

StuertzCloud - Creating Local SQL Database

How to create a SQL Database instance on the local network to enable factory machines to communicate with StuertzCloud

 Difficulty **Hard**

 Duration **30 minute(s)**

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Comments

Introduction

See StuertzCloud - Setup Overview for an overview of the setup.

This tutorial covers the setup of the Local SQL Express database instance and creating a "ProOpt" database structure on it.

- This database installed on the 'Location' local network.
- The 'Machines' write their production data to it
- The 'Gateway' software uploads this data to the StuertzCloud server

See Also

[StuertzCloud - Installing Gateway](#)

[StuertzCloud - Setting up Stuga Machine to Write Production Data](#)

[StuertzCloud - Creating a Customer Location](#)



...You must have SQL Server Management Studio (SSMS) installed to manage the databases

Step 1 - Download and Install SQL Server Express 2022

Download SQL Server Express 2022

- **Run the Installer:** Locate the downloaded file named

SQL2022-SSEI-Expr.exe and double-click it to launch the installer.

- **Choose Installation Type:** In the installer window, select the **Basic** installation option. This will install SQL Server Express with default settings.

- **Accept License Terms:** Read and accept the license terms to proceed with the installation.

- **Installation Progress:** The installer will download and install the necessary components. This process may take several minutes.

- **Installation Complete:** Once the installation is complete, you'll see a confirmation screen. You can note the instance name (usually) for

SQLEXPRESS future reference.

- SA password

Step 2 - Verify Installation

After installation, you can verify that SQL Server Express is running by:

- Opening **SQL Server Management Studio (SSMS)**.
- Connecting to the server using the instance name

.\SQLEXPRESS (e.g.,)

- Ensuring that the connection is successful and that you can see the server objects.

Step 3 - Download the ProOpt sql schema

This is stored on the Software versions Monday Board

Step 4 - Open SQL Server Management Studio (SSMS)

Launch SSMS and connect to your local server. If you used default settings, the server name will be:

.\SQLEXPRESS

Use "Windows Authentication"

Tick trust Server certificate

 ...We will set up SQL Authentication later

Step 5 - Enable SQL Server Authentication Mode

- In **Object Explorer**, right-click your server and select **Properties**.
 - Go to the **Security** page.
 - Under *Server authentication*, select: **SQL Server and Windows Authentication mode**
 - Click **OK**.
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Step 6 - Restart SQL Service

1. In SSMS, open **Object Explorer**.
2. Right-click the server name at the top
3. Click **Restart** and confirm.

Alternatively, you can use **SQL Server Configuration Manager** if SSMS doesn't show the restart option:

- Open

SQL Server Configuration Manager

- Expand **SQL Server Services**
- Right-click **SQL Server (SQLEXPRESS)** and choose **Restart**

Step 7 - Enable the "sa" Login and Set a Password

- In SSMS, expand:

Security > Logins

- Right-click on sa and choose **Properties**
- In the **General** page:
 - Set a strong password (and confirm it)
- Switch to the **Status** page:
 - Set **Login** to: **Enabled**
- Click **OK** to save changes

Step 8 - Test the sa Login

confirm that SQL Authentication works:

1. Disconnect your current session in SSMS.
2. Click **Connect** again.
3. Set:

.\SQLEXPRESS

• **Server name:**

- **Authentication:** SQL Server Authentication

sa

• **Login:**

- **Password:** (use the one you just set)

Step 9 - Create a ProOpt Database

1. Right click on Databases->New Database
2. Call it ProOpt

Step 10 - Open the SQL Script

- Go to **File > Open > File...**
- Browse to and open the script file:

ProOpt-StuertCloud-Reference-Database-20240131 (4).sql

Step 11 - Run the script in the ProOpt database

1. Select the ProOpt database in the drop down query menu
 2. Execute the script
 3. Check the proOpt tables have been created
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Step 12 - Create a SQL Server login for StuertzCloud

Uncheck Enforce Password Policy

Password in text file

Set permissions all bar denydatareader and denydatawriter

User Mapping->Map to ProOpt

should then appear in ProOpt->Security->Users folder

Step 13 - Set configuration compatibility with StuertzCloud gateway

Step 14 - Get a new GUID

- Use an online GUID generator <https://guidgenerator.com/>
 - Copy the GUID
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Step 15 - Add GUID to StuertzCloud_Metadata

- Right click -> Edit top200 rows
 - Paste GUID in ID field
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