

Microsoft SQL Server 2012

Installation Guide

ISD Software und Systeme GmbH
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Microsoft SQL Server 2012

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1 Introduction

The HELiOS - PDM - Module (document management, component management, Workflow, etc.) are based on a relational database. Before start of HELiOS, the Microsoft SQL database control system must be installed on the server and the clients ODBC connection has to be established.

The following installation instructions refer to the installation of the German Version of SQL Server 2012 Standard Edition. Other editions may require minor variations in the installation process.

For detailed information about Microsoft SQL Server 2008, please refer to the Microsoft documentation, or the Help on the Microsoft website:

<http://msdn.microsoft.com/de-de/library/ms144275.aspx>

Please note that the Microsoft SQL Server 2008 only can be used with HELiOS 2008 or higher.

2 Installation of the Database Server

2.1 Installation of the Database Module

Shortly after starting the setup, the installation screen will appear as shown below:

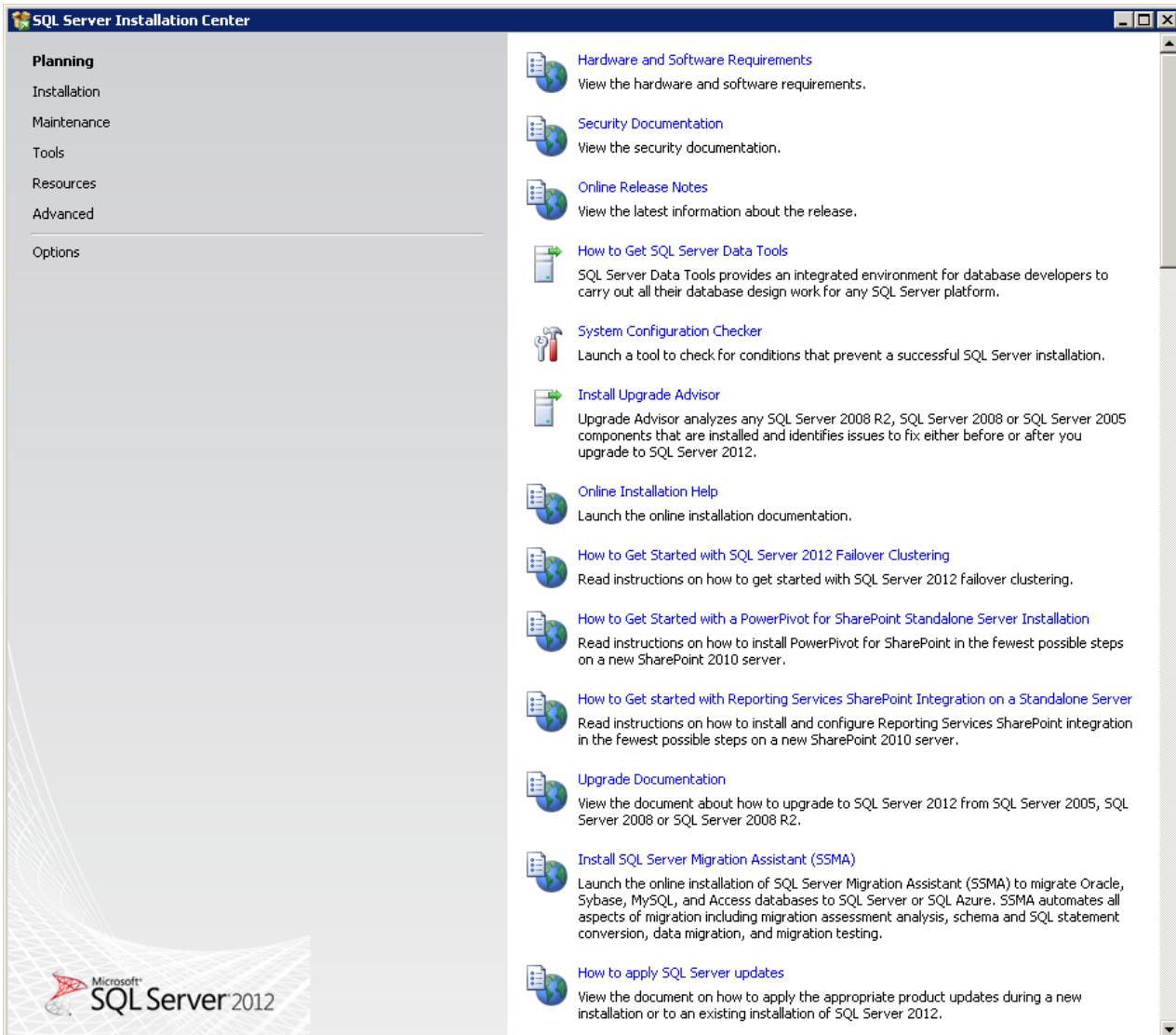


Image1: Installation screen

On the left hand side of the screen, click **Installation**.



Image 2: Installation options

Then, on the right side of the screen, click **New SQL Server stand-alone installation or add features to an existing installation**.

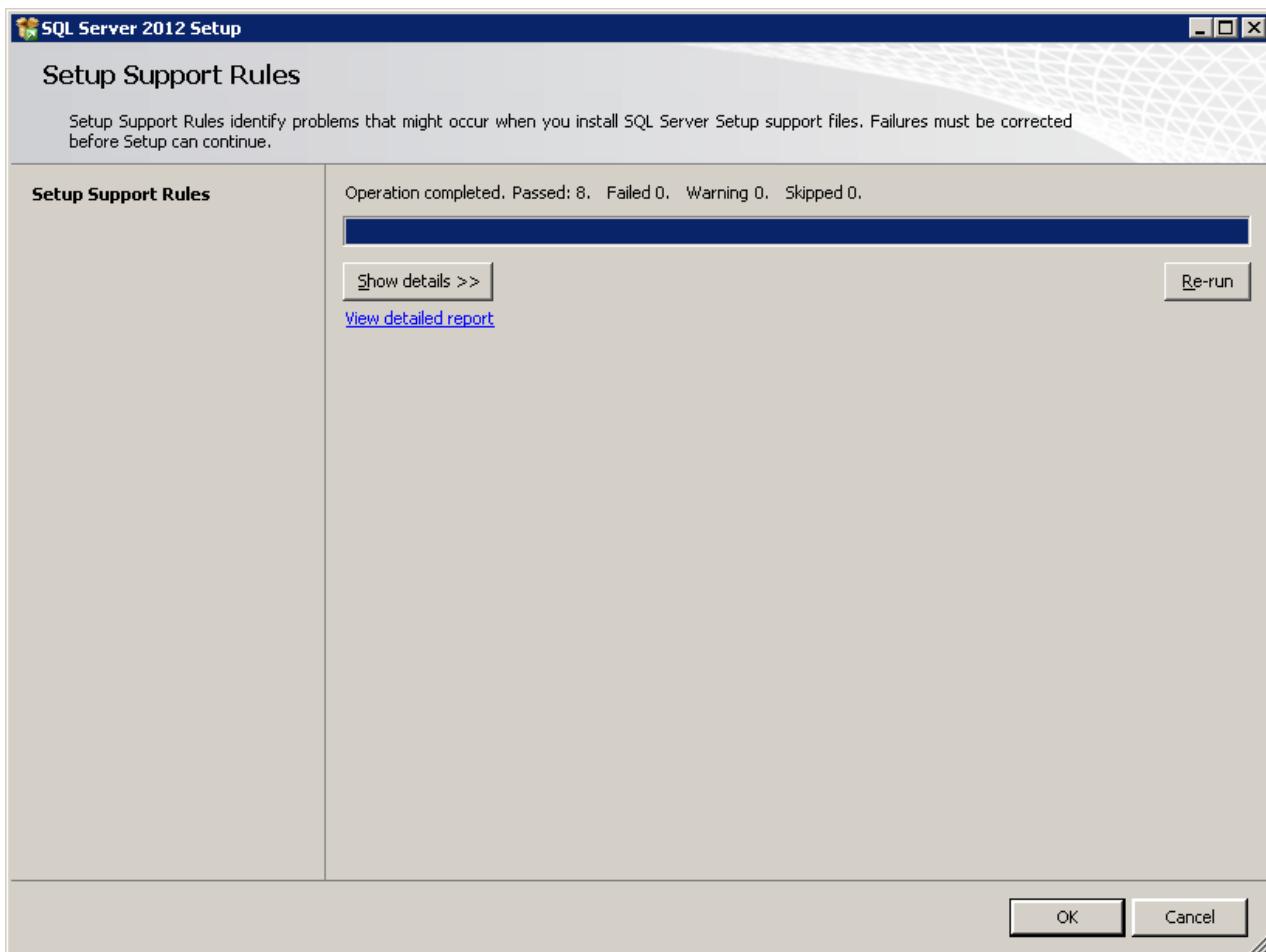


Image 3: Setup Support Rules

Product updates will then be installed. Click **Next** to execute the updates.

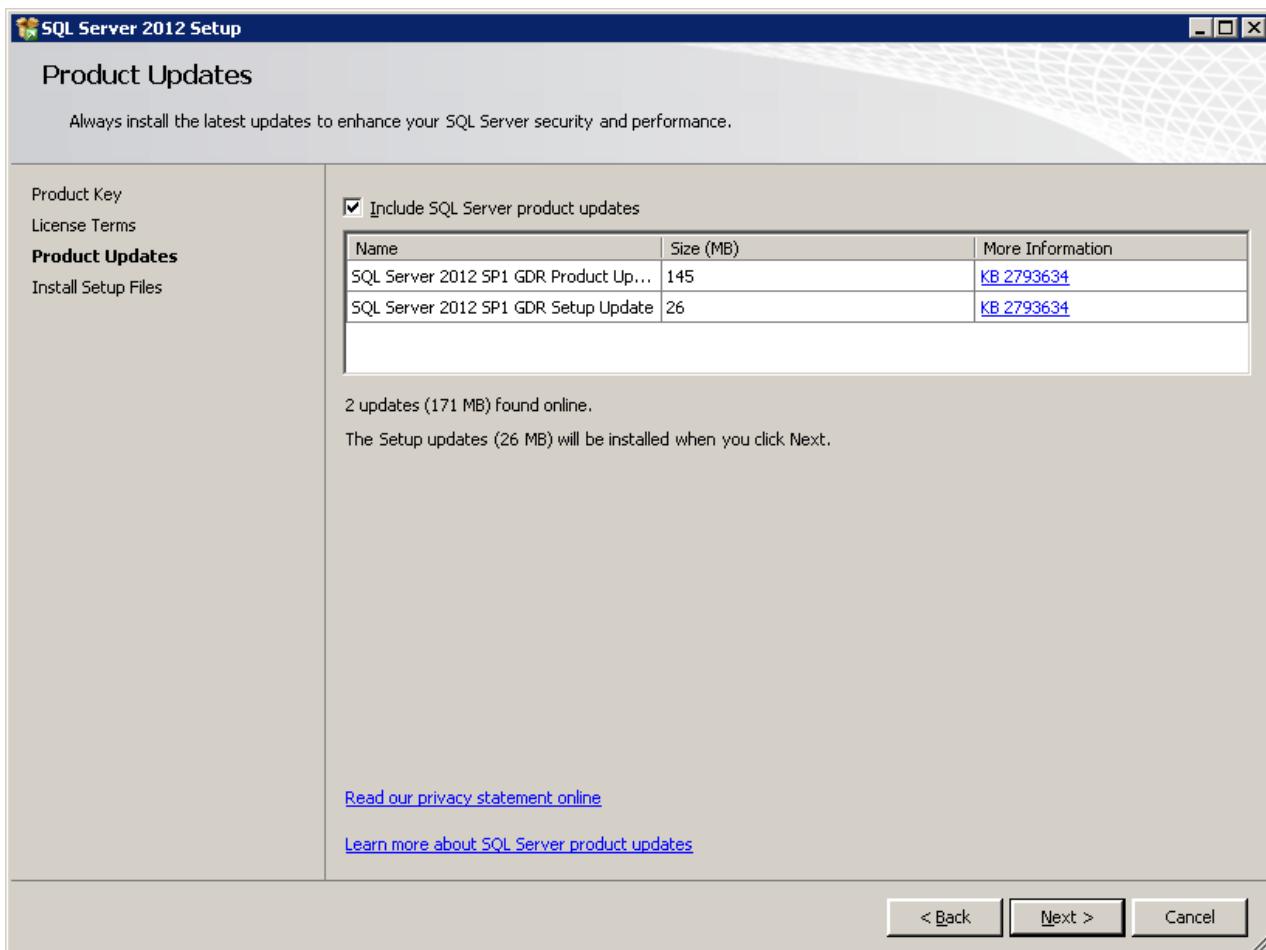


Image 4: Product updates

The system will then be checked again. Eliminate any error messages that may occur. After a successful test, click **Next**.

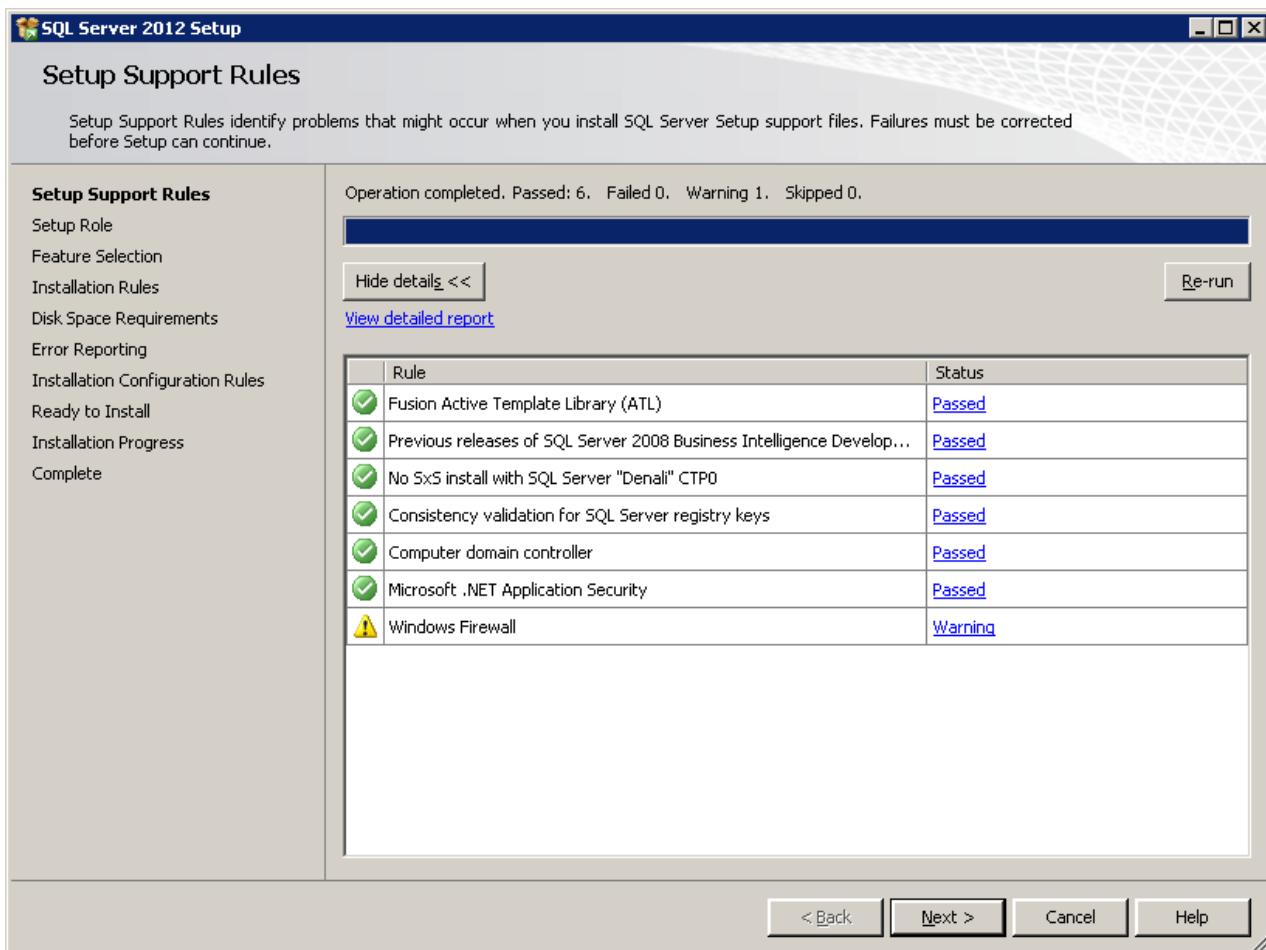


Image 5: System verification

Enter your product key:

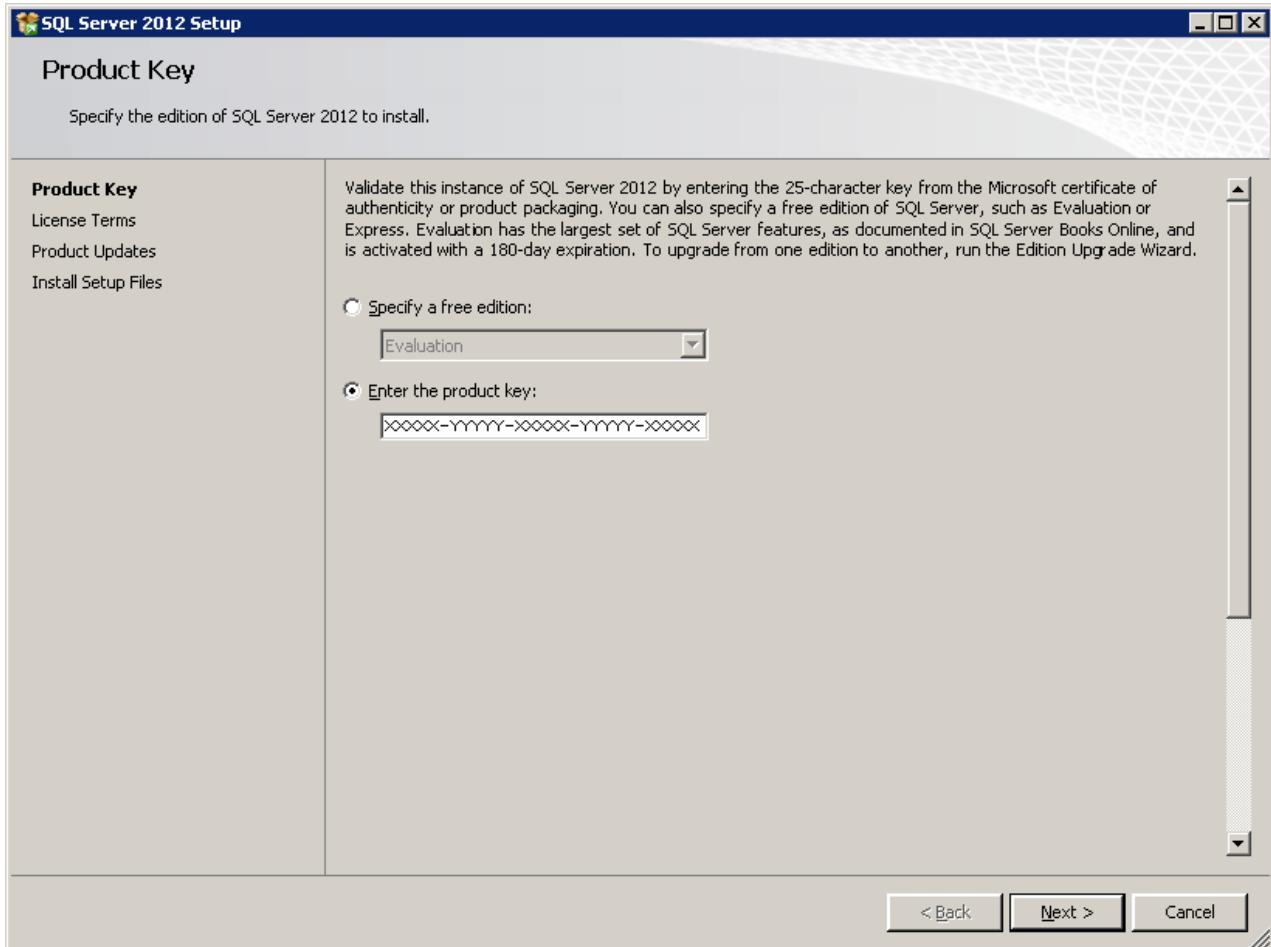


Image 6: Product Key

Accept the license terms:

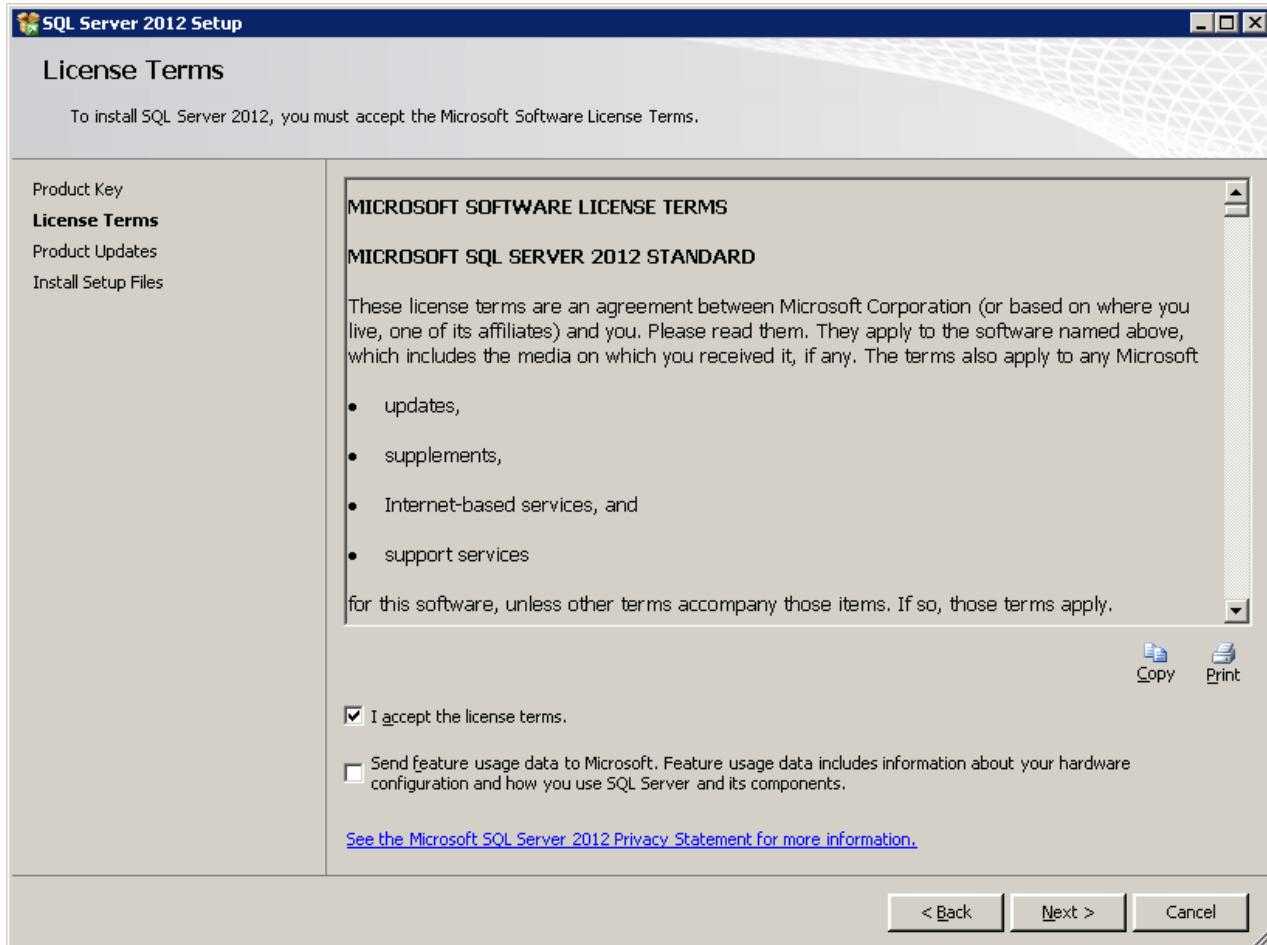


Image 7: Accept license terms

Activate the **SQL Server Feature Installation** option, which enables you to select individual feature roles.

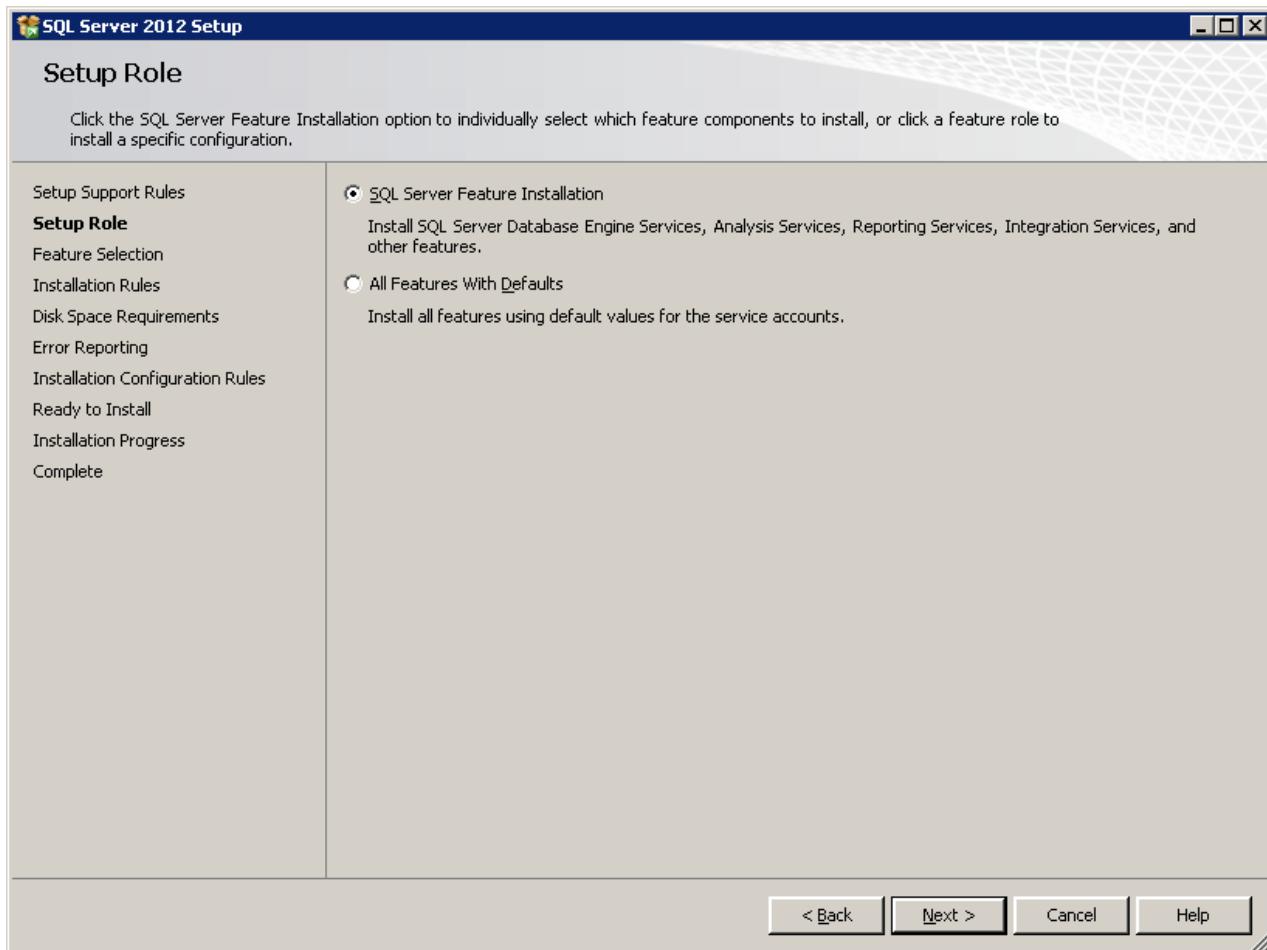


Image 7: Select SQL Server Feature Installation + confirm with **Next**

Select the features to be installed and confirm with **Next**.

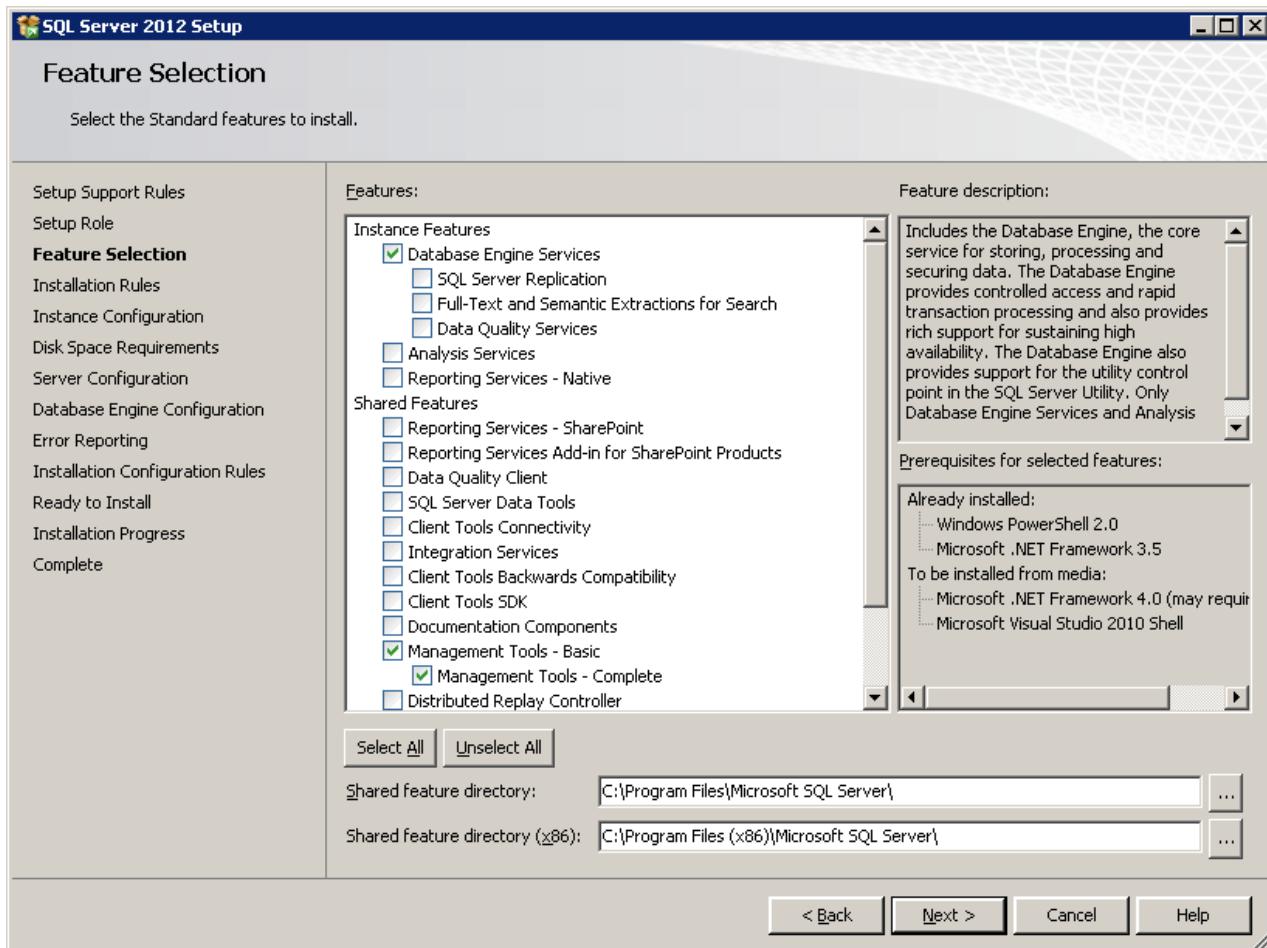


Image 8: Feature selection

In the dialogue shown below, specify the name of the SQL Server instance. Activate the **Default instance** option.

