TachoScan

Installation guide

Version: 5.1.1

TachoScan

Installation guide

© 2002 - 2020 INELO Polska Sp. z o.o. All rights reserved

All rights reserved. No parts of this work may be reproduced in any form or by any means - graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems - without the written permission of the publisher.

Products that are referred to in this document may be either trademarks and/or registered trademarks of the respective owners. The publisher and the author make no claim to these trademarks.

While every precaution has been taken in the preparation of this document, the publisher and the author assume no responsibility for errors or omissions, or for damages resulting from the use of information contained in this document or from the use of programs and source code that may accompany it. In no event shall the publisher and the author be liable for any loss of profit or any other commercial damage caused or alleged to have been caused directly or indirectly by this document.

The program windows (screenshots) shown within this help file can differ in form and contents from the actual program windows. This can be the case especially when the program version differs from the manual version.

Production:

INELO Polska Sp. z o.o.

ul. Karpacka 24/U2b
43-300 Bielsko-Biała
POLAND
www.inelo.pl

Table of Contents

1. Introduction 5
2. Installation package 5
3. Installation 6
3.1. Minimum requirements 6
3.2. Program installation 9
3.2.1. Manual installation of the program 9
3.2.2. Self-installation of Microsoft SQL Server 9
3.3. Server 23
3.3.1. Attaching and Detaching the database 24
3.3.1.1. Running "Database Manager" 25
3.3.1.2. Attaching database 25
3.3.1.3. Detaching database 28
3.4. HASP Manager 29
3.4.1. Windows® 10, Windows Server® 2008 29
3.4.1.1. Set up the installation file 30
3.4.1.2. Install the HASP License Manager as a Service 30
3.4.1.3. Configure "Data Execution Prevention" to Allow the Service to Run 31
3.4.2. Windows® 8 32
3.5. Device installation 33
3.5.1. License key 33
3.5.1.1. No licence key is inserted 34
3.5.2. Canon flatbed scanner 35
3.5.3. Roller scanner 35
3.5.4. TachoReader 36
3.5.5. TachoReader Mobile II 36
3.5.6. TachoReader Basic 37
3.5.7. TachoReader Combo Plus 38
3.6. Transferring the program to another computer 39
4. First launch 43
4.1. Step 1 - select program mode 44
4.2. Step 2 - server initiation 47
4.3. Log in 49
4.3.1. Simple logging 49
4.3.2. Advanced logging 49
4.3.3. Paths settings 50
4.4. Granting rights / privileges 51

4.5. Database backup settings 52
4.6. Program activation 52
5. Program launch mode 53
5.1. The change of working mode to Advanced 53
5.2. The change of working mode to Standard 53
6. Additional information 54
6.1. Support and service 54
6.2. TCP/IP Port for MS SQL Server 54
6.3. Database Manager 54
6.3.1. Server 55
6.3.2. Database 56
6.3.3. Backup 57
6.3.4. Data import 58
6.3.5. Databases management 58
6.3.6. About 59
6.4. Glossary 60

1. Introduction

This paper presents the installation process for TachoScan on the single user workstation. We also provide the installation guidelines for multiuser work on server software being the part of installation package or on the server you use in your company. The instruction contains the information on the installation of software and the devices being the part of installation package. Furthermore, we describe the configuration of "**Firewall**" in the way that enables the communication of workstations with server.

This paper is addressed for system administrators. Apart from the topics substantial during the first installation it also contains the description of the administration settings window. This window enables for example: the management of user accounts, setting the privileges as well as settings for the backup of database.

Prior to the installation of program we recommend to read carefully every topic of this instruction.

The contact details to Customer Support 54

2. Installation package

A **standard** installation package includes:

- Installation CD or link to software installation,
- Operation manual or link to download operation manual,
- Certificate (license),
- License key,

The installation kit can extended with:

- Canon scanner 35 or Roller scanner 35 - that enables to scan tacho discs,
- TachoReader 36 - that enables efficient data downloading from driver's cards,
- TachoReader Mobile II 36 - the device for data downloading from digital tachographs,
- TachoReader Combo Plus 38 - the device for data downloading from digital tachographs as well as from driver's cards.

TachoScan depending on the order, is sold along with different installation packages.

3. Installation

This topic addresses the issues related to the installation of TachoScan. Further in the topic, there is a description of the installation of devices compatible with the program.

> *To install the programs it is **required** to log in to an account with administrative privileges in the operating system.*

3.1. Minimum requirements

The following configuration shows the **MINIMUM** requirements that must be met in order to run the program.

> *Regardless of the minimum requirements requirements below, TachoScan will not be supported on Windows® and SQL Server™ for which Microsoft® support is discontinued.*

PC working as a client

- system: Windows® 8, Windows® 10, Windows Server® 2008 R1 SP-2, Windows Server® 2008 R2 SP-1, Windows Server® 2012, Windows Server® 2012 R2;
  +for each system, all available Windows Update patches;
- Internet Explorer **version 8 or higher**;
- **1,5 GHz** processor;
- minimum **512 MB of available** RAM;
- depending on the number of installed modules, approx. **2 GB** of free disc space;
- graphic display resolution: **1280 x 768**;
- database attached to **Microsoft® SQL Server™ 2012 or newer** on the PC working as a server;
- during the first launch is installed by default:
  - Microsoft® SQL Server™ 2014 Express for Windows Server® 2008 R1 and Windows Server® 2008 R2**;**
  - Microsoft® SQL Server™ 2017 Express for Windows® 8.1, Windows® 10, Windows Server® 2012, Windows Server® 2012 R2;
  - Microsoft® SQL Server™ 2019 Express for Windows® 10;
- the date format in the system regional settings must be the same for **all** stations, including the server computer;
- Scanner for disc scanning that supports the scanning resolution of 300 dpi, color mode monochrome (1 bit - black & white), black background of the scanned documents area and TWAIN driver;

(recommended scanner models: Canon LiDE 70, LiDE 100, 110, 200 or LiDE 210, Plustek SmartOffice PS283);

- digital driver card reader that meets the requirements: support for T=0, T=1 protocols, clock frequency of 4 MHz or higher, ISO 7816 and EMV 2000 Level 1 chip card support, compliance with the requirements of ISO 7816, card format: ID-1 (Full Size), compatibility with PC/SC and CT-API or TachoReader Combo Plus,
  (recommended models of card readers: Omnikey 3121 (USB), Omnikey 4040 Mobile (PCMCIA), Omnikey 4321 Mobile (ExpressCard 54), SCR 3310 (USB), SCR 243 (PCMCIA), SCR 3340 (ExpressCard 54);
- one of the devices to read data from the digital tachograph: **TachoReader Mobile II**, **TachoReader Combo Plus**, **TachoUSB** or **TachoBlue**.

PC working as a server

- system: Windows® 8, Windows® 10, Windows Server® 2008 R1 SP-2, Windows Server® 2008 R2 SP-1, Windows Server® 2012, Windows Server® 2012 R2;
  +for each system, all available Windows Update patches;
- Internet Explorer **version 8 or higher**;
- **2 GHz** processor (multi-core system recommended);
  - The sum of all the cores in a single- and multiprocessor system must be a power of 2 - for example, 1, 2, 4, 8, 16, etc.
- free disc space: **1 GB** (depending on the volume of entered data);
- a minimum of **512 MB of available** RAM (recommended minimum is 1 GB);
- USB port - for the USB license key;
- graphic display resolution: **1280 x 768**;
- the date format in the system regional settings must be the same for **all** stations, including the server computer;
- to install the program server, you are required to log on to the account with administrator rights in the operating system;
- server name:
- user name can not be the same as the computer name.
- The first character must be a letter defined in Unicode 2.0 standard, which includes Latin letters from "a" to "z" and from "A" to "Z"
- The following characters:
  - letters defined in Unicode 2.0 standard;
  - latin alphabet digits;
  - spaces and special characters are not allowed (e.g. "-", "@", "#", "$");
- **You cannot change the name of the computer on which the database of TachoScan was installed**;

During the first run, the database server is installed:
***- Microsoft® SQL Server™ 2014 Express** for Windows Server® 2008 R1 and Windows Server® 2008 R2;*
***- Microsoft® SQL Server™ 2017 Express** for Windows® 8.1, Windows Server® 2012, Windows Server® 2012 R2;*
*- **Microsoft® SQL Server™ 2019 Express** for Windows® 10.*

SQL Server™ 2014 Express database limitations:
- support for a single physical processor;
- 1 GB of RAM;
- the size of the database: 10 GB.

SQL Server™ 2017 Express database limitations:
- support for one physical processor;
- 1410 MB of RAM;
- database size: 10 GB.

If the maximum database size (10 GB) is not sufficient, you need to purchase the latest commercial version of Microsoft® SQL Server™.
When installation is finished you have to reboot your computer.

