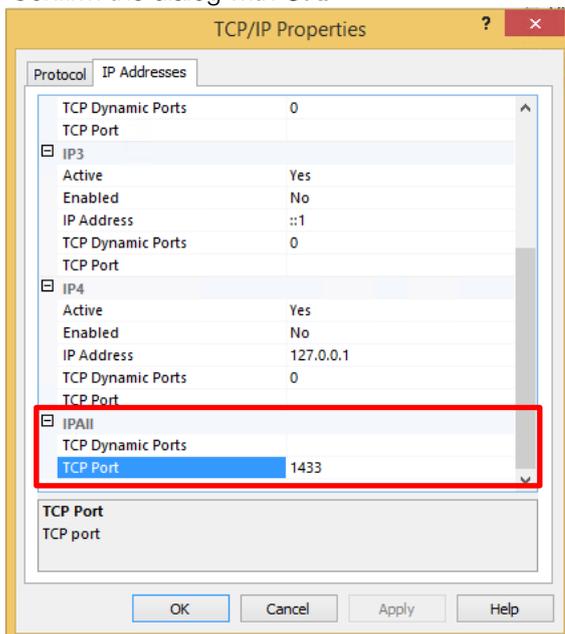
3. Open the branch **SQL Server Network configuration** in the left tree structure and click on **Protocols for MSSQLSERVER**



4. Right click on **TCP/IP** to activate this protocol

5. Double click on **TCP/IP** and switch to the page **IP-Addresses**
6. Check the settings of the TCP Ports and adjust them if necessary. The standard MS SQL port is 1433.

Confirm the dialog with **OK**.



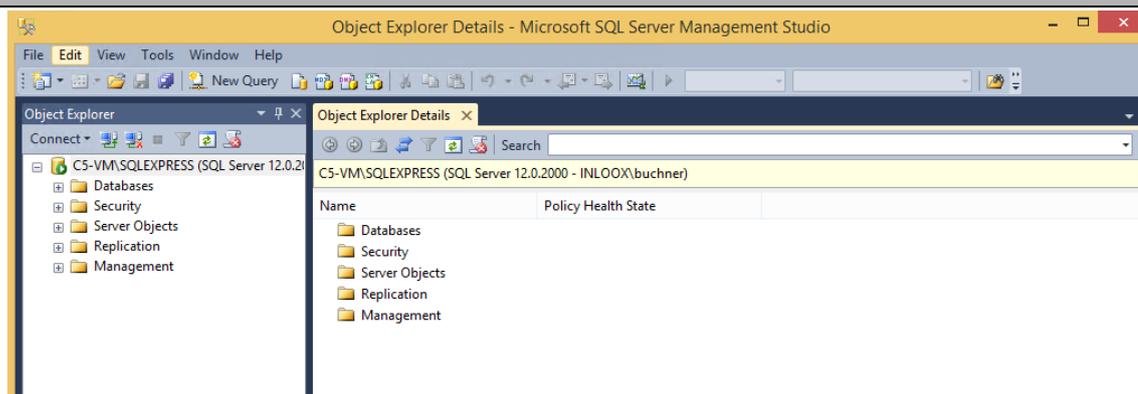
7. Deactivate **Named Pipes**.
8. If a message requests to restart the SQL service, click on the node **SQL Server 2014 or 2016- Services**, stop the **SQL Server** and **SQL Browser** and restart these afterwards. Lastly, make sure that both services are running .