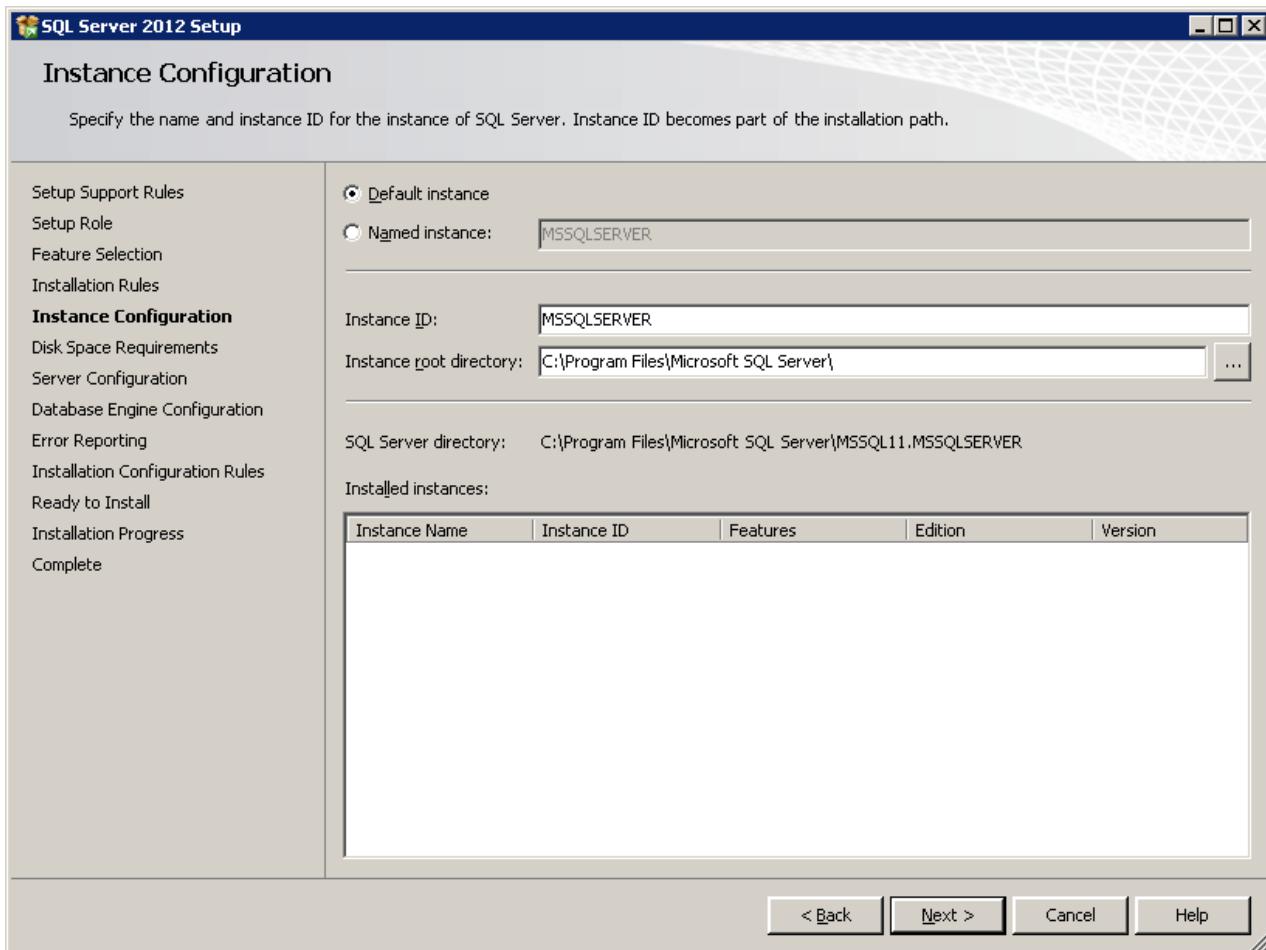


Image 9: Instance configuration

An overview is shown of the disk space requirements is shown:

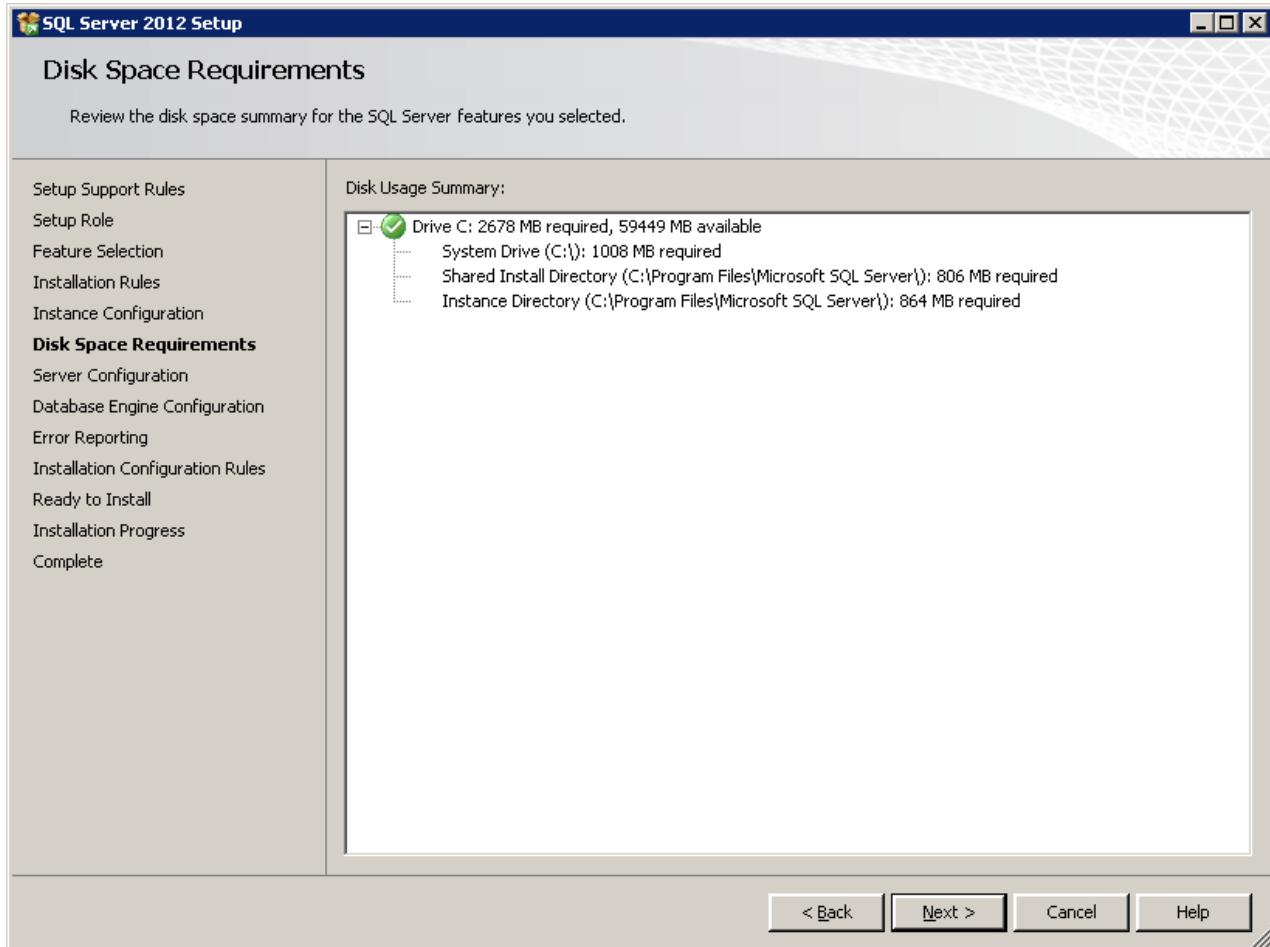


Image 10: Disk space requirements

Then define under which service accounts the services are to be launched.

Apply the settings shown below.

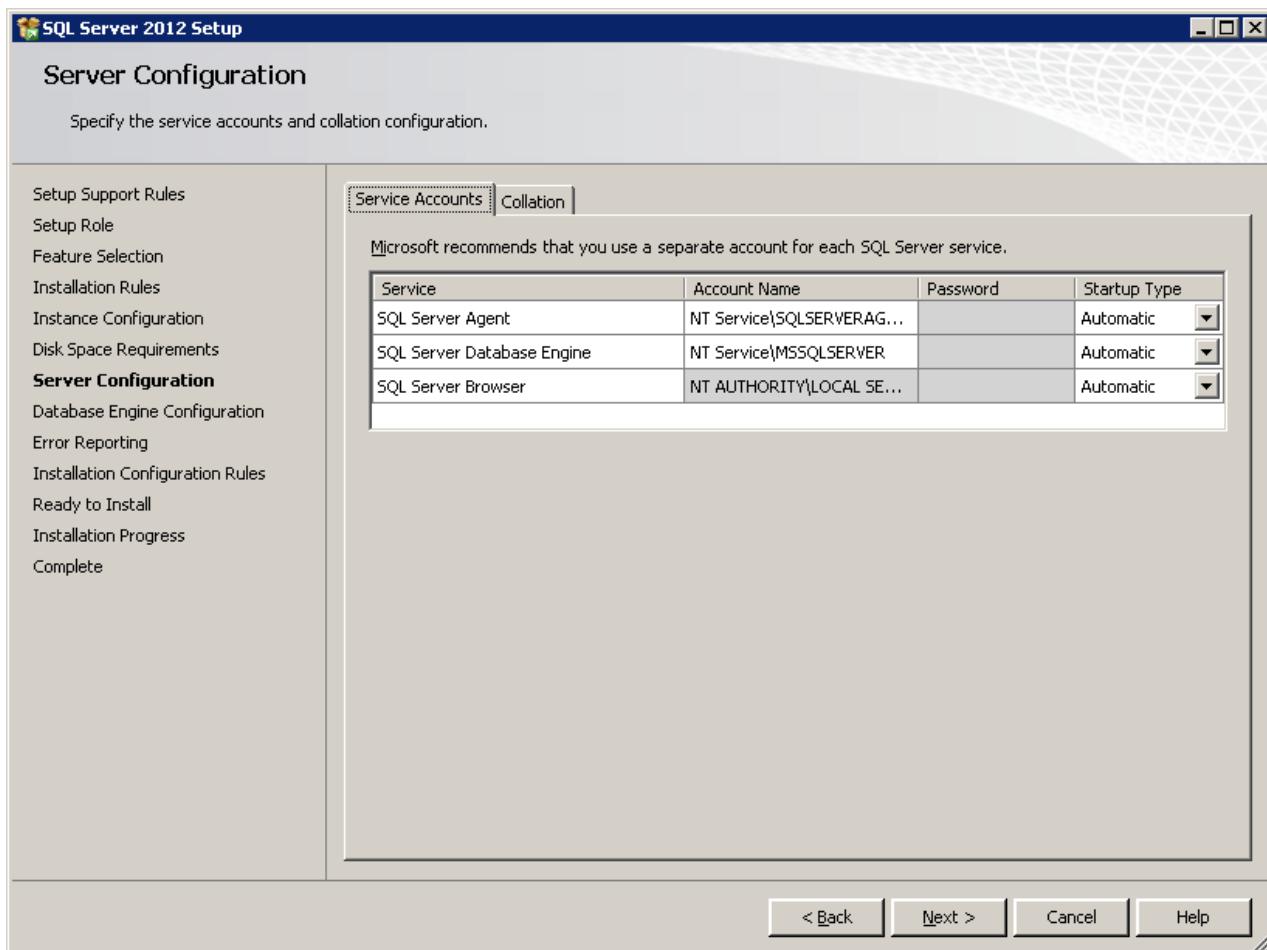


Image 11: Server configuration, Service accounts

After clicking **Next**, specify the authentication mode. Select the **Mixed mode**. Enter the password for the internal database administrator (sa). In the **Specify SQL Server administrators** field, enter the current user and the group of Windows - Administrators.

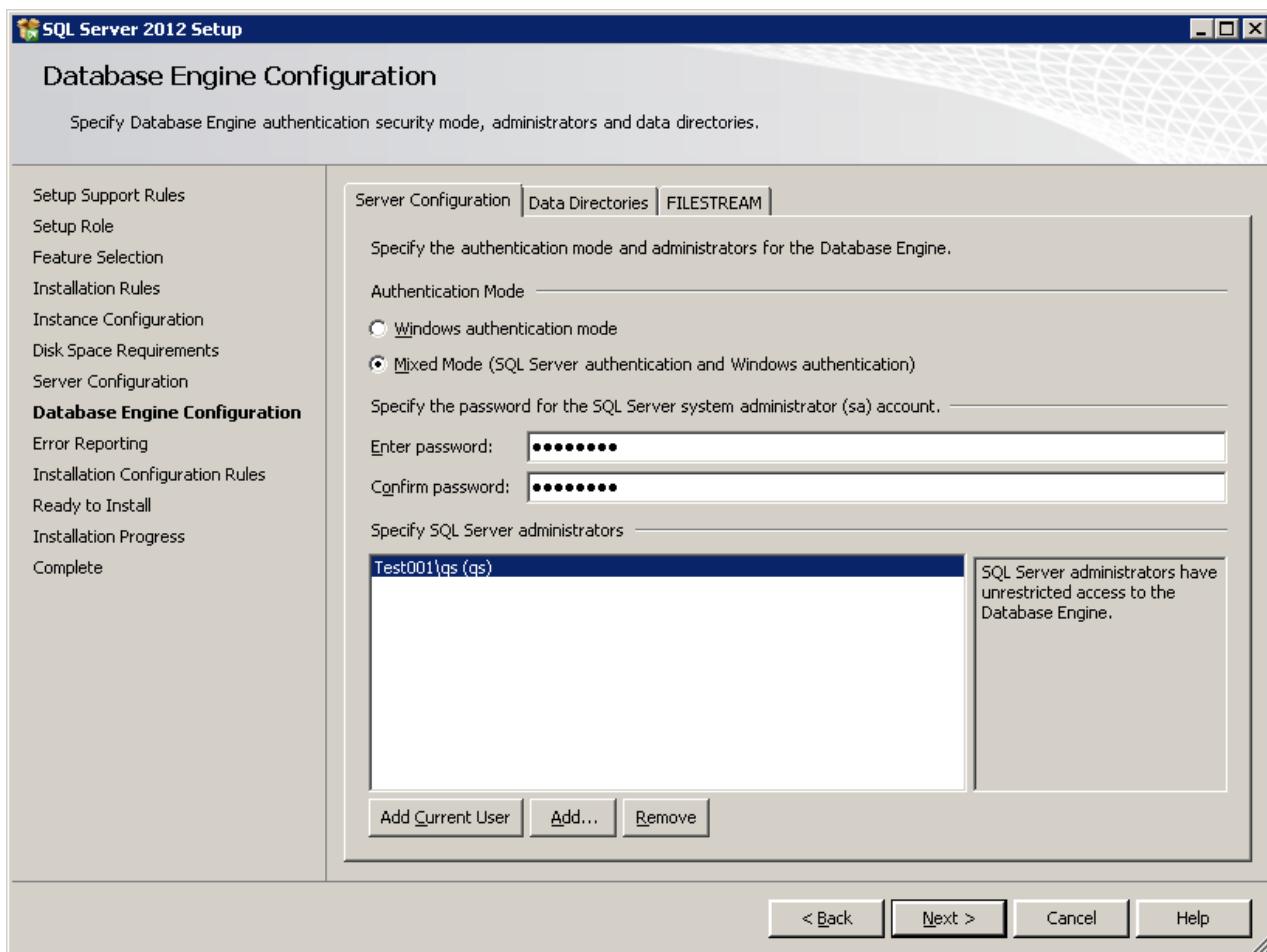


Image 12: Authentication mode

In the following dialogue you have the possibility to send error and usage reports to Microsoft. Select the desired settings.