Self-installation of Microsoft SQL Server

Software producer allows self-installation of Microsoft SQL Server.

In this case, you should pay special attention to:

1. Select **Mixed Mode** as **Authentication mode** in the system configuration window for Microsoft SQL Server.
2. Configure advanced server options:
   - enable **xp_cmdshel** option support;
   - enable **Agent XPs** option support;
3. The **SQL Server ™** user used by TachoScan must have sysadmin privileges.

*The Express version of the database server does not automatically create a backup copy of the database. If you install **SQLServer™ 2012** or higher database server version, intermediate database migration of TachoScan (4TransMDF, 4TransKONFIG) to **SQL Server™ 2008 R2** must be done first.*

Database update (older than SQL Server™ 2008 R2):
*The Express version of **SQL Server™ 2005 or higher** database server does not automatically create a backup copy of the database.*
TachoScan has a built-in database backup service. If you want to use it, you need to install the INELO Service.
The installer is available on the TachoScan installation CD, in "Utils/INELO Service/IneloServiceInstaller.exe."
In the event of an error, please contact the software service.

3.2. Program installation

To carry out installation, please run the installation file downloaded via link or received on a CD.

If the products installer window has failed to pop-up, you should carry out manual installation 9

Then perform activities suggested by the products installer by clicking the button

. If the target directory is not changed, the program will be installed in the default location.

- for 32-bit systems: "C:\Program Files\INELO\";
- for 64-bit systems, depending on the Windows® version: "C:\Program Files (x86)\INELO\";

A further step in TachoScan program installation is shown in the clause: "First launch 43".

3.2.1. Manual installation of the program

If the function of automatic installation is not working (it may happen so if the function of AutoStart in Windows® is turned off), do the following:

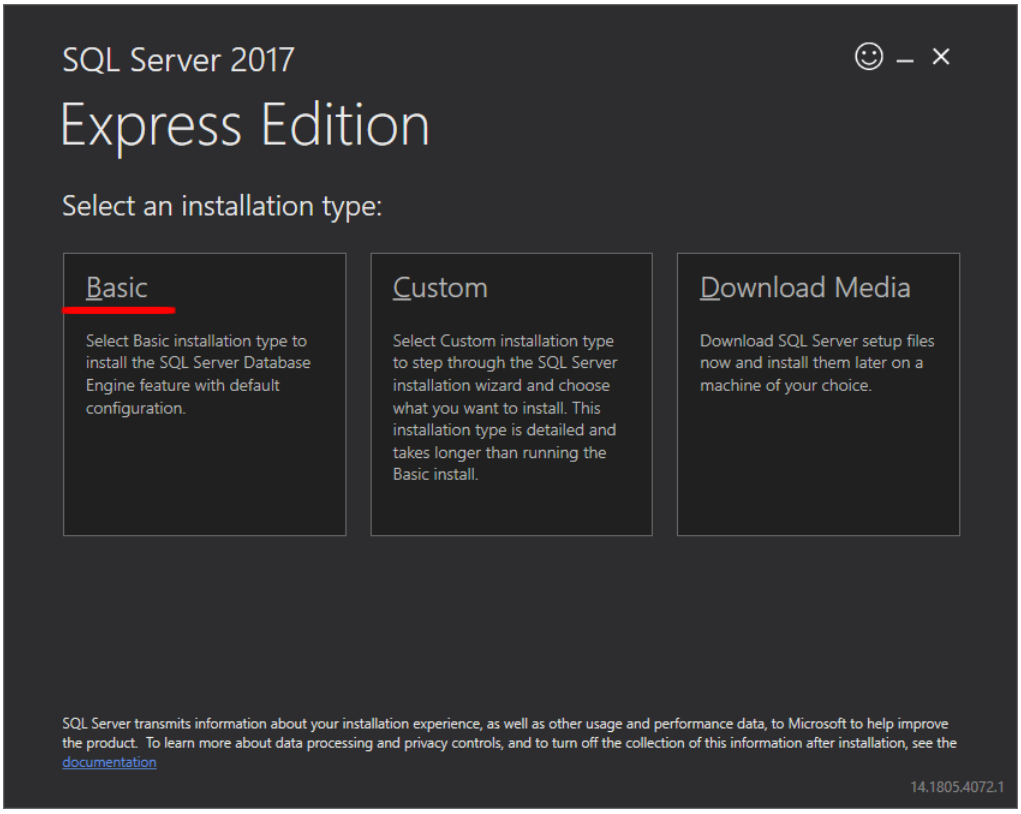
1. Double-click the icon of DVD/CD-ROM drive containing the installation disc.
2. start the file: **Start.exe**.

3.2.2. Self-installation of Microsoft SQL Server

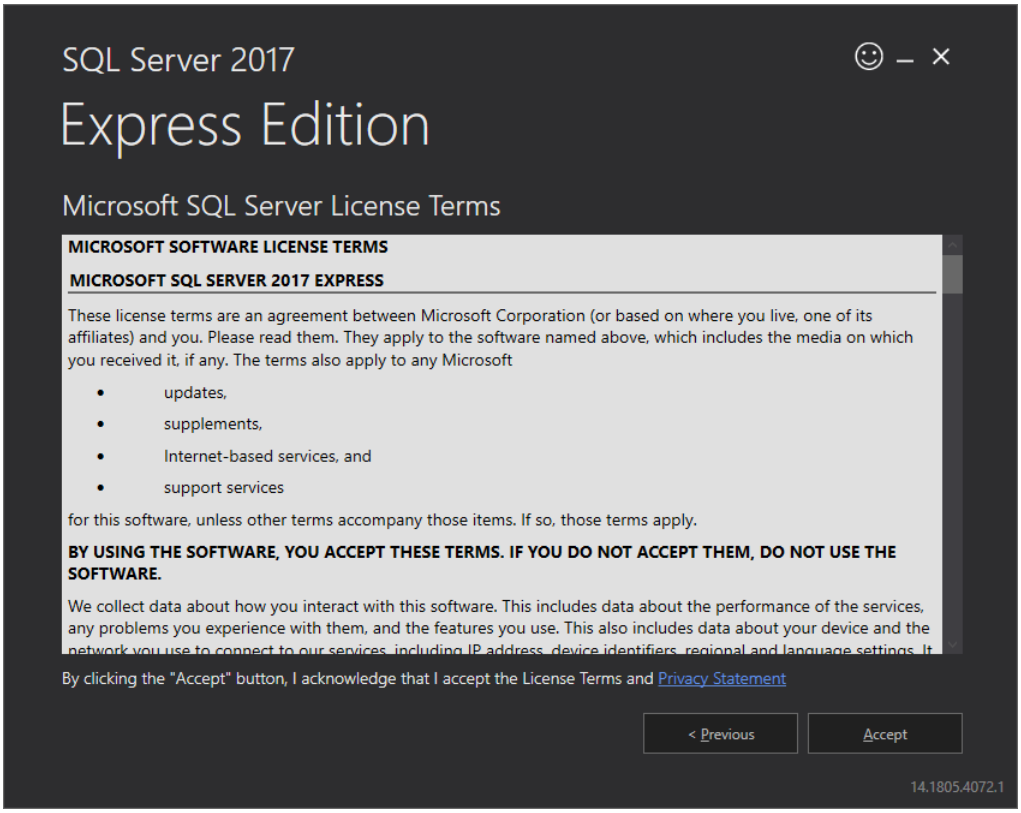
Software producer allows for self-installation of Microsoft® SQL Server™.

- To install Microsoft® SQL Server™:

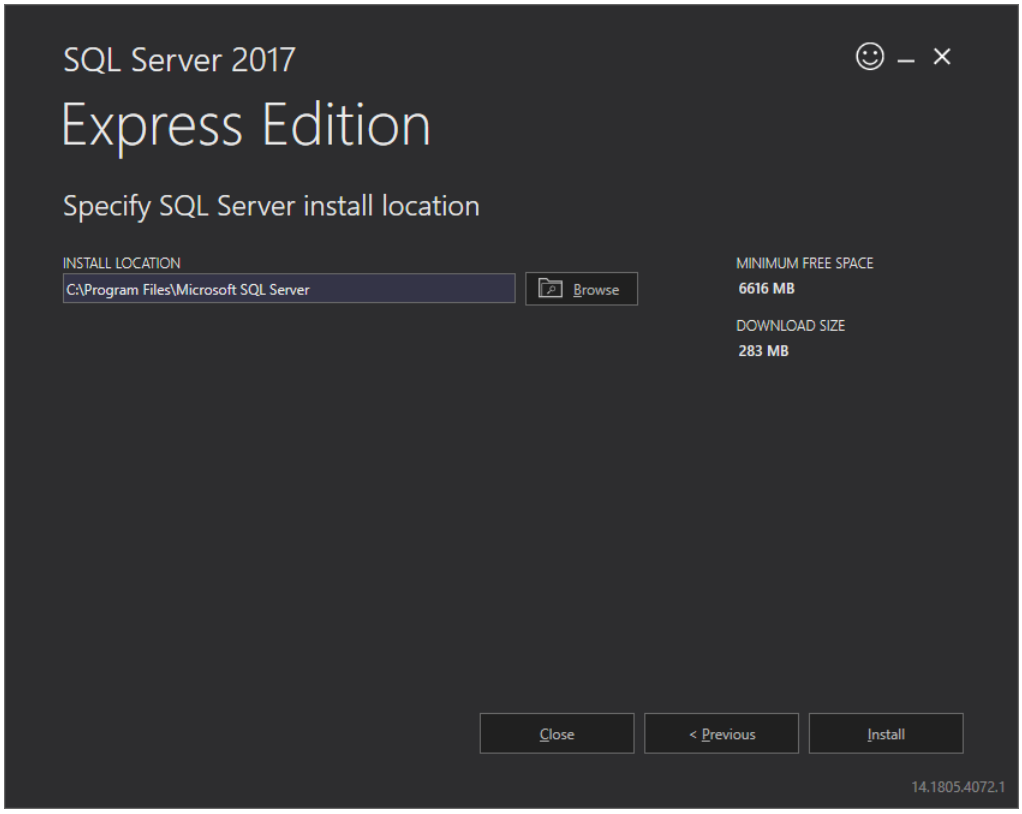
1. Download the free version of the server from the Microsoft website by clicking the Download button
2. After starting the installer, the installation window is displayed. Choose the **Basic** installation type



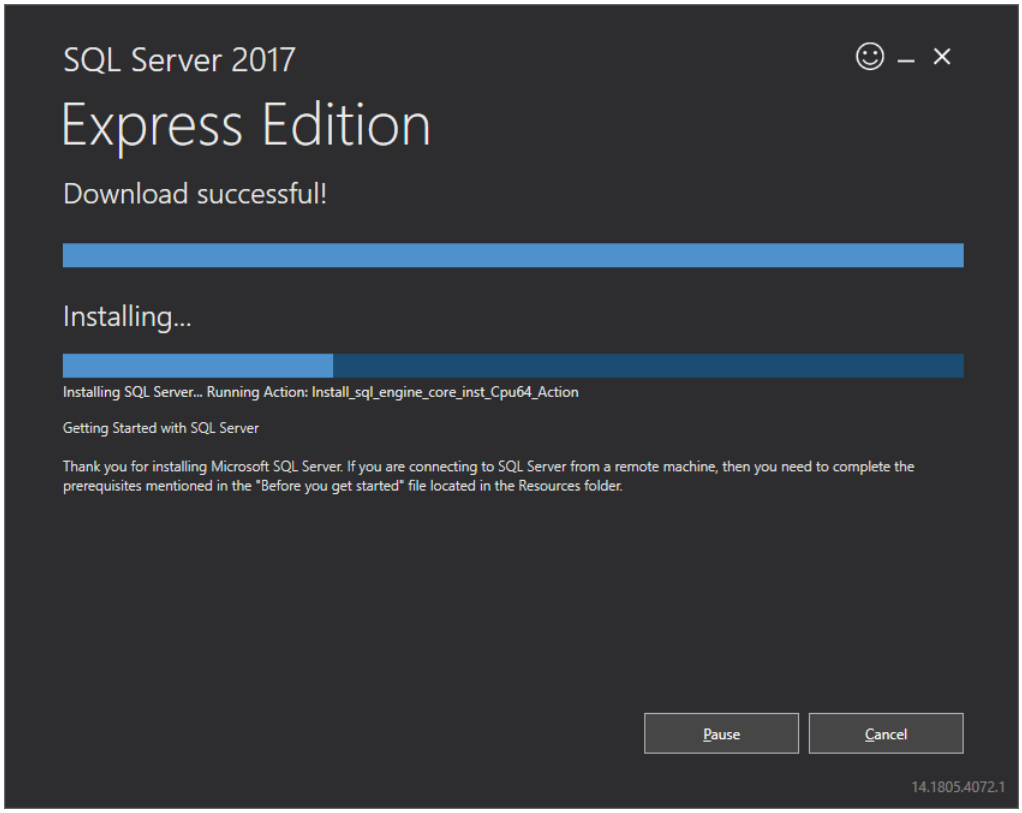
3. Accept license terms



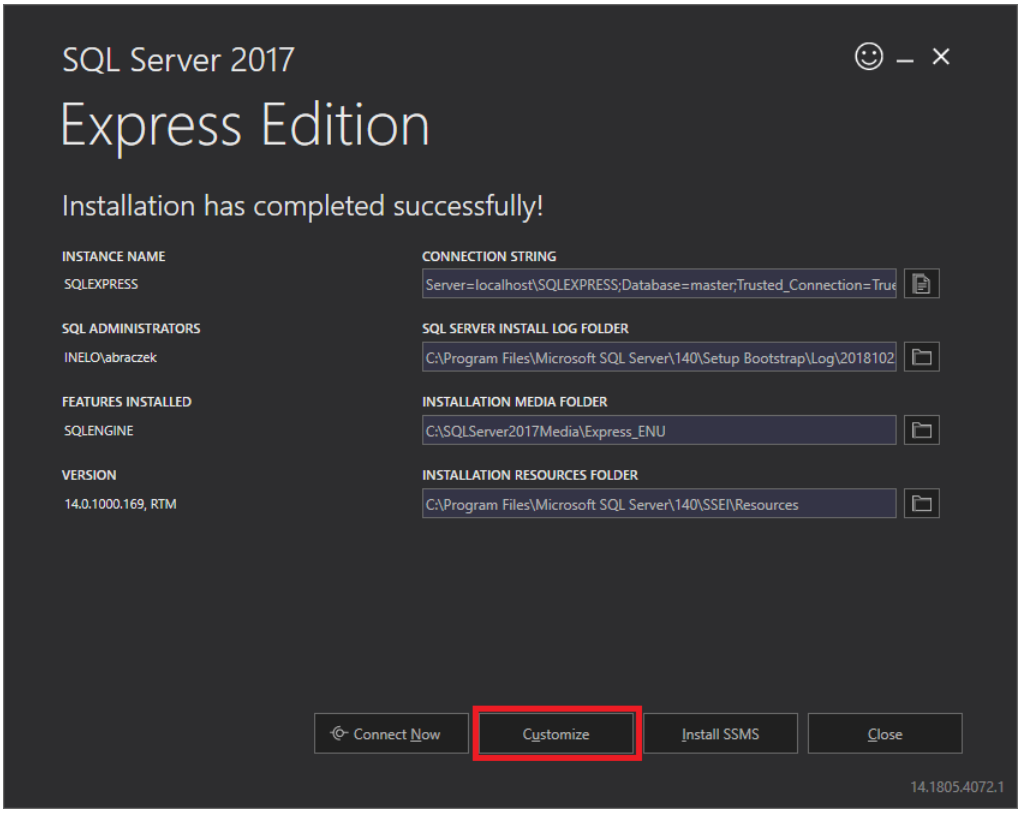
4. Choose the location where the SQL Server database files are to be created