Authorizations configuration

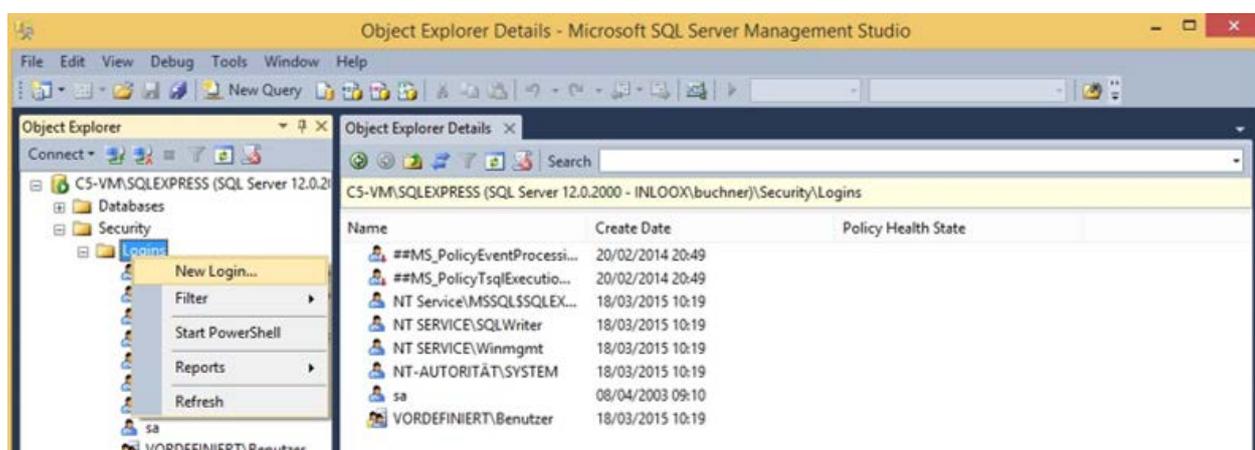
1. Create a new user group **InLoox PM** in the Active directory
2. Add all **InLoox PM users** to this group
3. Click on **Start >> Programs >> Microsoft SQL Server 2014 or 2016 >> SQL Server Management Studio**
4. The **Connect to Server** dialog appears



5. Select the appropriate Server under **Server name** or enter the server name manually.
6. Click on **Connect** afterwards
7. Microsoft SQL Server Management Studio indicates that it is **connected**