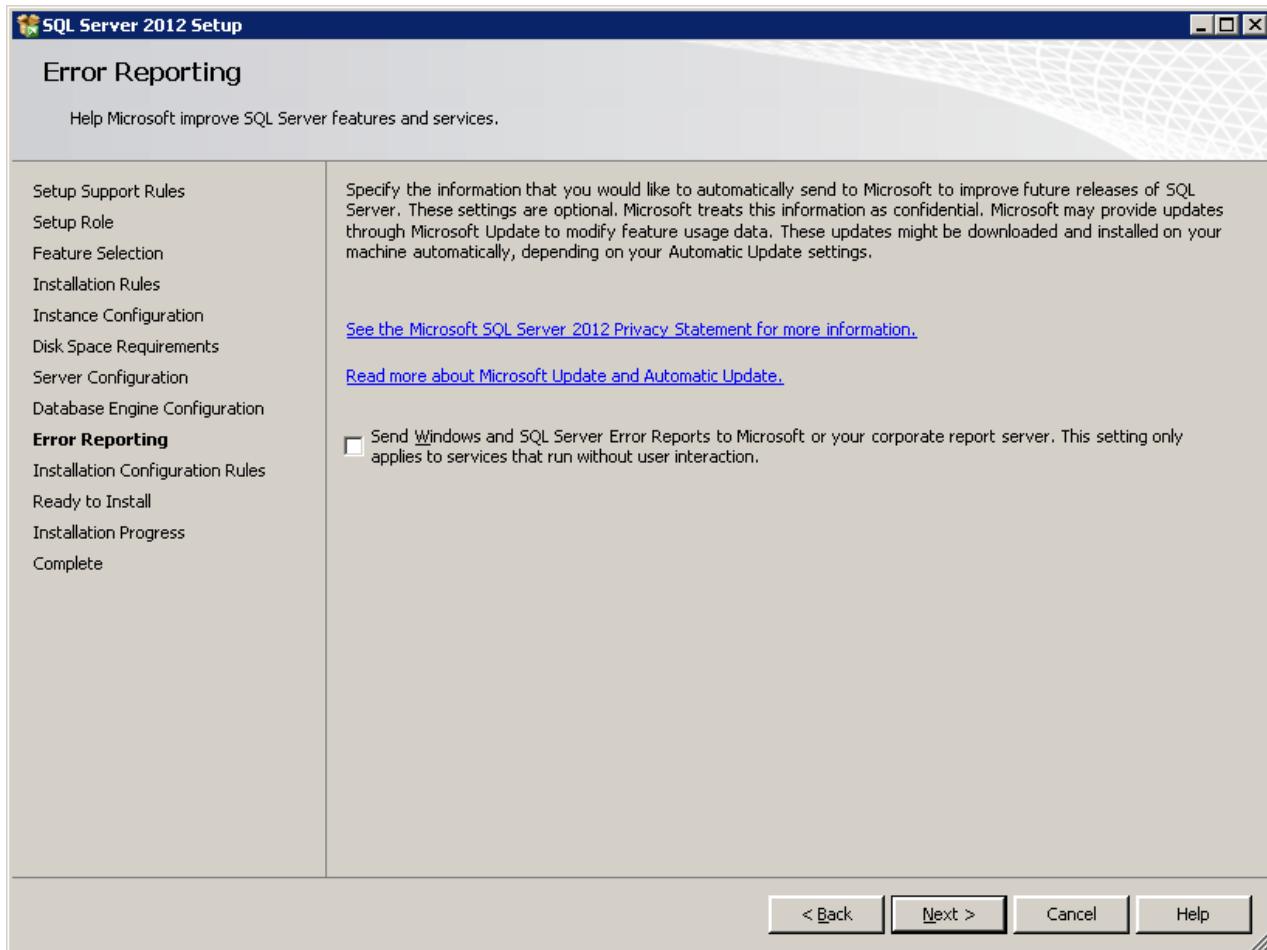


Image 13: Error and usage reporting

Then, an overview of installation configuration rules will be displayed. Confirm with **Next**.

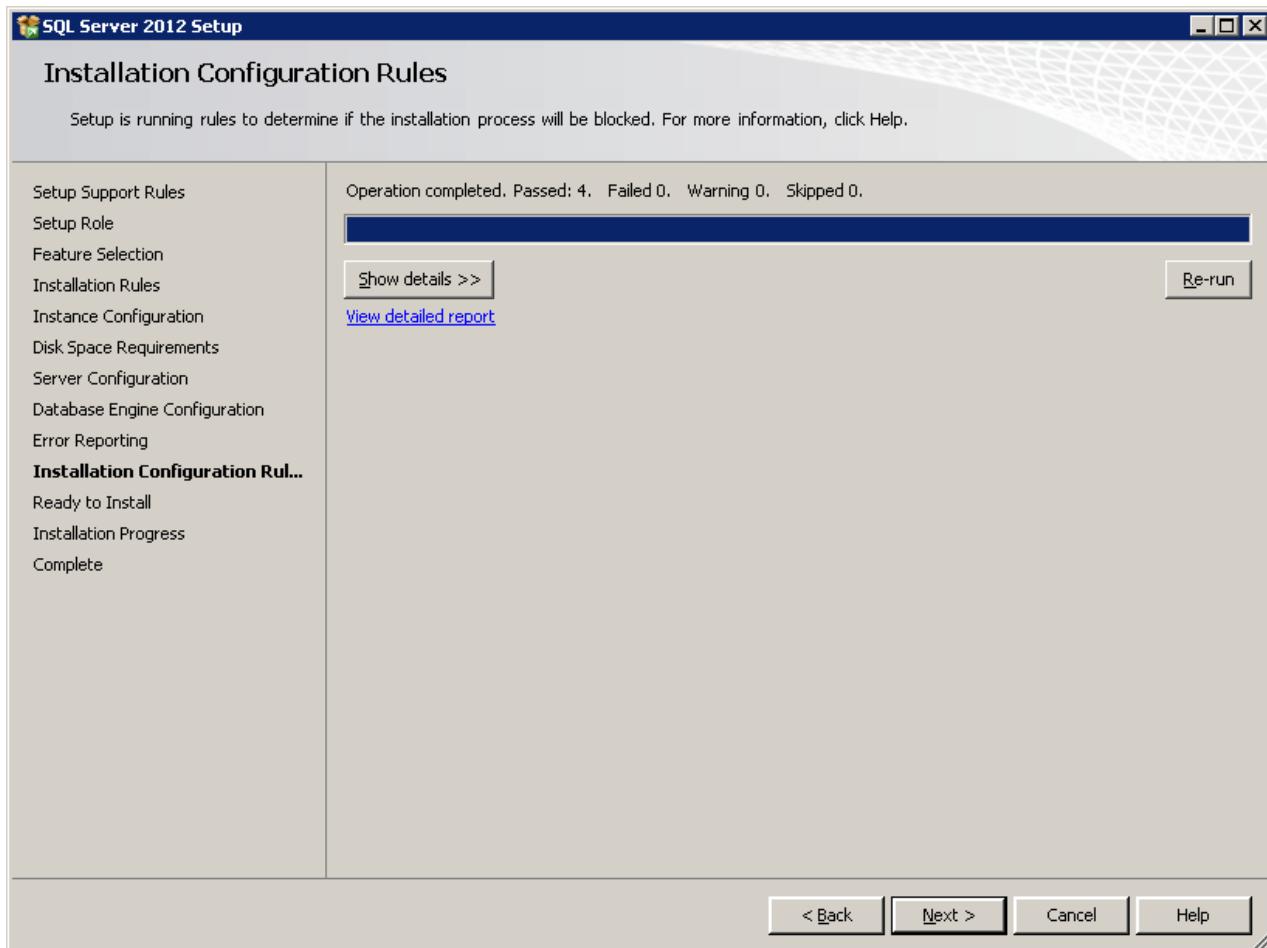


Image 14: Installation configuration rules

Now an overview follows of all the settings which have been made by the user. Click **Install** to start the installation of the SQL Server 2012.

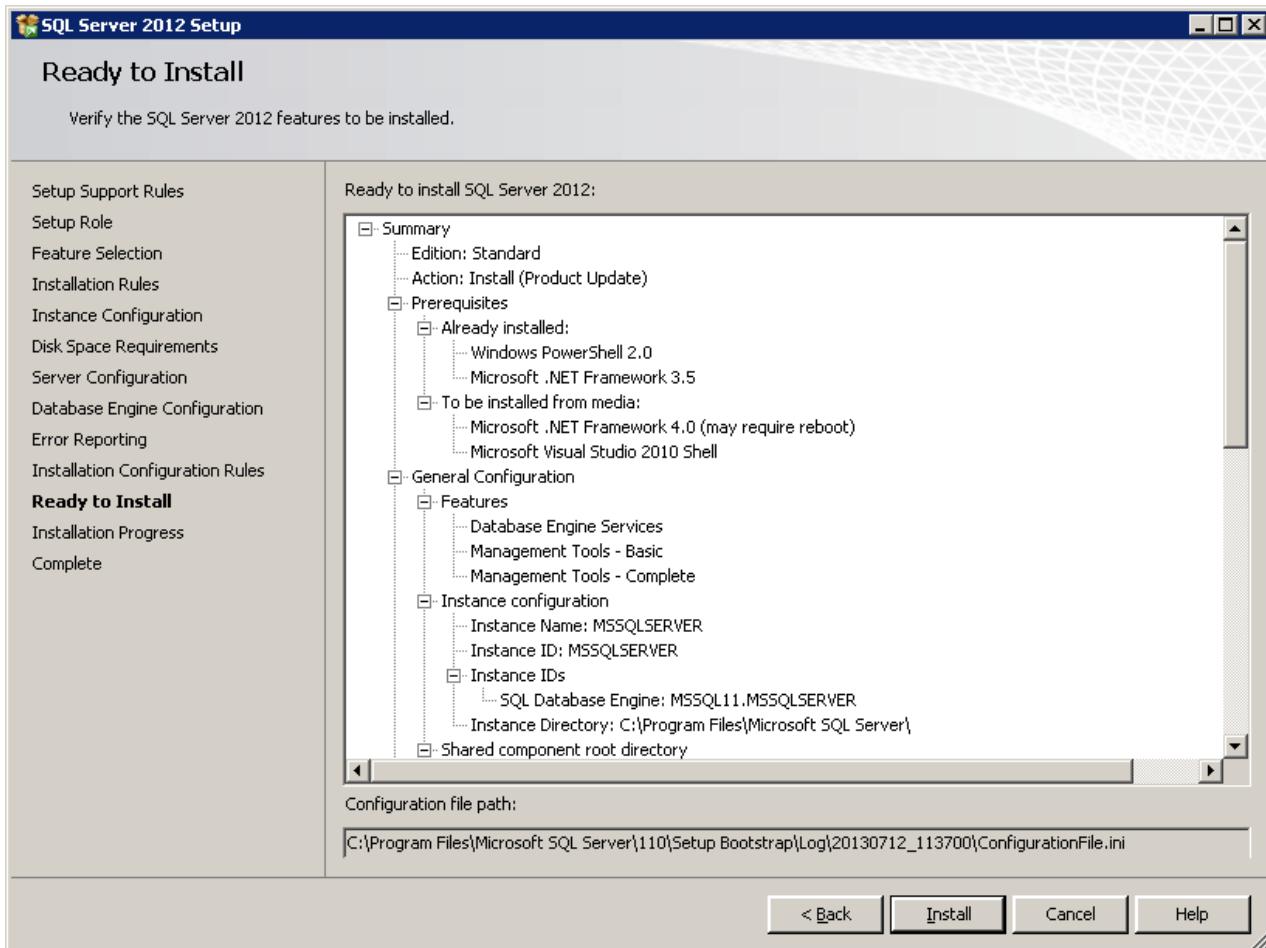


Image 15: Ready for installation

After successful installation, additional information and the status of functions will be displayed.

Click **Close** to finalize the installation.

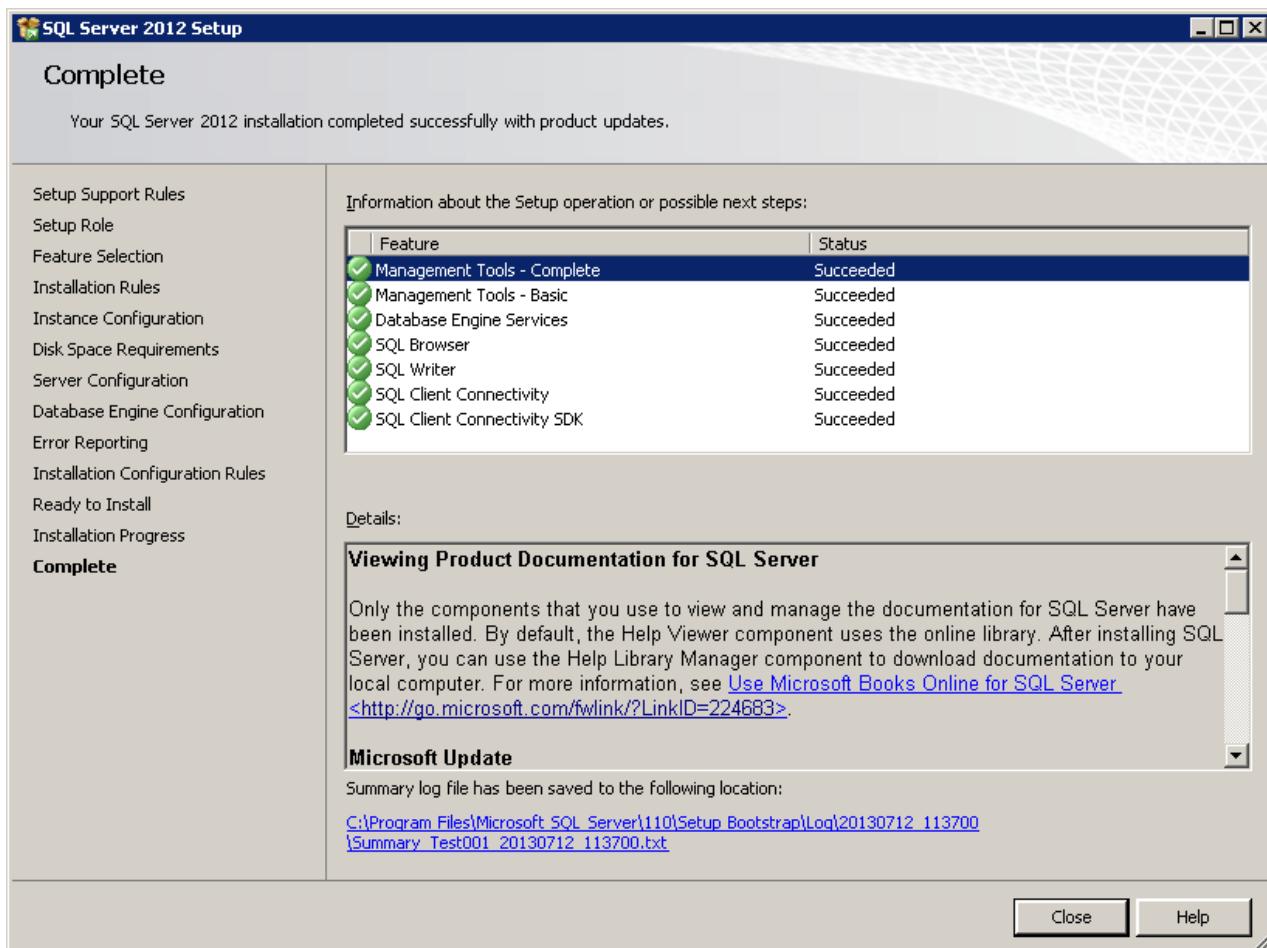


Image 16: Finalize installation

3 Setting Up the SQL Server 2012

3.1 Setting Up the Conditions for Database Import

To configure the SQL database, click the **Start** icon on the Windows task bar and select **All programs > Microsoft SQL Server 2012 > SQL Server Management Studio**.

In the login window, specify the server name in the same-named field. Enter **SQL Server Authentication** in the **Authentication** field, **sa** in the **Login** field and the password you specified during installation in the **Password** field. Click **Connect**.



Image 17: Connect to server

The following window will then appear:

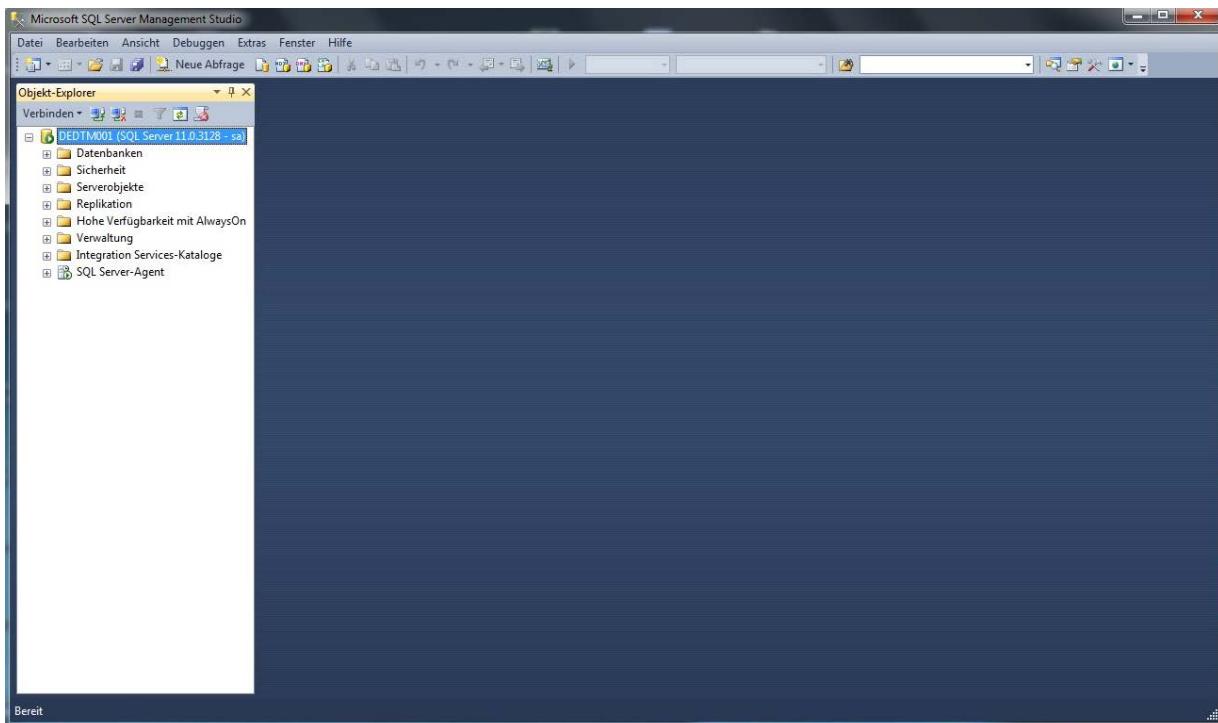


Image 18: Microsoft SQL Server Management Studio

In the left area of the window, expand the folder **Security**, right-click the **Logins** sub-folder and select **New Login** from the context menu.