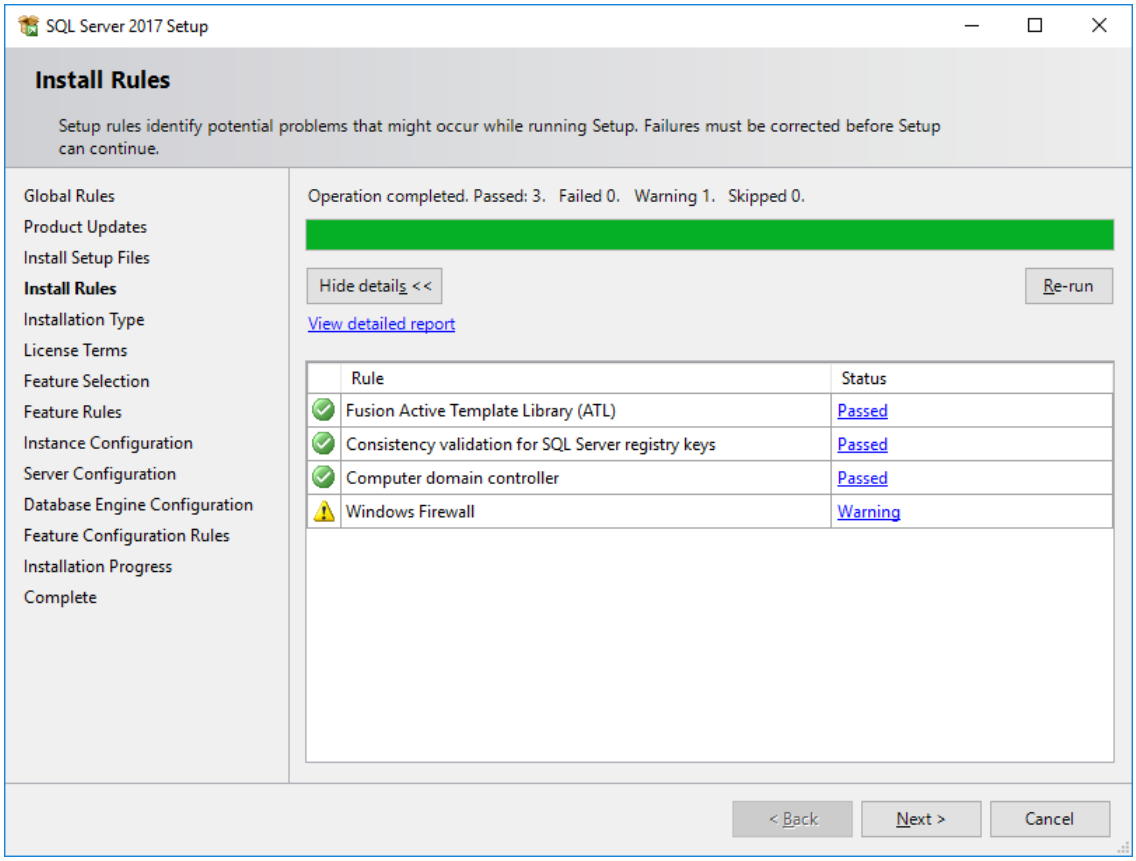
5. Click the **Install** button. The installation process will start.



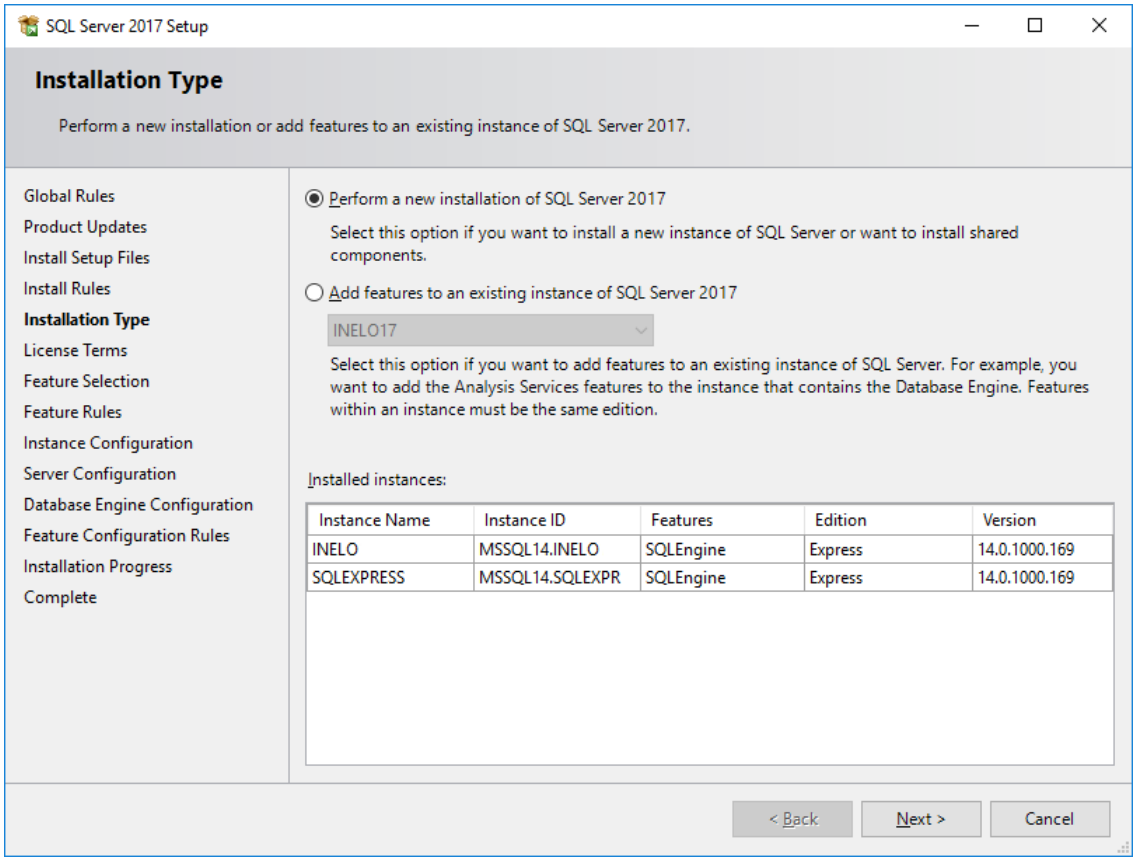
6. The installation was successful - you need to customize SQL Server to **4Trans** software.



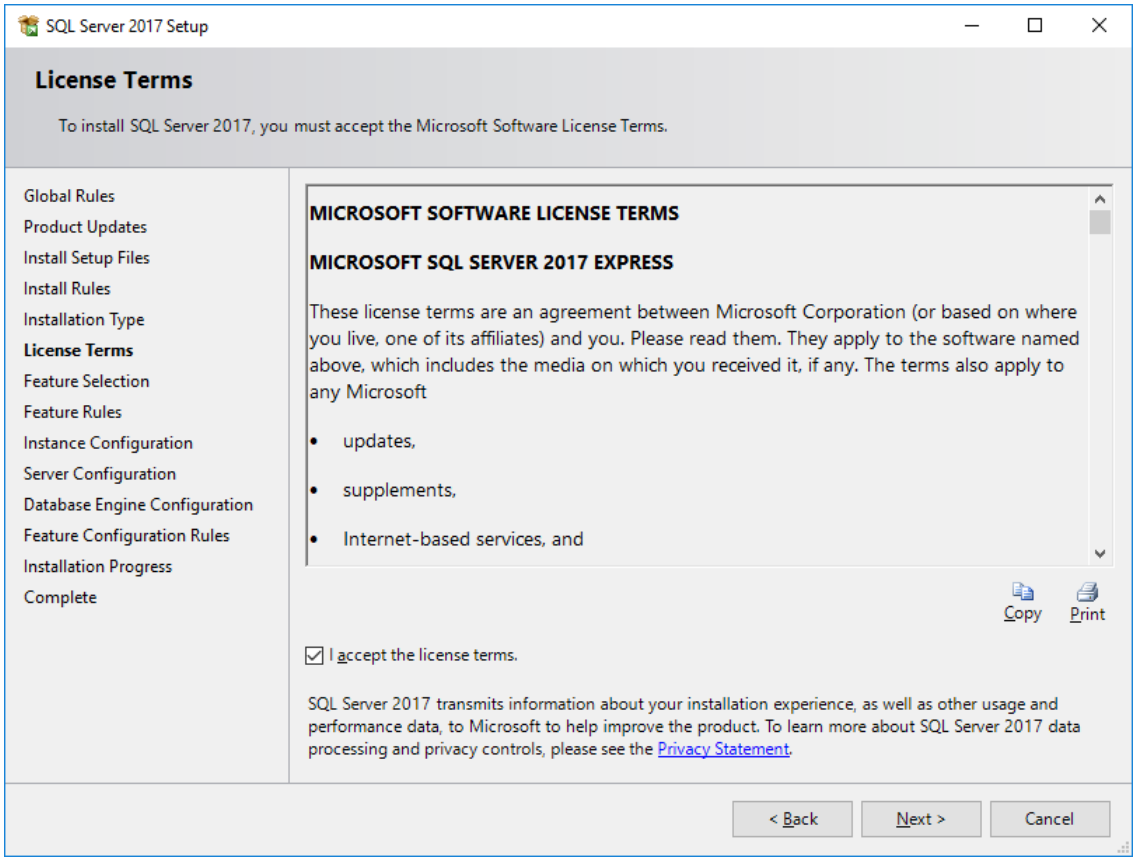
7. Go to the SQL Server 2017 Setup window by clicking **Customize**
8. **Install Rules:** when the displayed operations succeed - click **Next>**