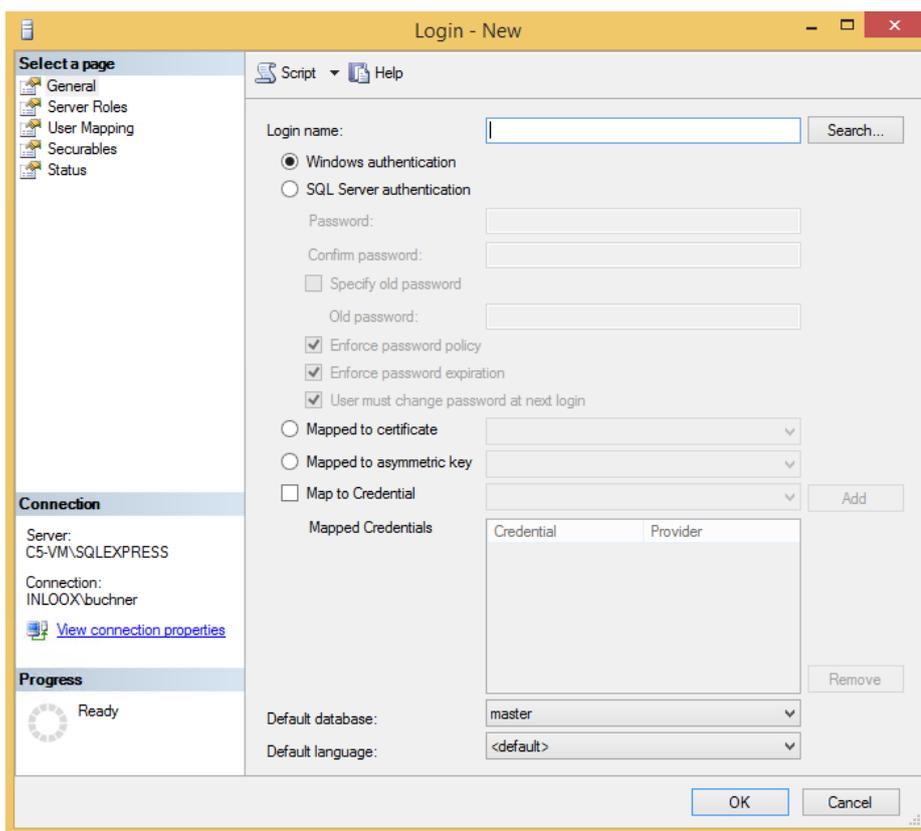


8. Open the **Security** node
9. Click on **Login** with the right mouse button

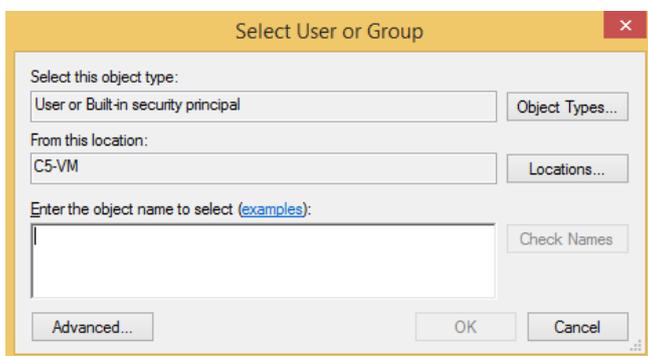


10. Click on **New Login**

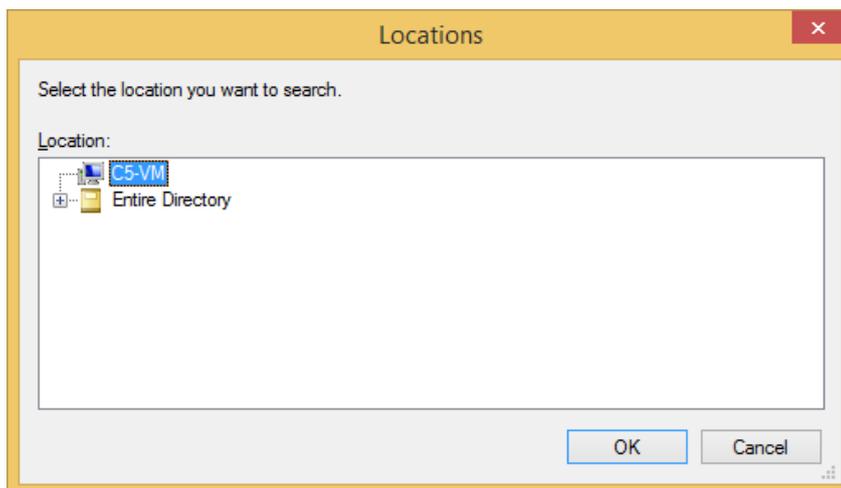
11. The window **Login - New** appears



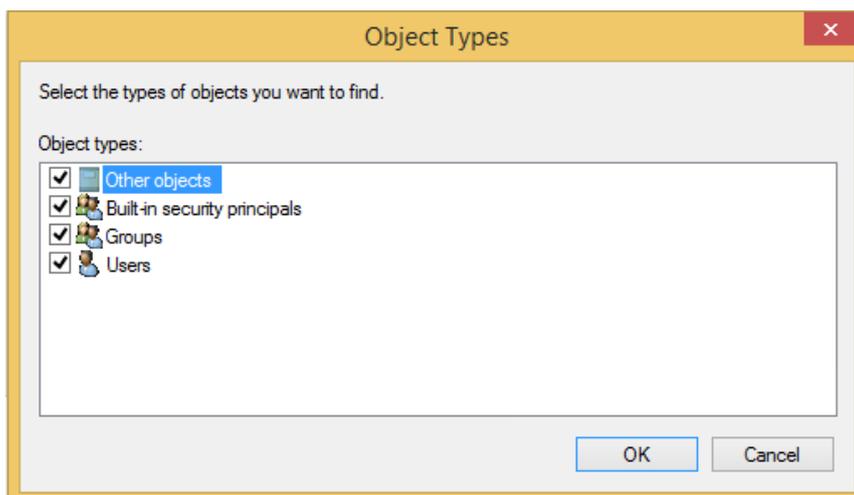
12. Click on **Search**



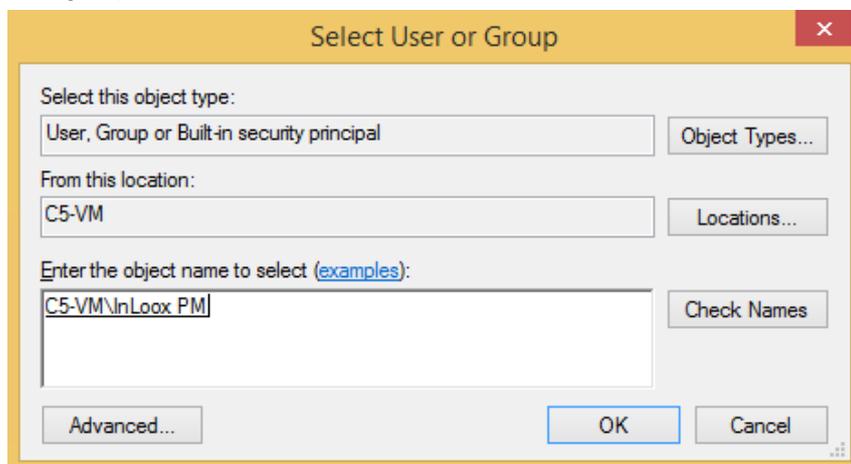