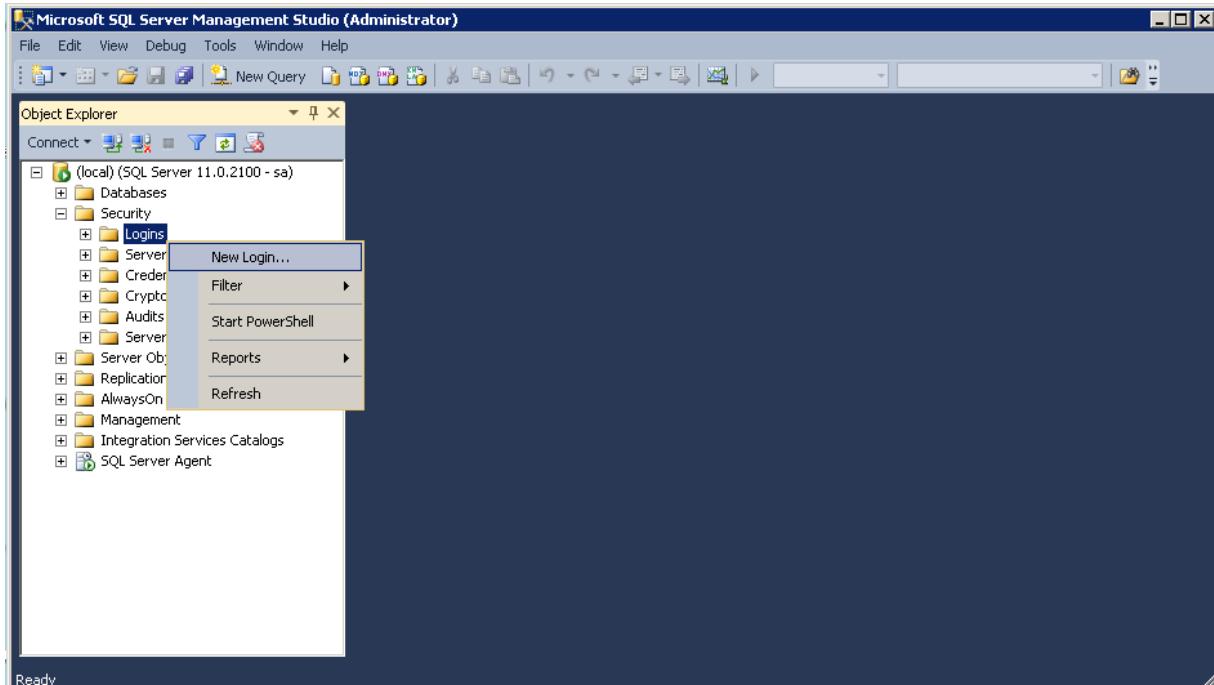


Image 19: Create new login

The following window will be displayed:

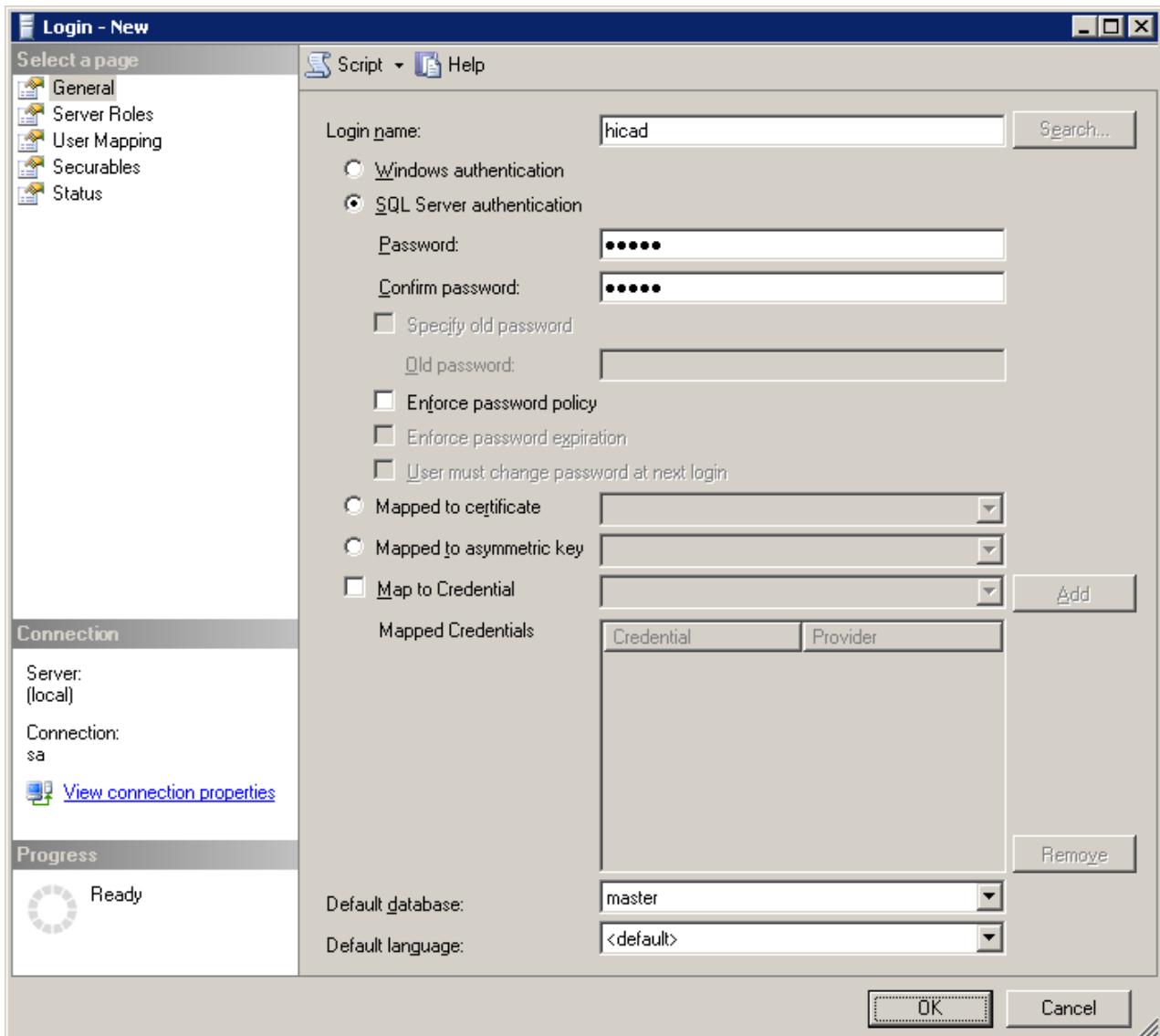


Image 20: Creating the User hicad

Enter **hicad** in the **Login name** field, activate the **SQL Server authentication** option and enter a password. Then, deactivate the **Enforce password policy** option and switch to the **User Mapping** menu.

Activate, as shown in the image below, the **model** database and enter hicad as the Default Schema. Confirm your entries with **OK**.

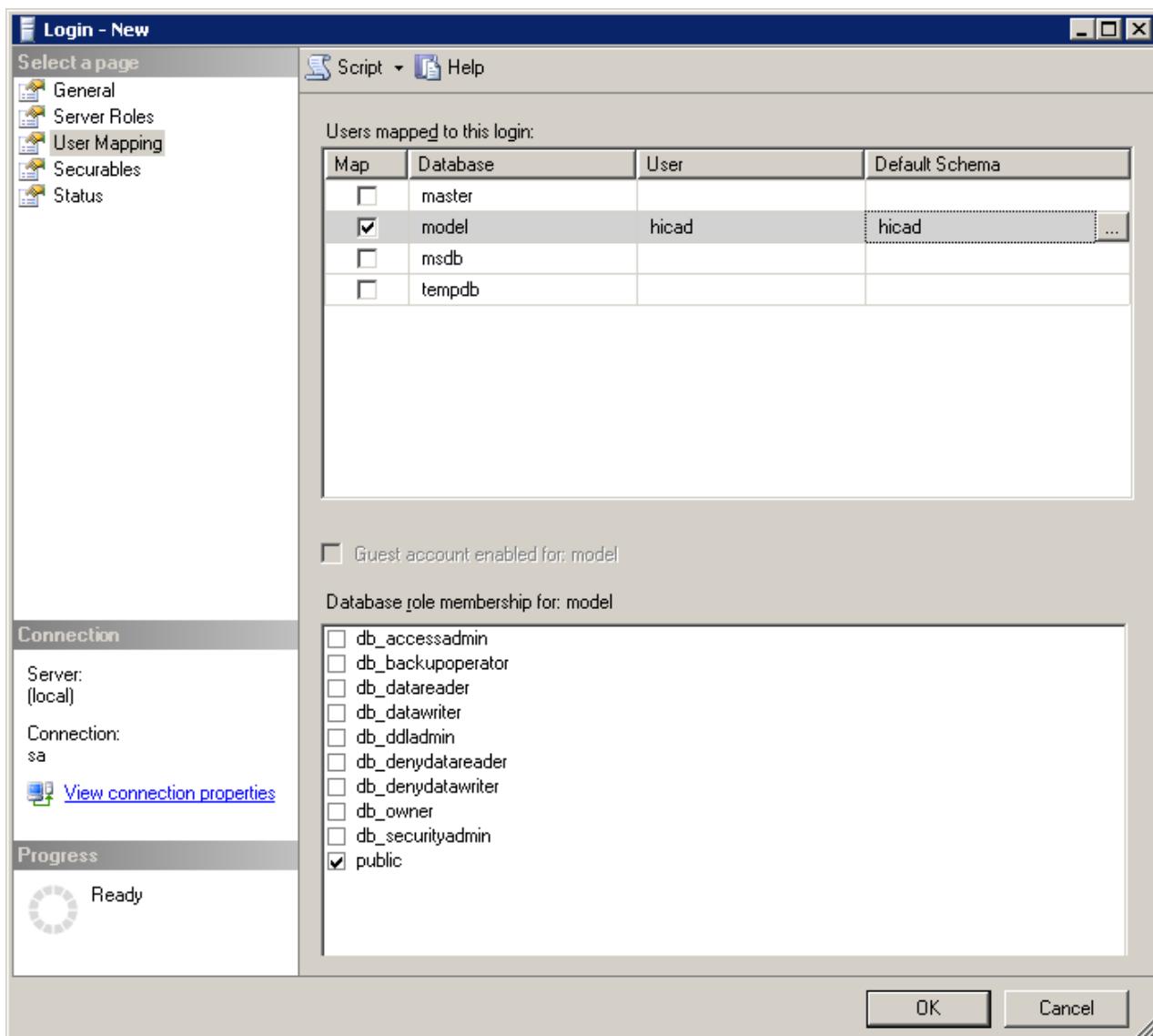
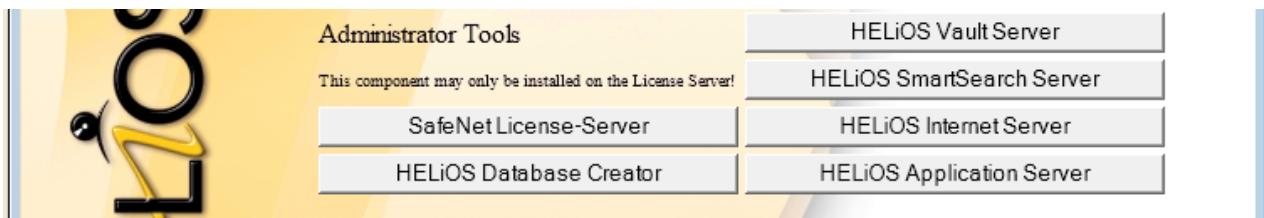


Image 21: User Mapping

4 Importing the HELIOS Database

4.1 Installing the HELIOS Database Creator

To install the **HELIOS Database Creators** click the corresponding button in the selection mask.



The start mask of the setup wizard of the **Helios Database Creator** will be displayed.

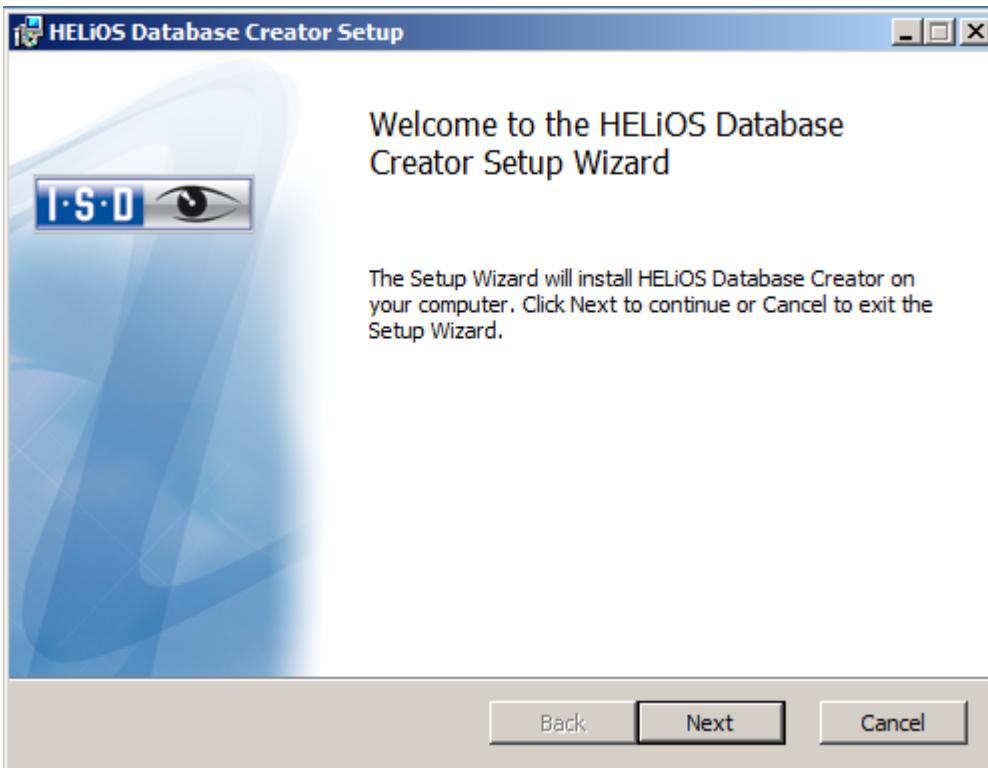


Image 22: Installation wizard

Click **Next**.

Specify an installation directory for the HELiOS Database Creator, and click **Next**.

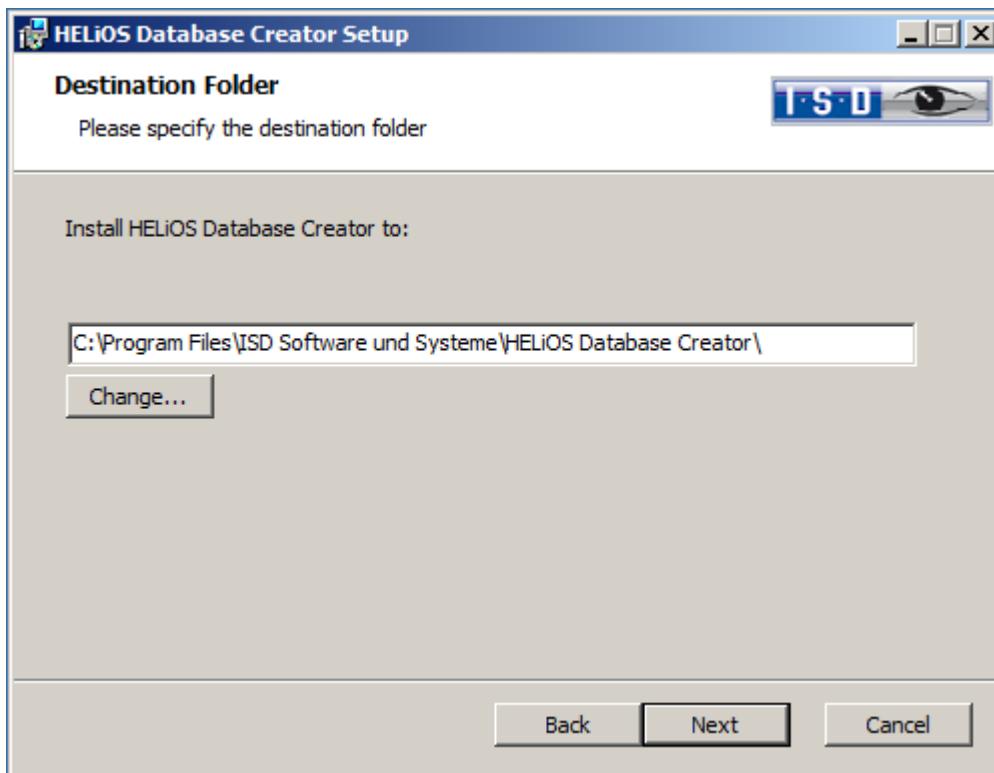


Image 23: Specify target folder

Click **Next**, then click **Install** to start the installation.