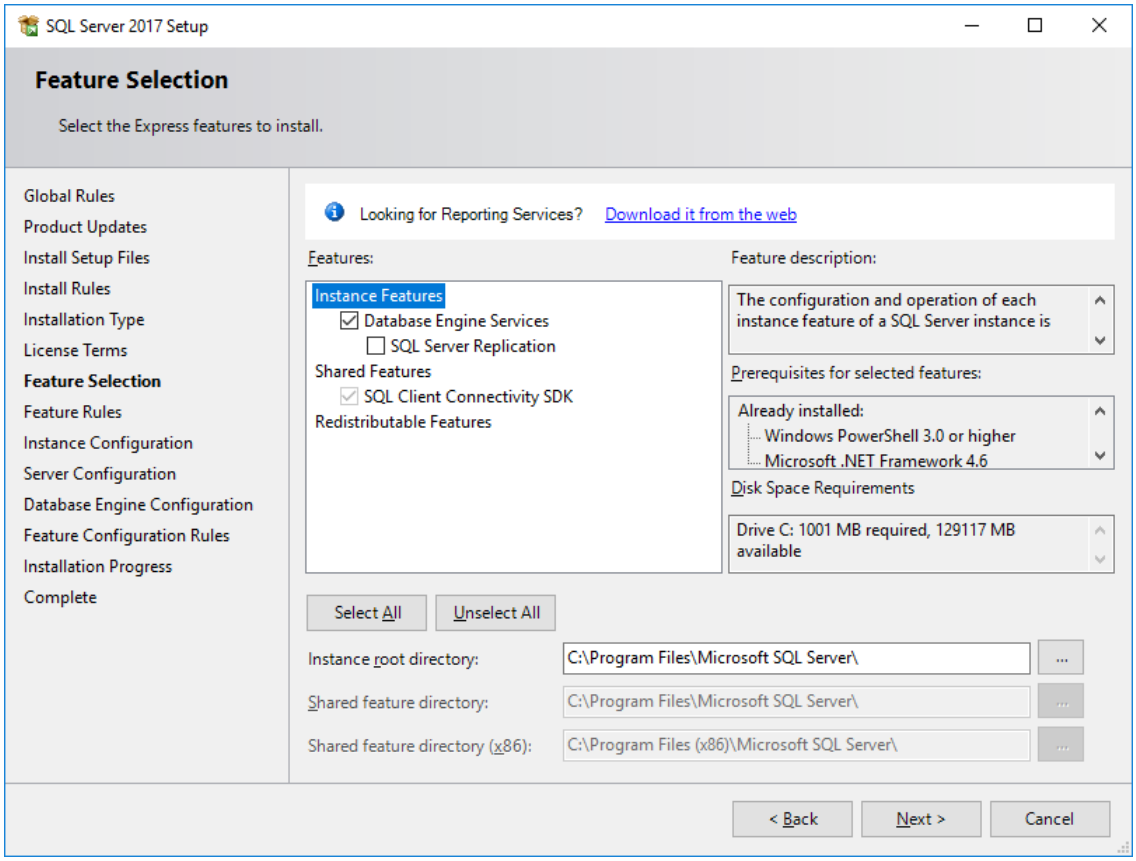
9. Choose a new **SQL Server 2017** installation



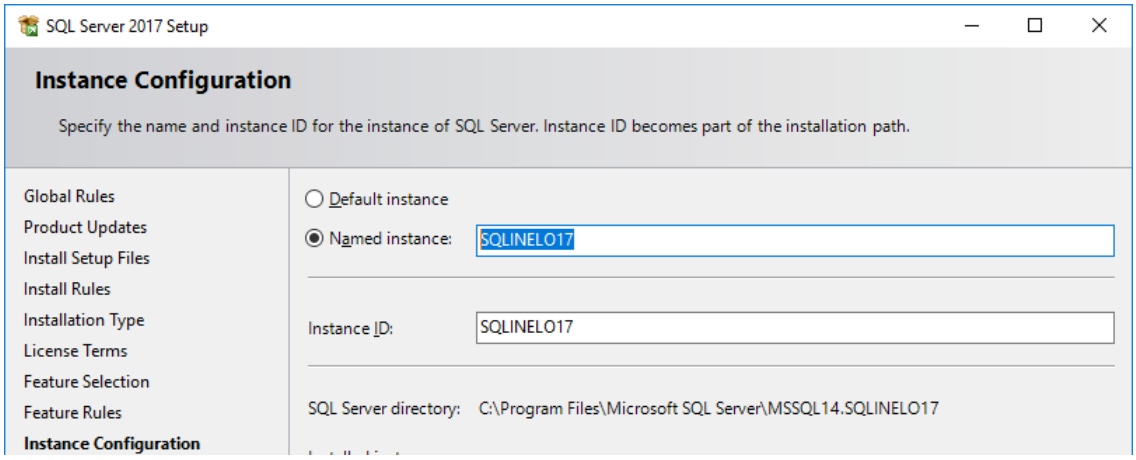
10. Once again, accept the license terms



11. **Feature selection:** Check Database Engine Services, the rest are additional options that are not required for proper operation of 4Trans.