- Look for the **InLoox group** in the Active directory or in the **computer administration** under groups. You can adjust this via a click on **Location...**



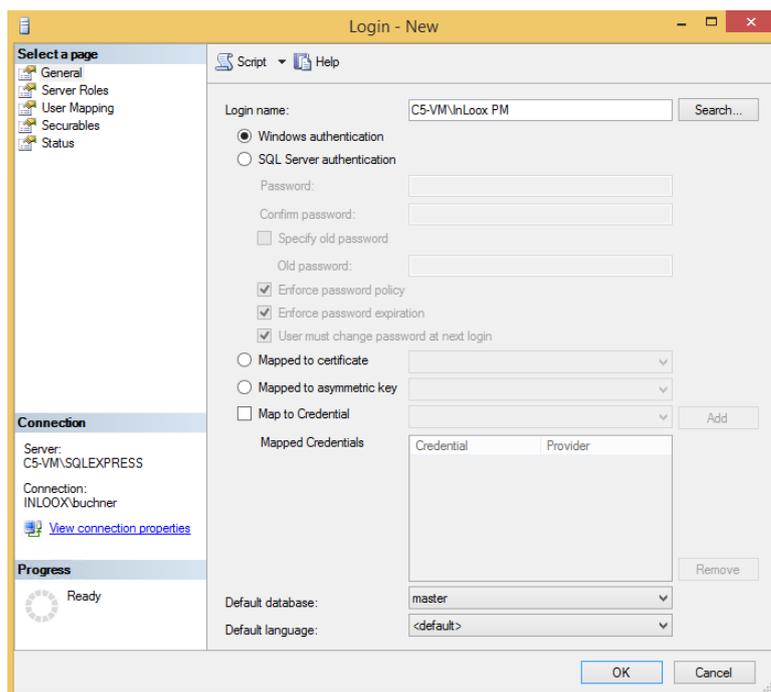
- Enter "InLoox PM" as the **object name** and click on **Check Names**.
- Make sure that all **Object Types** are selected. Occasionally groups are not activated and you have to set the appropriate option here, so that you can see the groups.



- The group was found and can be confirmed with OK.