Click Finish to complete the installation of the HELiOS Database Creator.

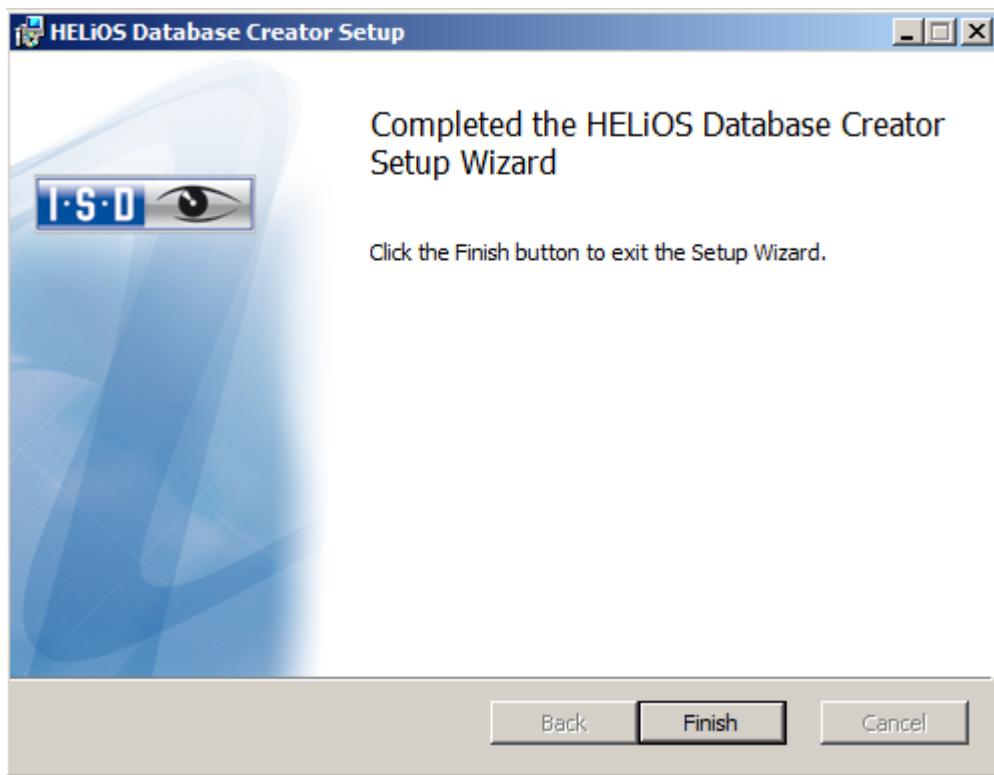


Image 24: HELiOS Database Creator installation completed

4.2 Importing the Database with the HELIOS Database Creator

Click the **Start** icon on the Windows task bar and select **All programs > ISD Software und Systeme > HELIOS Administration > HELIOS Database Creator**.

After entering the user data – User: sa, the Password and the SQL Server to be connected – you will be logged in.

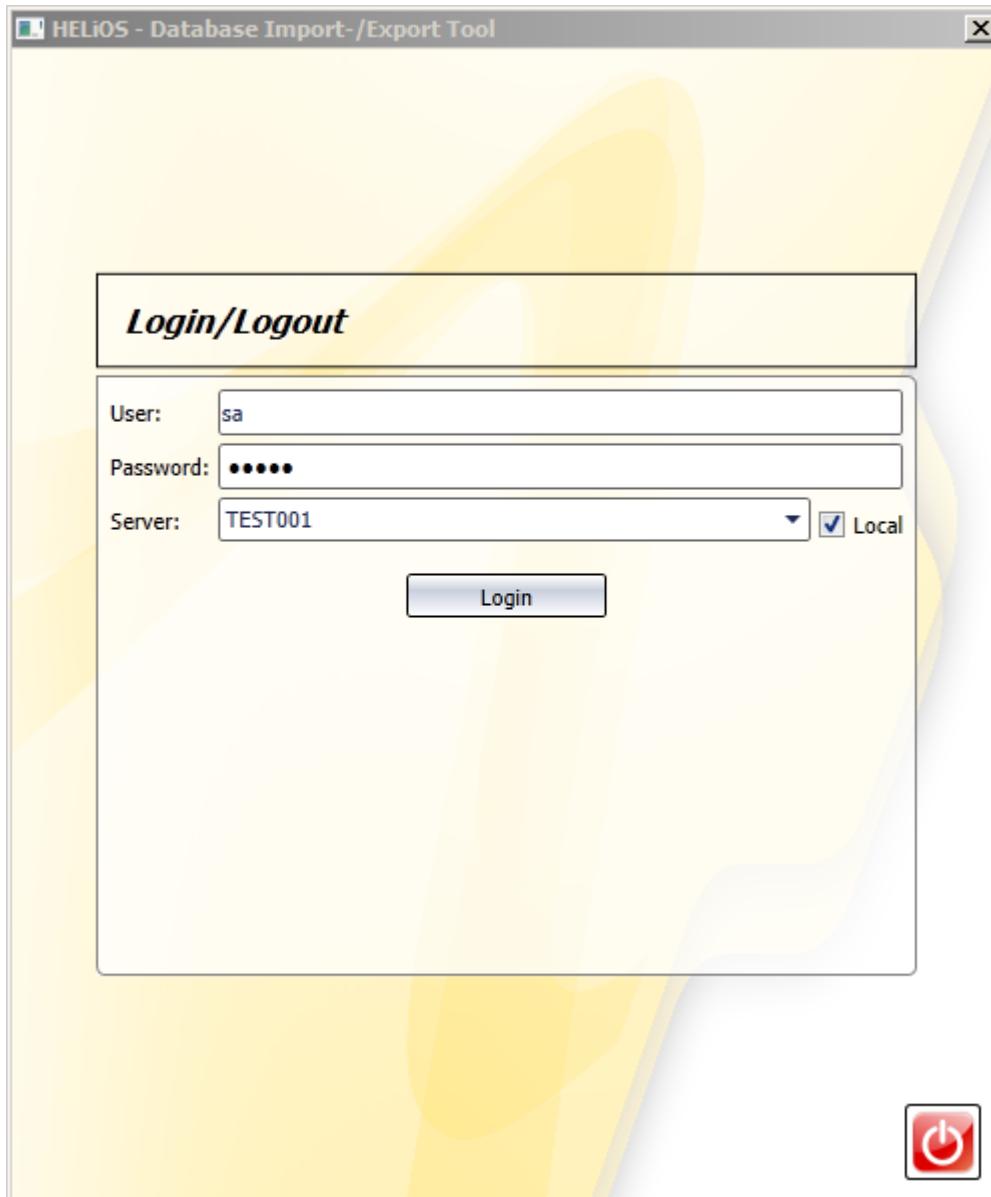


Image 25: HELIOS Database Import/Export tool

For older versions, it was necessary to copy the empty HELiOS database from the installation DVD (\Helios\Datensachen\MsSql80\bauteil_sic) to a temporary directory of the server. As of HELiOS 2014 SP1 (Version 1901.1) you can also directly import the database from the DVD to an empty directory, without this intermediate step.

The log file for the process will be saved to %Appdata%\Roaming\ISD Software und System\HELIOS\bauteil_aktl_Helios_Export.log and the configuration will be saved to %Appdata%\Roaming\ISD Software und System\Helios.DB\ImportExport\DB\ImportExportConfig.xml

In this guide the database name **bauteil** (German for “part”) is used. Enter the export path and the database name and start the **Import** by clicking the same-named button.

Exports to directories which already contain files are no longer possible. In this case an appropriate error message will be displayed.

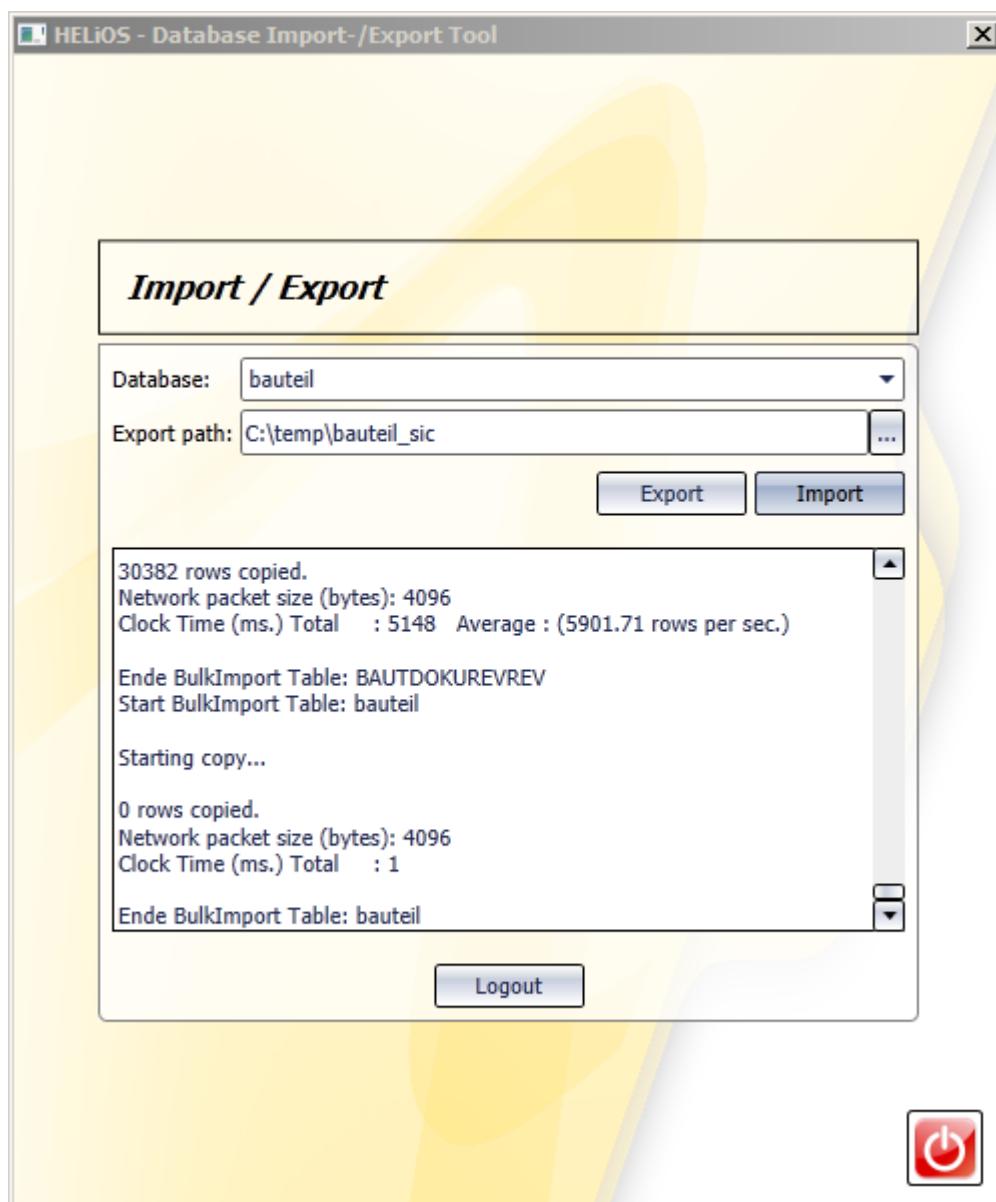


Image 26: Start the import

The import procedure will be recorded in an import log:

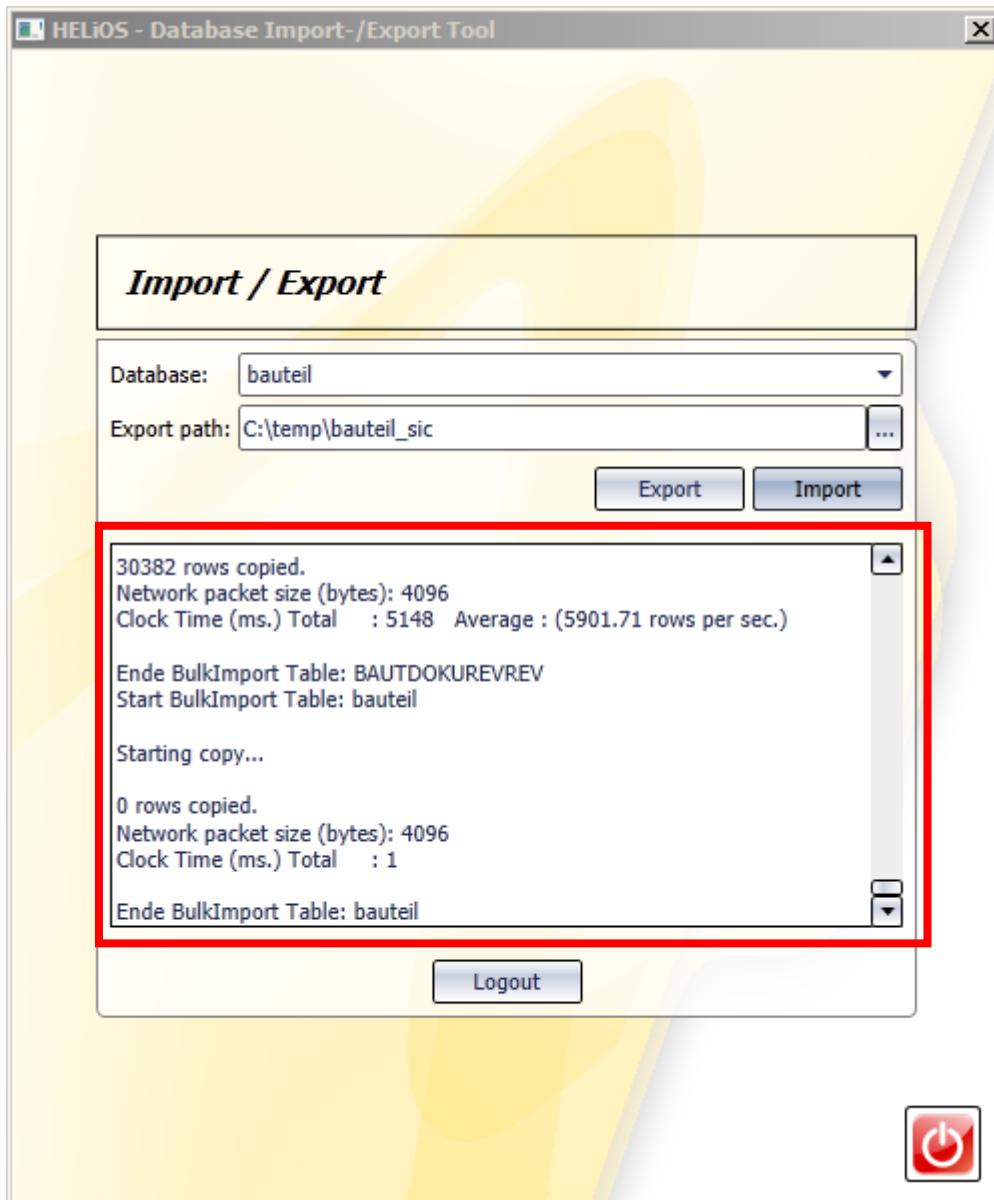


Image 27: Import log

If the import was successful, this will be indicated by a corresponding message. Confirm with **OK**.