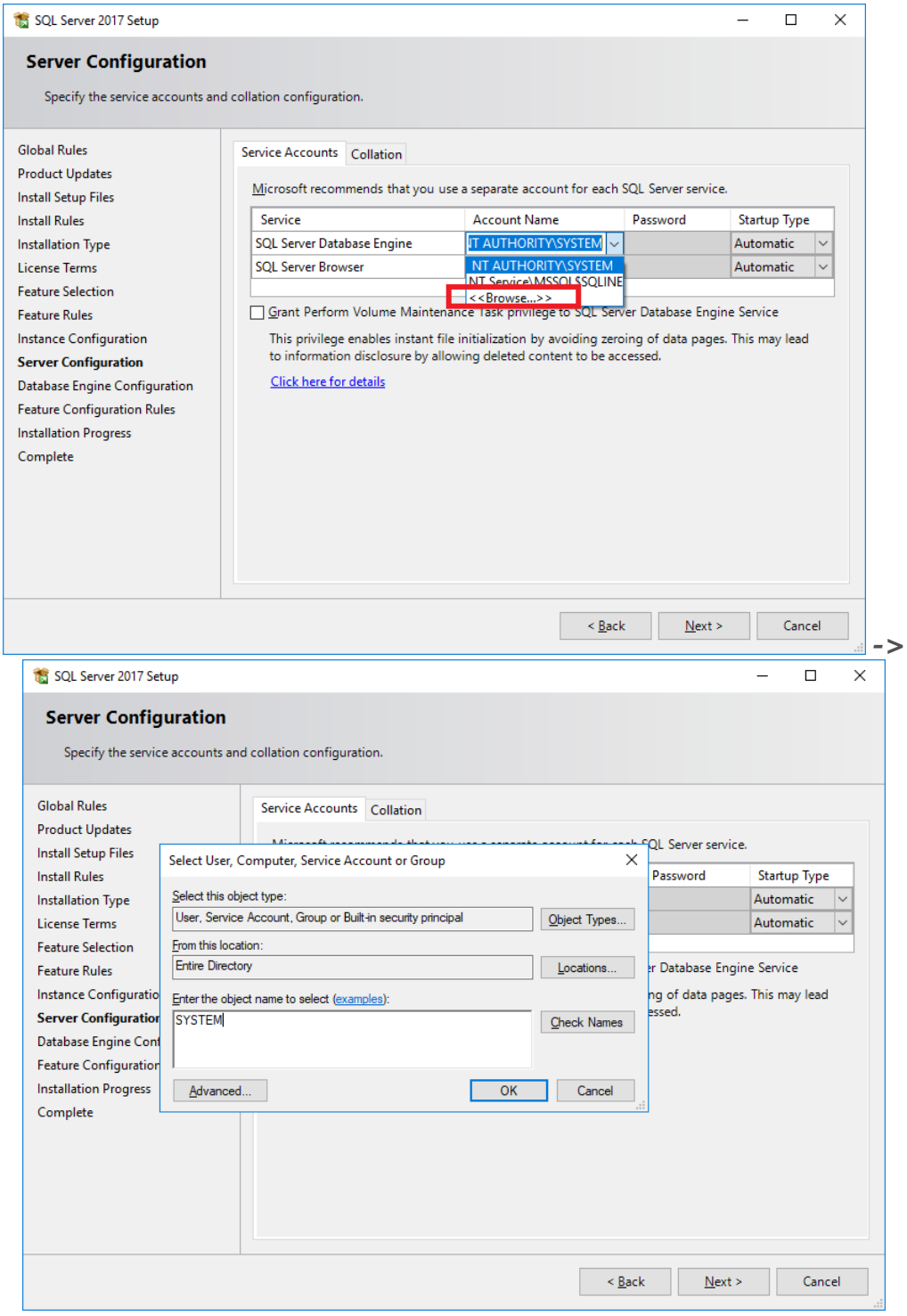


12. Enter the instance name - enter **SQLINELO17** instead of the default SQLExpress name



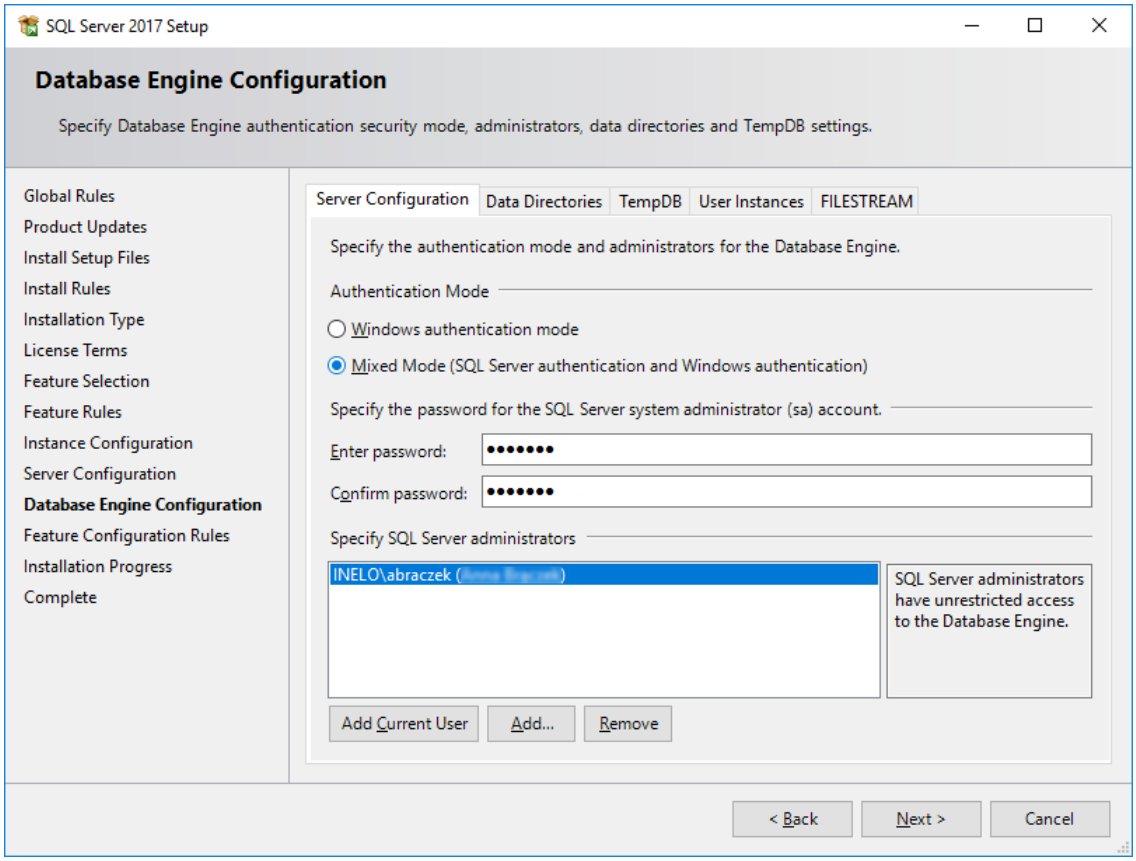
13. **Server Configuration**: in the SQL Server Database Engine choose Account Name NT AUTHORITY**SYSTEM**, in Startup Type options are to be **Automatic**

Note: If NT AUTHORITY**SYSTEM** is **NOT** displayed in the Account Name field, select **<<Browse...>>** from the list and in the **Enter the object name to select** field enter the word: **System**, and then click **OK**. The data will be completed automatically.

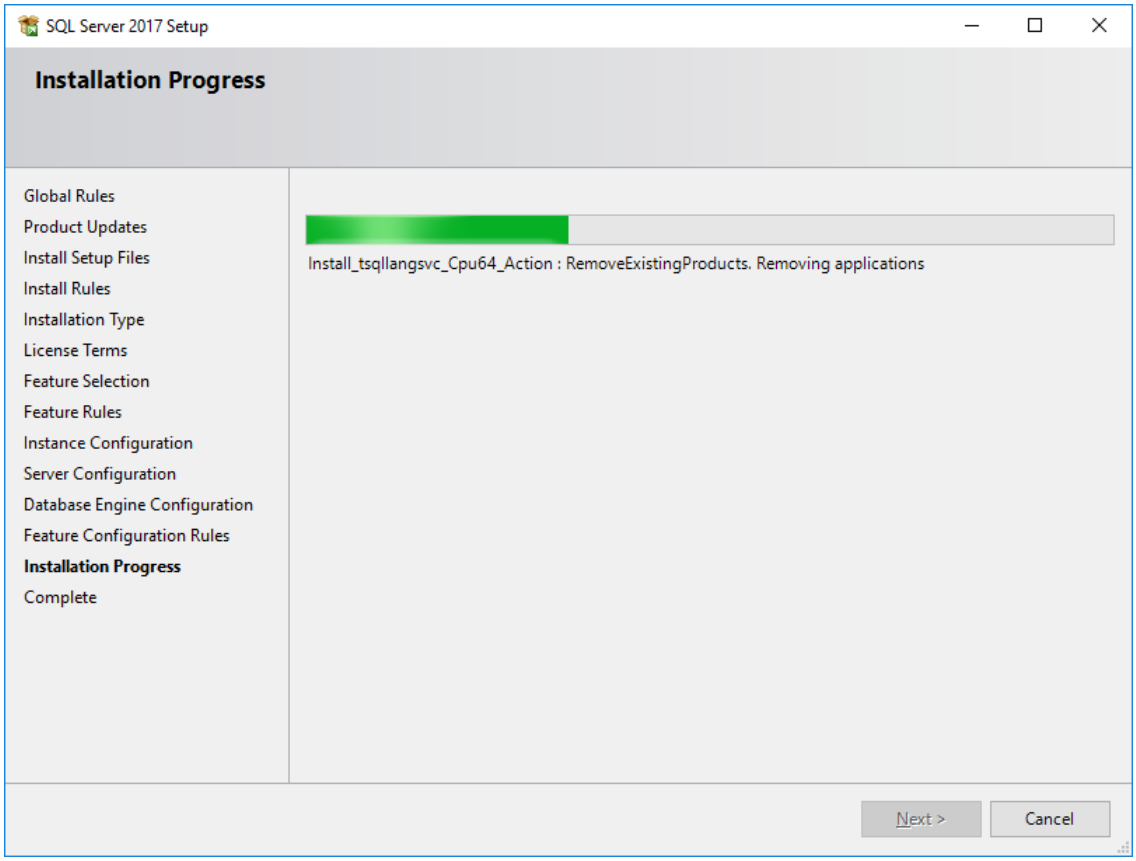


14. **Database Engine Configuration**: in Authentication Mode, select **Mixed Mode** and enter the strong password it will be needed in **DB Manager**.

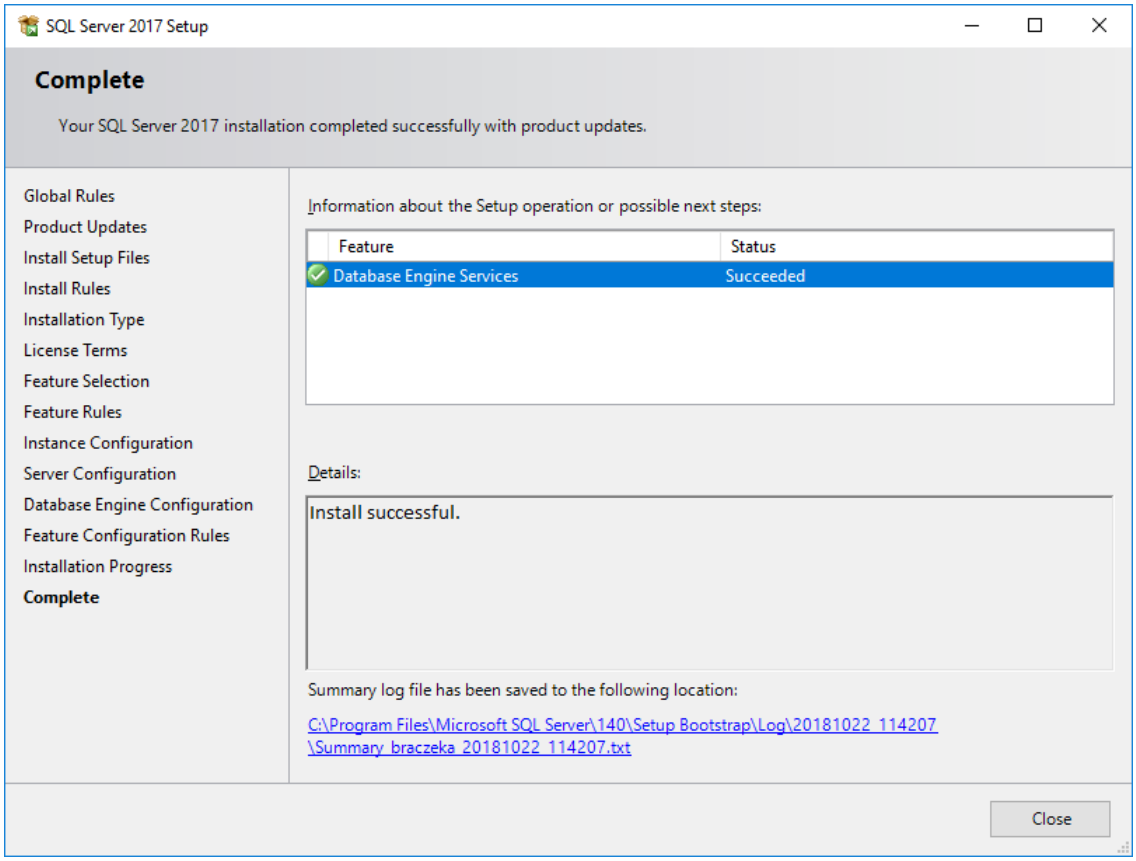
Note: Without **Mixed Mode** you will not be able to run the program!