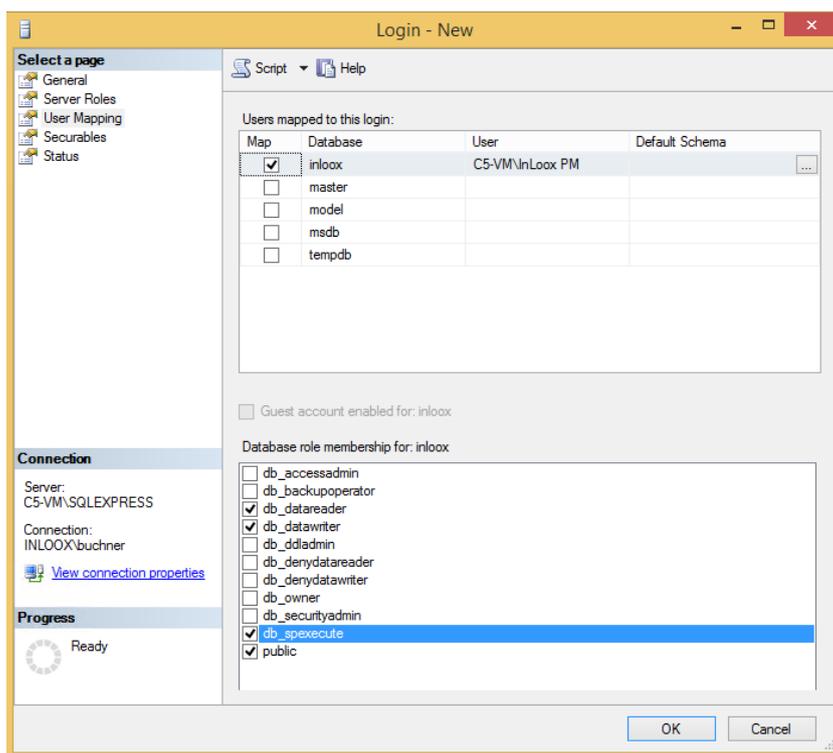
17. The group name was inserted



18. Make sure that the option **Windows authentication** is selected. In exceptional cases, e.g. if the client is not integrated in a domain, you will have to use the **SQL authentication**. For that an appropriate change of the SQL Server configuration is necessary, which can be set as follows:

- Click with the right mouse button on **SQL Server** in detail area on the left, then click on **Properties**.
- In the **SQL Server Properties** dialog change the **Server authentication** in the register **Security** >> **Server authentication** to **SQL Server and Windows Authentication mode** and then confirm with **OK**
- For details consider the Whitepaper **Configure Microsoft SQL Server for SQL-authentication**

19. Click on **User Mapping** afterwards



20. **Users** who are assigned to this logon see all SQL databases on this Server. Activate the InLoox database here. If this database does not exist yet, publish the InLoox database with help of the **InLoox PM Setup**
21. Subsequently, you have to assign the permission **public**, **db_datareader**, **db_datawriter** and **db_spexecute**.

Configuration of the Firewall

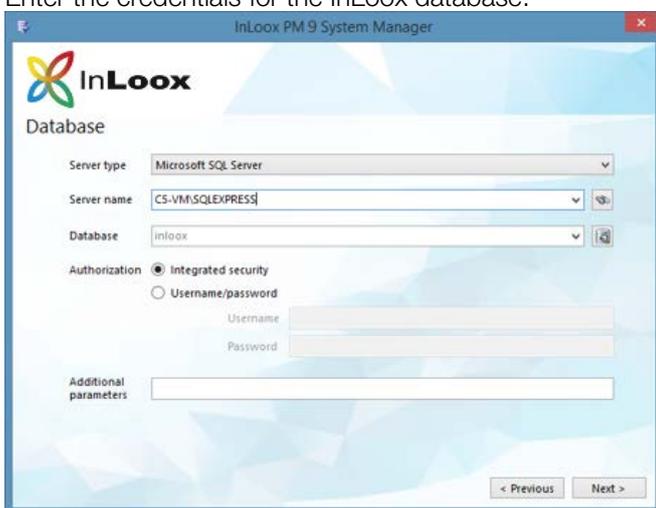
Create an exception for the SQL Server Browser Service in the Windows Firewall

With the InLoox System Manager you can automatically add the Standard MS SQL Port as an exception to the integrated Windows Firewall.