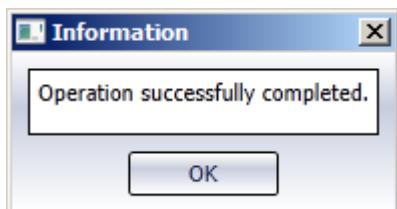


Image 28 : Successful import

5 Defining the Permissions for the User hicad

Switch to the SQL Server Management Studio to define the permissions of the user **hicad**.

Expand the **Databases** folder, right-click **bauteil** and select the **Properties** function from the context menu.

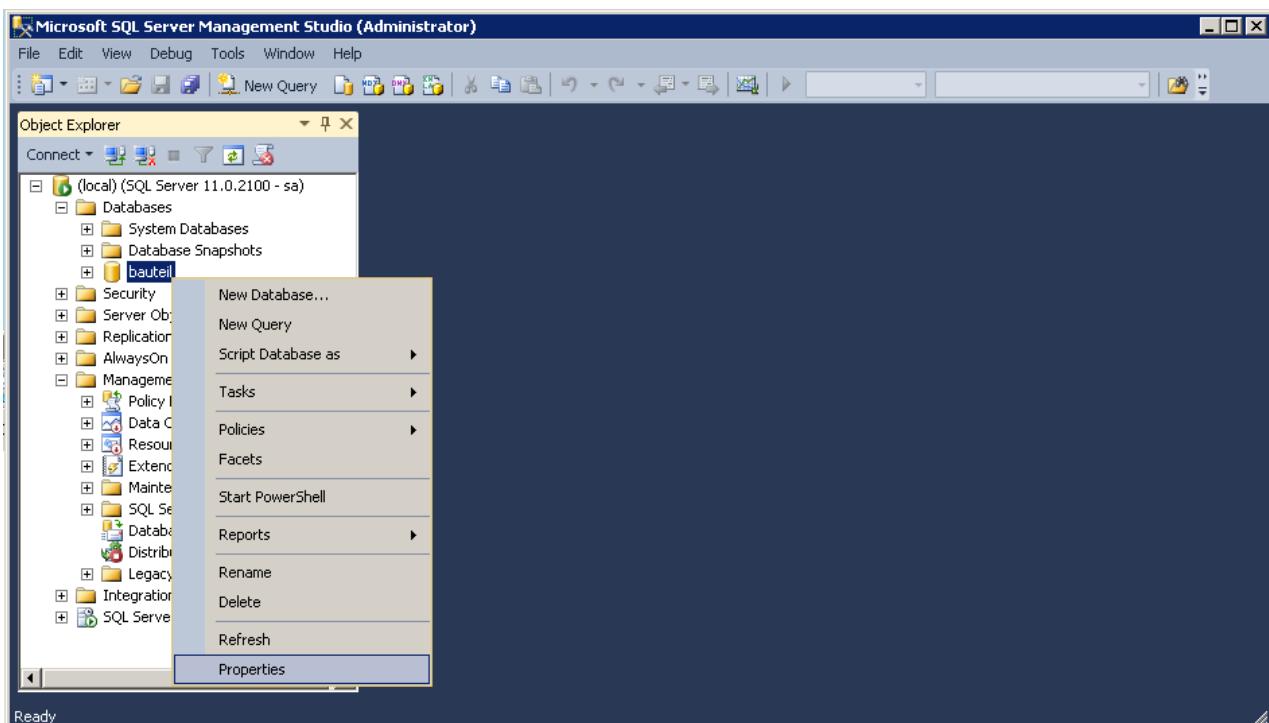


Image 29: Calling the Properties of “bauteil”

In the left pane of the window, select **Permissions**. Define the permissions for the user **hicad**.

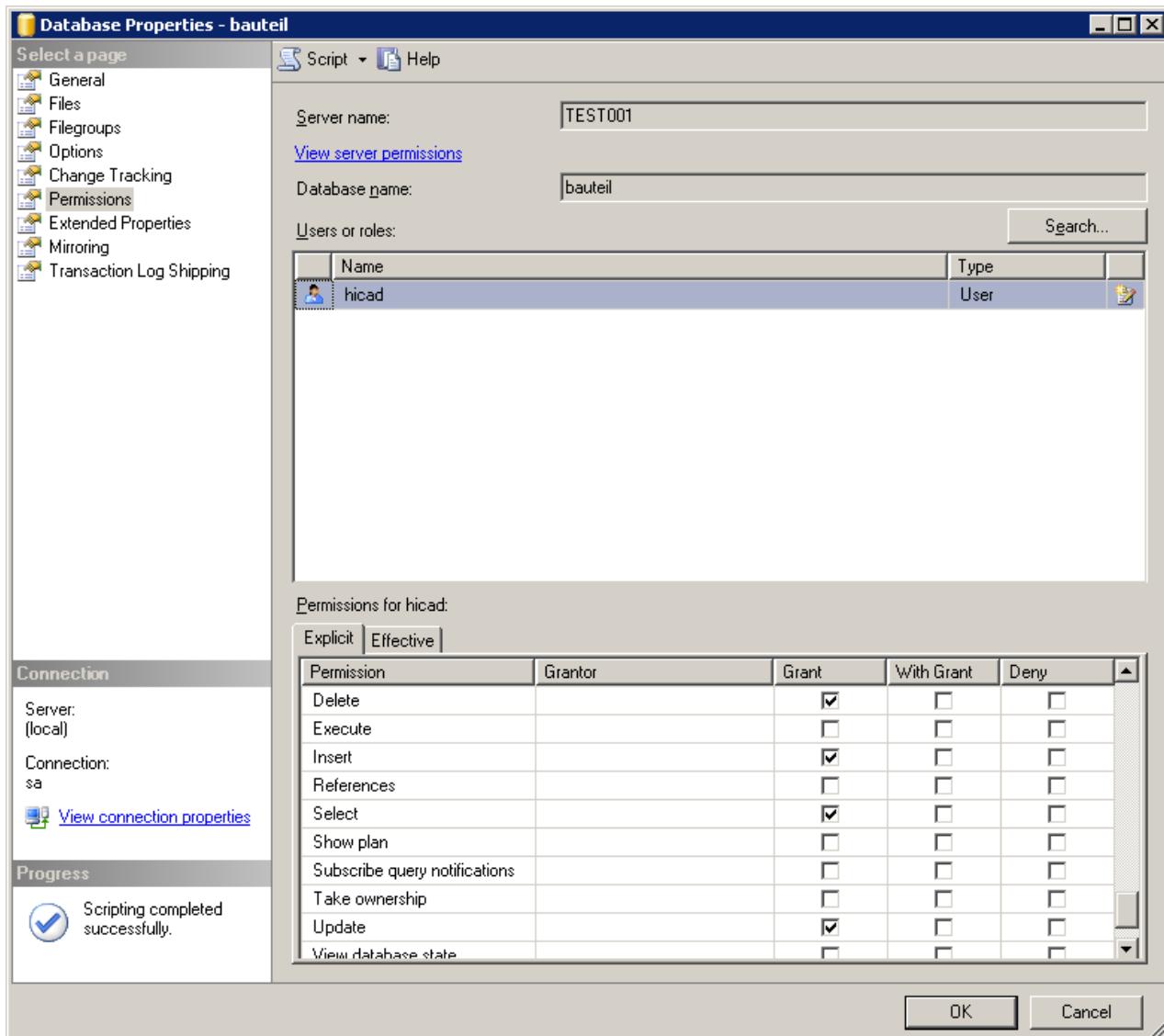


Image 30: Permissions for hicad

Assign to the user **hicad** the following permissions:

- » Delete
- » Insert
- » Select
- » Update
- » Create table

6 Setting up the ODBC Connection

To set up the ODBC connection for the clients, click the **Start** icon on the Windows task bar and select **Control Panel > Administrative Tools > Data Sources (ODBC)**.

The ODBC data source can be set up either as a **System DSN** (by an administrator) which will be available to all users of the computer, or as a User DSN which will only be available for the user who has created it. The procedure for both options is identical.

In the ODBC Data Source Administrator, click the **Add** button.

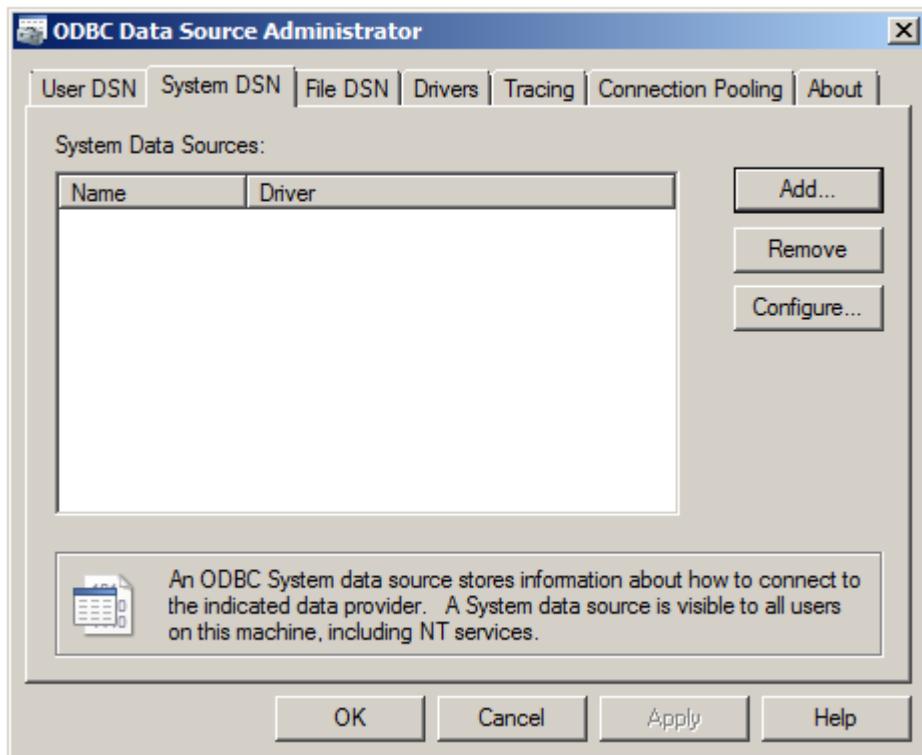


Image 31:ODBC Data Source Administrator

In the Create Data Source dialogue window, select the SQL Server Native Client 11.0 and click Finish.

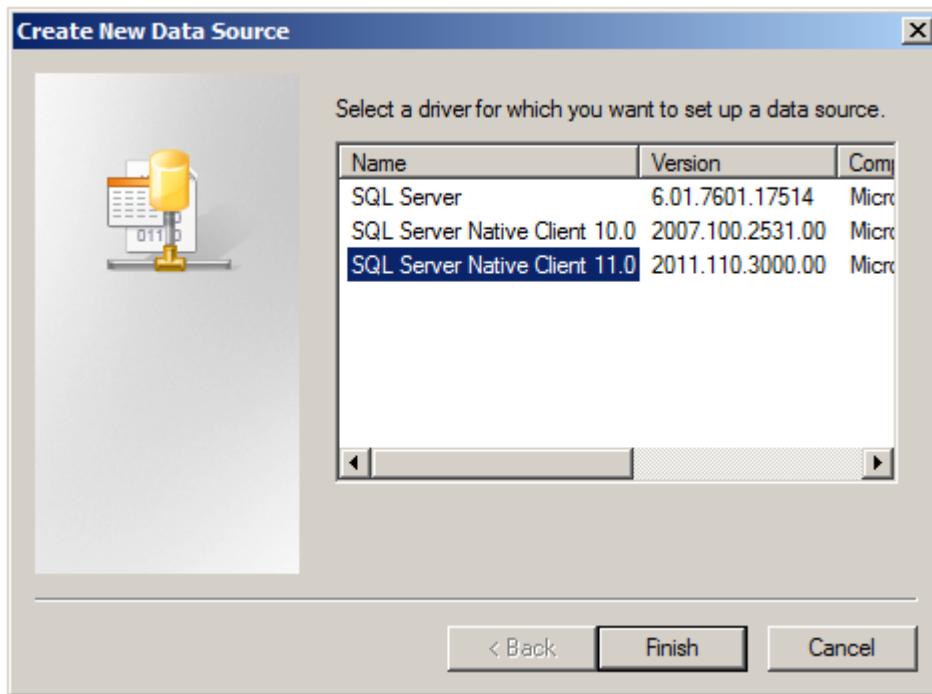


Image 32: Select ODBC driver

Now enter the name of the data source (**HeliosBauteil**), and enter the name of the database server or select it from the list. Confirm your entries with **Next**:

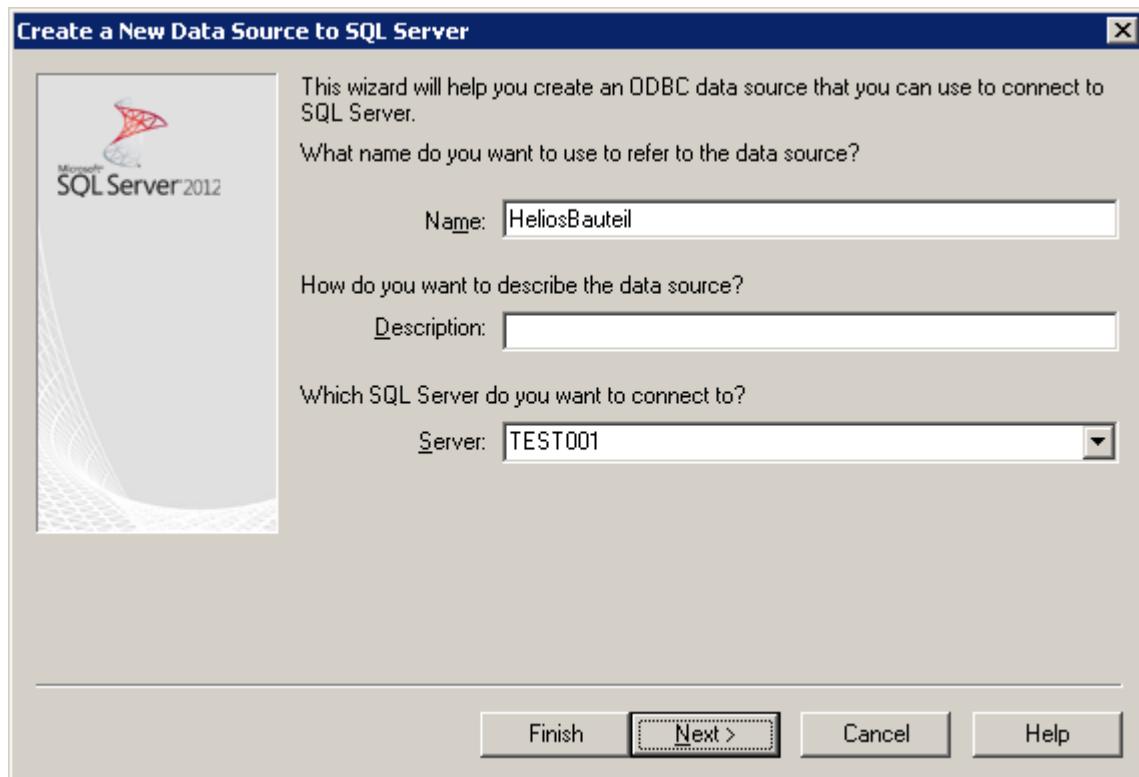


Image 33: Definition of the data source

Activate the **With SQL Server authentication...** option, enter **hicad** in the **Login ID** field and your **Password** in the same-named field below.