15. Installation procedure



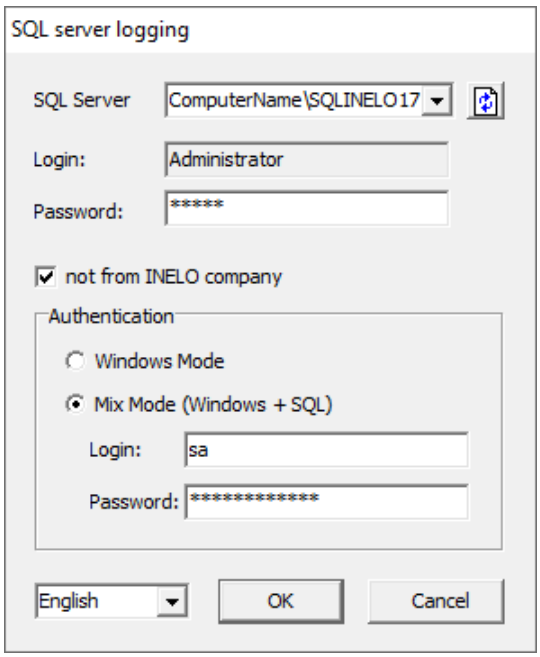
16.Installation Complete



- Server configuration in **Database Manager**

1. Launch **Database Manager** (Start Menu -> All programs -> Inelo -> Database Manager). The program default location is: "C: \Program Files (x86)\Inelo\Utils\Database Manager\manager_db.exe"

2. Log in to the SQL server by entering the data as in the figure below:

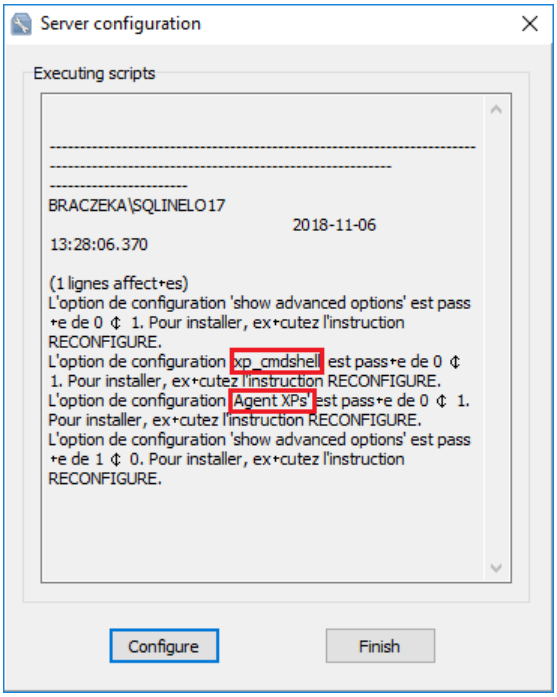


*SQL Server:**computer name**\instance name*

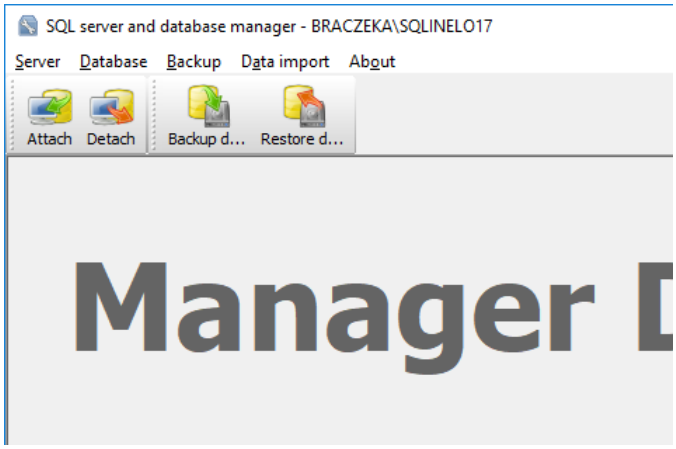
*Password for the **Administrator** login: admin*

*The password for the **sa** login is the one we provided during the SQL installation*

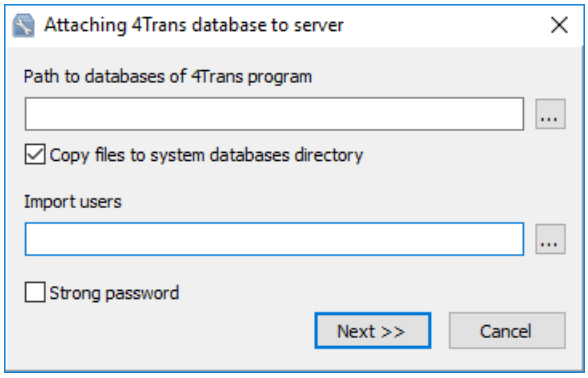
3. Click **OK** for the error
4. Go to Server -> Server Configuration -> **Configure** and wait.



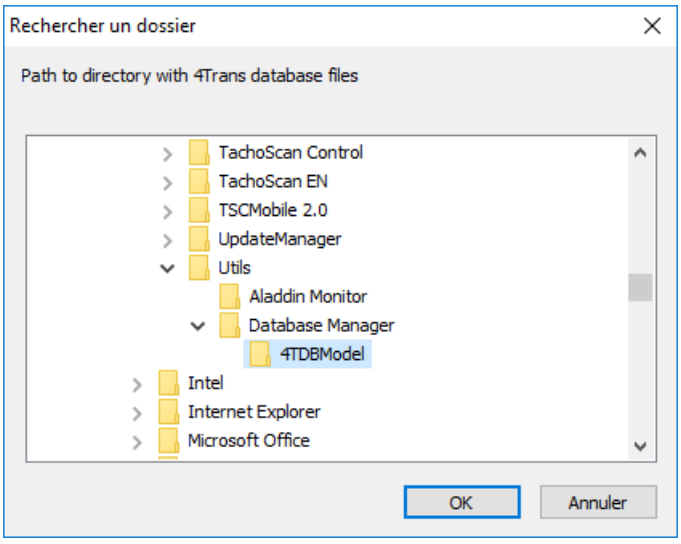
5. After completing the configuration, connect the 4Trans program model base server by clicking **Attach**



6. Select the path to the 4Trans database files



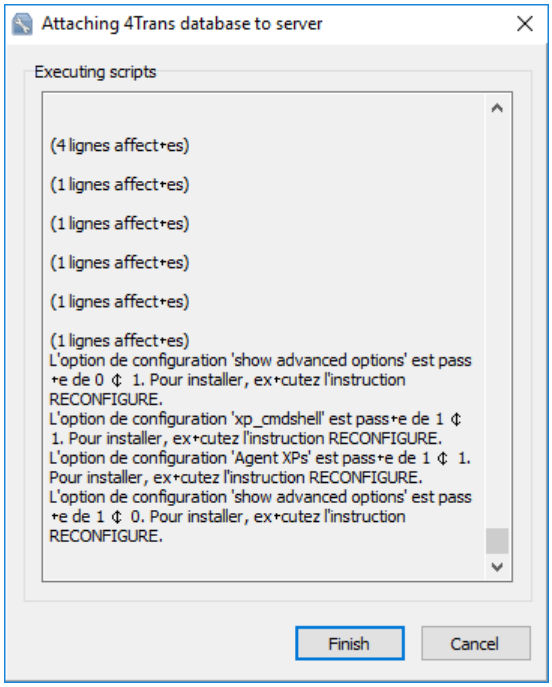
->



The exact path of the database model is:

C:\Program files (x86)\INELO\Utils\Database Manager\4TDBModel

7. After selecting the database model, click **Next>>**, wait for the database to be connected in and click **Finish**.



8. After the configuration, the server service must be restarted. **Services -> SQL Server (SQLINELO17) -> Right mouse button -> Restart**

The Express version of the database server does not automatically create a backup copy of the database.