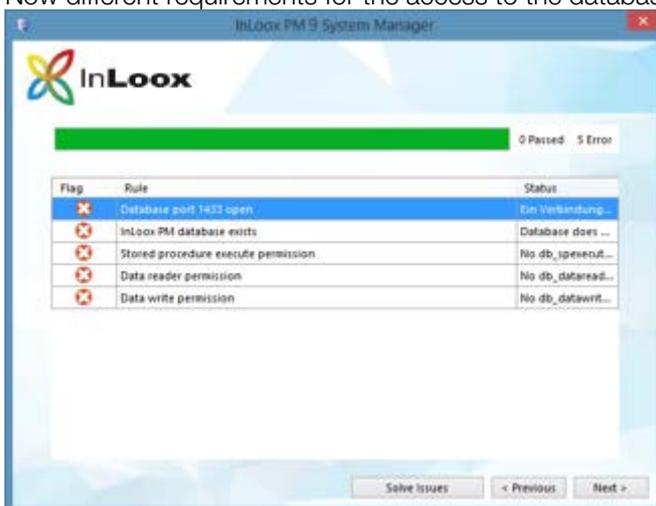
If you use another firewall system consult the appropriate firewall documentation.

1. Download the **InLoox System Manager**:
<http://www.inloox.com/support/downloads/additional-software/>
2. Start the InLoox System Manager on the SQL Server
3. Select the option **Database Configuration**.
4. Enter the credentials for the InLoox database:



The screenshot shows the 'Database' configuration window in the InLoox PM 9 System Manager. The 'Server type' is set to 'Microsoft SQL Server'. The 'Server name' is 'CS-VM\SQLEXPRESS'. The 'Database' is 'inloox'. The 'Authorization' is set to 'Integrated security'. There are fields for 'Username' and 'Password', and an 'Additional parameters' field. Navigation buttons '< Previous' and 'Next >' are at the bottom.

5. Select **Next**
6. Now different requirements for the access to the database are being checked.



The screenshot shows the InLoox PM 9 System Manager displaying a progress bar with '0 Passed' and '5 Error'. Below the progress bar is a table with the following data:

Flag	Rule	Status
✘	Database port 1433 open	Ein Verknüpfung...
✘	InLoox PM database exists	Database does ...
✘	Stored procedure execute permission	No db_spexecut...
✘	Data reader permission	No db_dataread...
✘	Data write permission	No db_datawrit...

At the bottom, there are buttons for 'Solve Issues', '< Previous', and 'Next >'.

7. If the appropriate SQL Port is not open, you can add the corresponding SQL Port to the Windows Firewall with the Button **Solve Issues**.



This will only work if the InLoox System Manager is directly executed on the SQL Server.

8. Afterwards the Connection test should be successful.

Check list for error solution

In case of problems, please check the following:

- Are the **SQL Server** and **SQL Browser Service** running on the server?
- Are **Remote Connections** and **TCP/IP** activated in the surface configuration?
- Is the authentication (Windows/SQL with Windows) correctly set in **SQL Server Management Studio** under **Security** in the **Server Properties** of the SQL of the server?
- Is the group, in which the InLoox PM users are entered, in **SQL Server Management Studio** under **Security** >> **Logins** set correctly? Does the registration have the membership **db_datareader**, **db_datawriter** and **db spexecute** in the database roles?
- Is **port 1433** open in the Firewall?
- Did a restart of the **clients** take place?
- Did a restart from **SQL Server** take place?

Should you need assistance, please contact us

Go to our website and click on [Support](#). There, you can open a ticket. Our support team will be happy to help you.