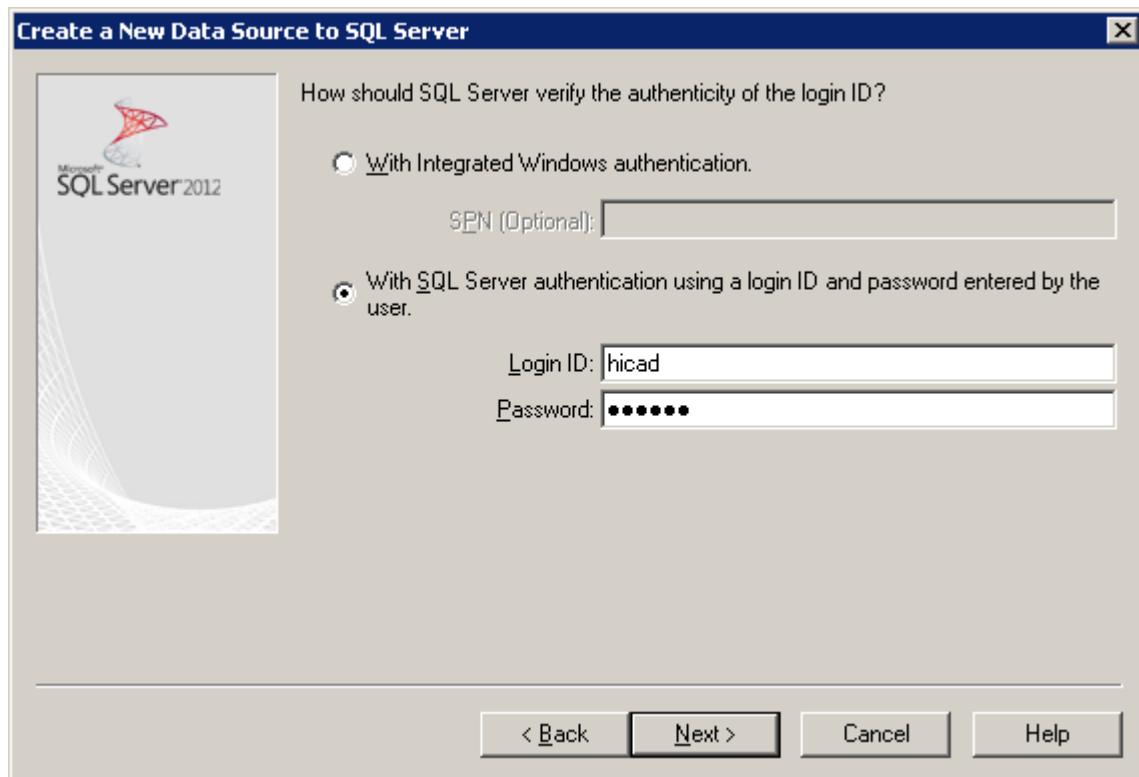


Image 34: User input

Activate the **Change the default database to:** checkbox and select the **bauteil** database. All other options must correspond to those in the image:

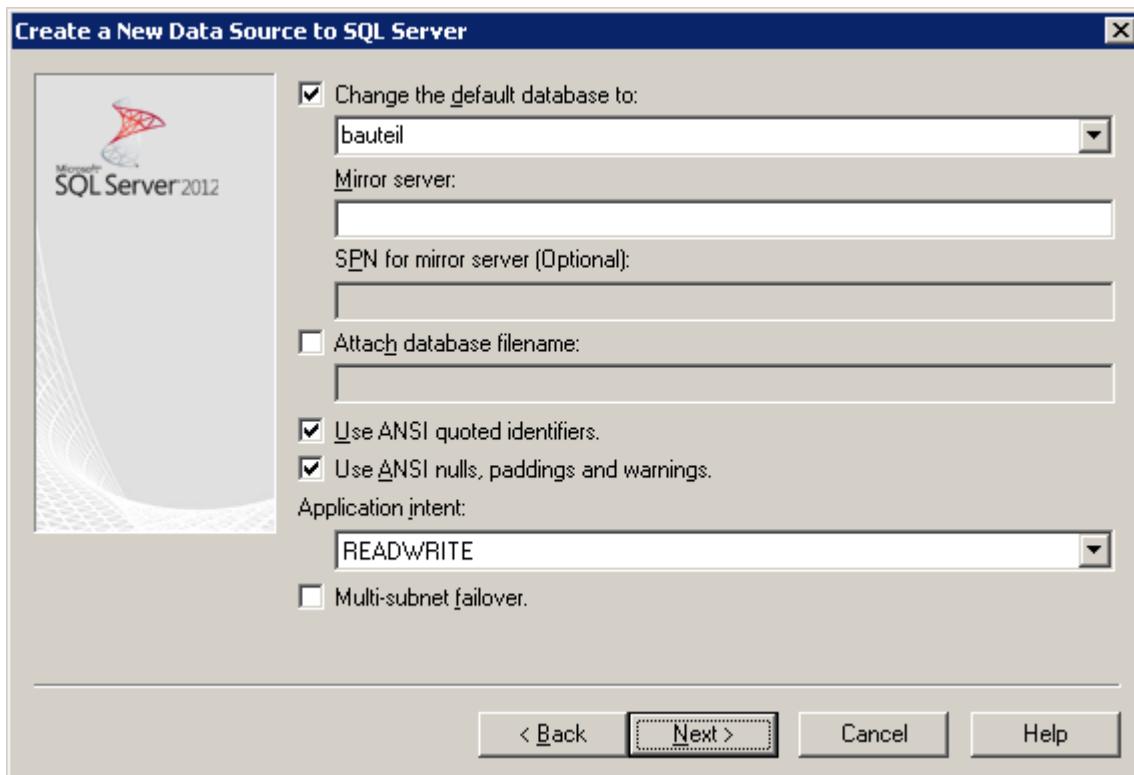


Image 35: Database selection

Deactivate all options and click **Finish** to complete the creation.

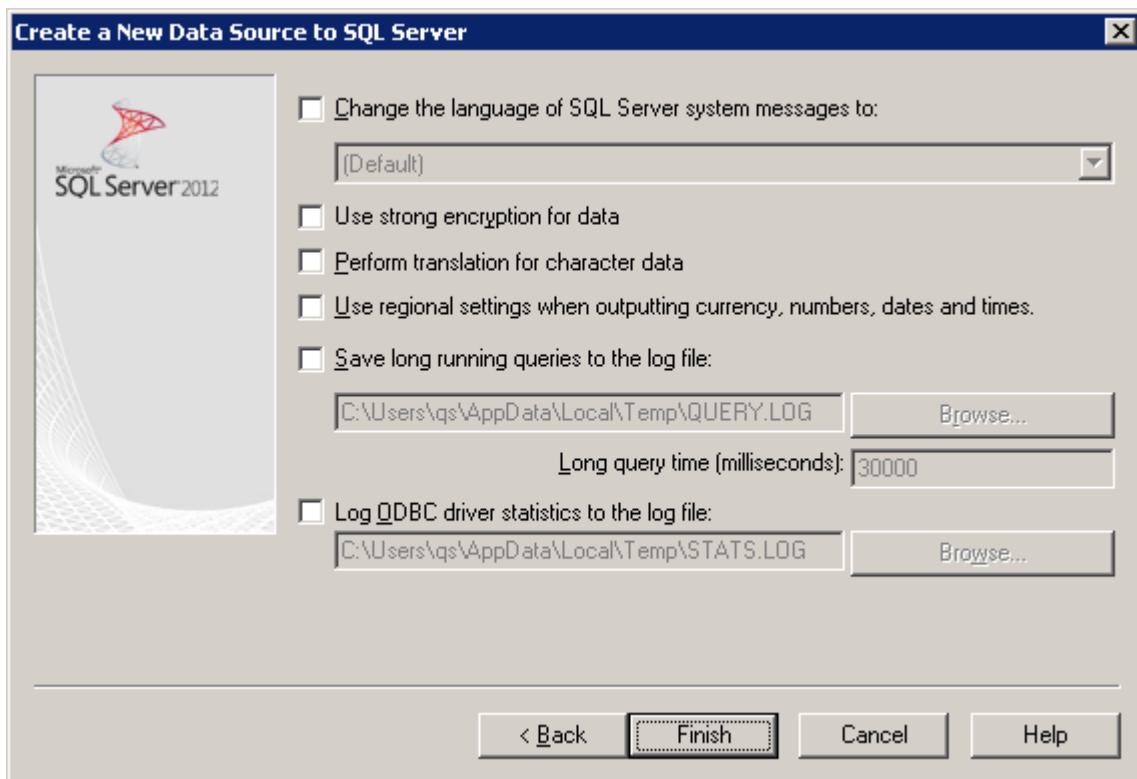


Image 36: Settings for ODBC connection

The window below offers the option to test the data source and completely finalize the creation by clicking **OK**.
The ODBC Data Source Administrator can now be closed as well.

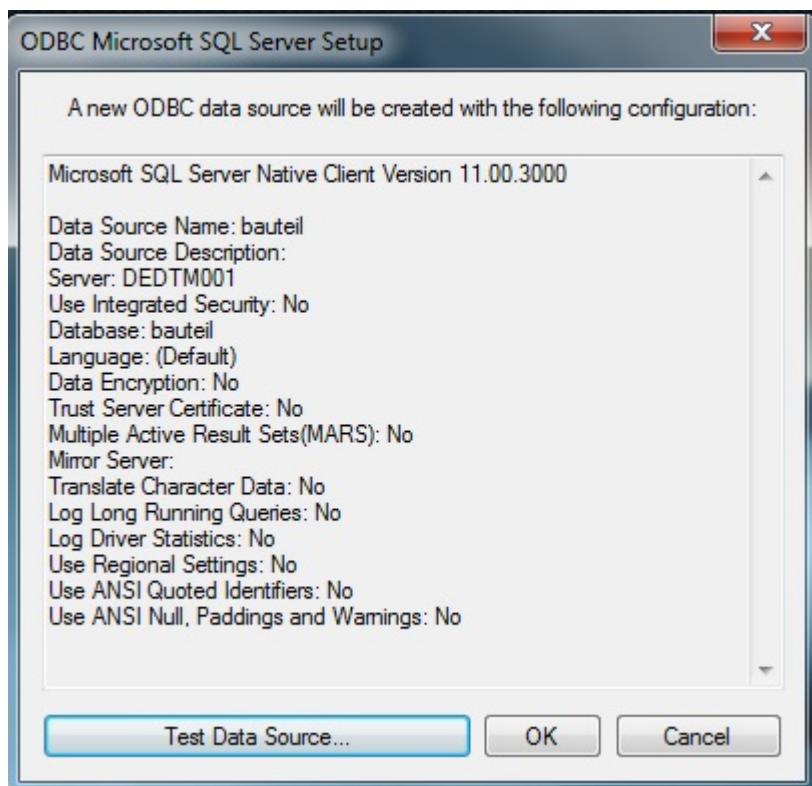


Image 37: Testing the data source and complete finalization of the creation

7 Establishing the HELiOS Connection

Finally, you need to tell HELiOS the name of the data source you have defined in the previous chapter. Click the **Start** icon of the Windows task bar and select **All Programs > ISD Software und Systeme > Administration > DB Manager**. Activate the **Connections** tab.

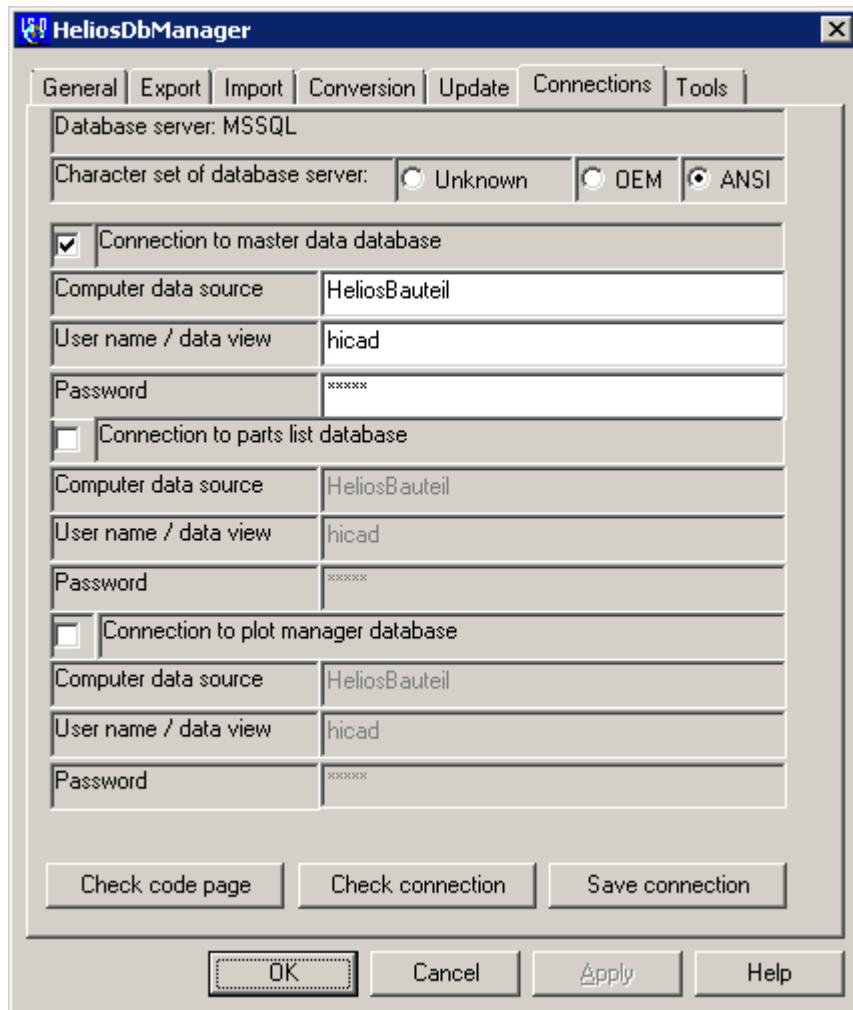


Image 47: DB Manager

Important notes on the DB Manager:

Please note the setting for **Character set of database server**: Here, it is important that you select the **ANSI** option. Then, activate the **Connection to master data database** checkbox and enter the previously defined name of the ODBC data source in the **Computer data source** field, **hicad** in the **User name** field, and your **Password** in the same-named field. The setting options for the **Connection to parts list (BOM)** database and the **Connection to plot manager** database are only there for historical reasons and are of no relevance.

Click **Save connection** to save your settings, then close the DB Manager with **OK**.

All steps required for the installation are now completed. You can now start HELiOS.

8 Possible source of error

If any problems should occur during import of the HELIOS Database with the HELIOS Database Creator (see Chapter 4) or with the establishing of the ODBC connection (Chapter 6), please check in the settings of the SQL Server whether the TCP/IP protocol has been disabled. This protocol needs to be enabled.

Select Start > All Programs > SQL Server 2012 > Configuration Tools > SQL Server Configuration Manager, and change the settings if required.

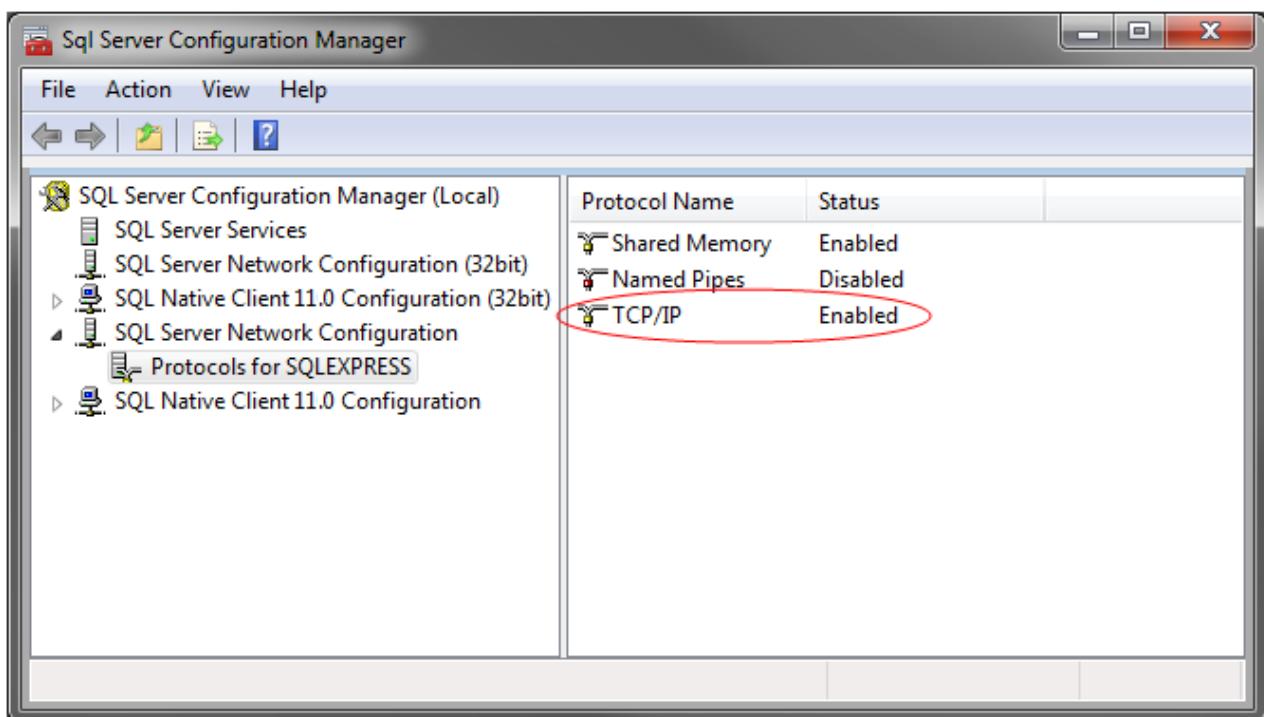


Image 39: Sql Server Configuration Manager