*If you install **SQLServer™ 2012** or higher database server version, intermediate database migration of TachoScan (4TransMDF, 4TransKONFIG) to **SQL Server™ 2008 R2** must be done first.*

Database update (older than SQL Server™ 2008 R2):
*The Express version of **SQL Server™ 2005 or higher** database server does not automatically create a backup copy of the database.*
TachoScan has a built-in database backup service. If you want to use it, you need to install the INELO Service.
The installer is available on the TachoScan installation CD, in "Utils/INELO Service/IneloServiceInstaller.exe."
In the event of an error, please contact the software service.

3.3. Server

*It is recommended to select programs shown in the window "**INELO Polska Sp. z o.o. products installer**" (this window appears during the start of the program installation CD) for installation.*

According to a standard procedure, server installation is possible after installation of the program (see: "Program installation 9") during first start-up (see: "First launch 43").

If you want to connect the program database to an existing MSSQL server, go to the topic: "Attaching and Detaching the database 24".

When to install a server from a separate location?

- when the TachoScan program cannot be installed on the PC as the server;
- when standard server installation (see: "First launch 43") does not proceed successfully.

Installation of the TachoScan server from a separate location:

Before installation, please read the minimum server requirements (see: "Minimum requirements 6").

To carry out installation:

1. Run the Microsoft® SQL Server™ installation file downloaded via link or received on a CD.
2. Then, follow the steps proposed by the installation program by pressing the button Next >>.

For Windows® 10, 8.1, Server® 2012:
- the free version of SQL Server™ 2017 Express will be installed by default;
- the database will be placed in the directory: "C:\Program Files\Microsoft SQL Server\mssql$\INELO17\Data;

To make the server visible in the network and operating correctly, unlock communication through the ports:
*- **1433**, **1434** at **UDP** protocol;*
*- for HASP Manager **475** at **UDP** protocol - if the network license key is installed on the same PC.*

Give (full) access to the program resources directory in the network (default directory: "My documents\INELO").

To UNINSTALL the server, please contact the manufacturer's sevice 54.

Launch the TachoScan program after server installation for further configuration (see: "First launch 43").

3.3.1. Attaching and Detaching the database

WE STRICTLY RECOMMEND that only people who know the architecture of the MSSQL server or trained INELO Polska Sp. z o.o. employees/consultants attaching/detaching the database.

3.3.1.1. Running "Database Manager"

1. Select: "Start -> All programs -> INELO -> Utils -> Database Manager -> **Database Manager**".
2. In window "**SQL server logging**" (Fig. bellow) you should:
   - select the desired server - if the server is invisible on the list, press on the button beside;
   - enter the administrator account password (default password: "admin");

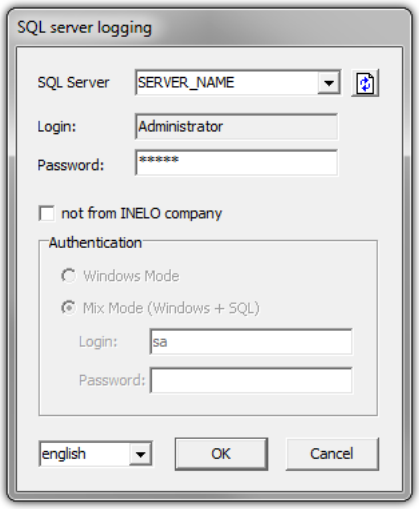


Fig. Login to database.

When the server was installed from the other source than TachoScan install CD
• mark the option as below "**not from INELO company**"; • the the field: "**Authentication**" will be displayed and authenticated login option have to be chosen (this information should be provided by the server administrator), for option "**Mix Mode**" you should type dbo(sa) user password for the selected server; • press the button: Ok;

3.3.1.2. Attaching database

1. After successfully logging in to the database in the **SQL server and database manager** window (Fig. bellow) select **Attach** command from the **Database** menu or click on icon.

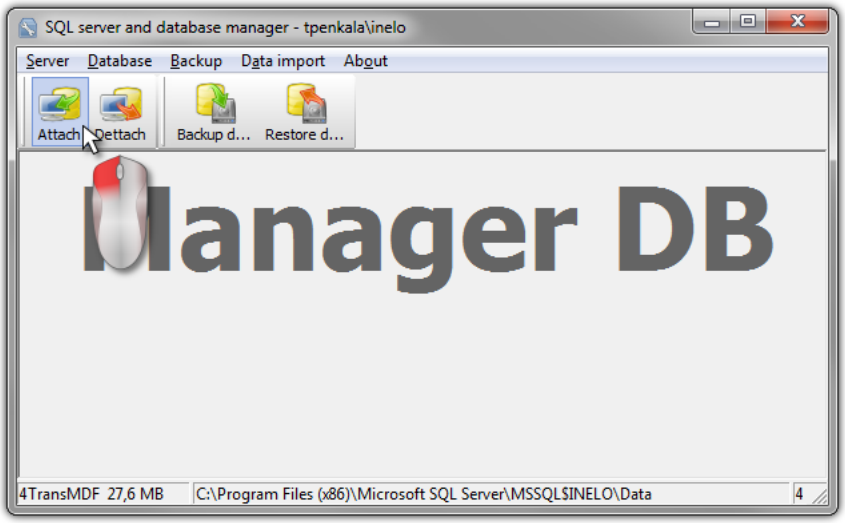


Fig. Selecting command "Attach".

2. In the next window you should point the localization of database files (Fig. bellow) and:

- Press the button: Next >>, OR mark before:
  - option: "**Copy files to system databases directory**" (Fig. bellow), will copy database files to the default database folder. This option attaches **the copied** database files to the server.

*The files of **empty** database are on the install CD: "**(Napęd CD/DVD:) \Utils\Database**".*

If the above option is not selected then the program attaches to the server the previously selected database files,

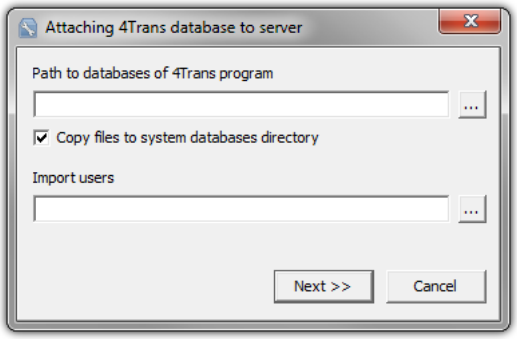


Fig. Determining the localization of database files.

3. Program will start attaching databases according to the previously chosen options. When the operation is finished the following windows will show up (Fig. bellow):

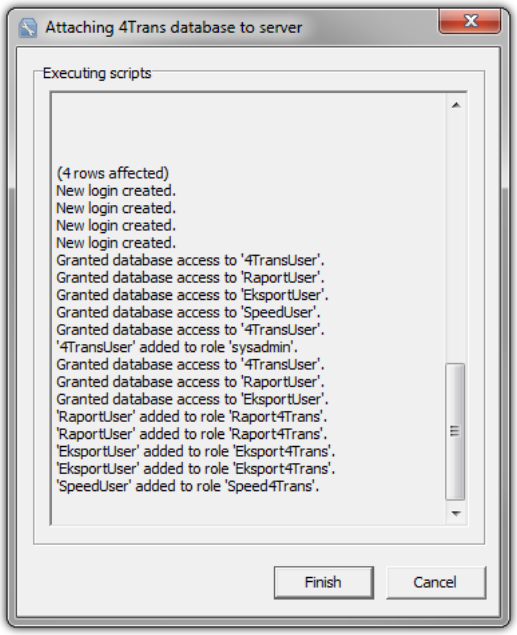


Fig. Finishing the process of attaching the databases.

*During the operation the server generates messages that are shown on the display and are saved to file "**ManagerDB_log.txt**" in the directory from which "**Database Manager**" is run. The destination file is named: "**manager_db.exe**".*

*In case of any doubts whether the operations were performed correctly – please send "**ManagerDB_log.txt**" to e-mail address: support@inelo.pl.*

4. After attaching the database you should create and make available the directory (eg. named: "INELO"), where all documents, driver cards and tachograph readouts, scans of tacho discs and the backup of database are stored,
   - in the main directory (eg. INELO) create a folder of files stored by the module TachoScan (eg. **TachoScan**),
   - in the root folder (eg INELO) create a folder of documents (such as **Documents**),
   - in the root folder (eg. INELO) create a folder where a backup copy of the database (eg. **Backup**) will be saved,

All users who are running TachoScan MUST have full access to these folders.
*- It does not apply to the folder "**backup**".*

*The folder "**backup**" must appear on the same computer that is running MSSQL server.*

The move program will only work properly on computers running MSSQL server.

Server services and SQL agent must be running for the proper operation of the program.

3.3.1.3. Detaching database

1. After successfully logging in to the database in the **SQL server and database manager** (Fig. bellow) select **Dettach** command from the **Database** menu or click on .

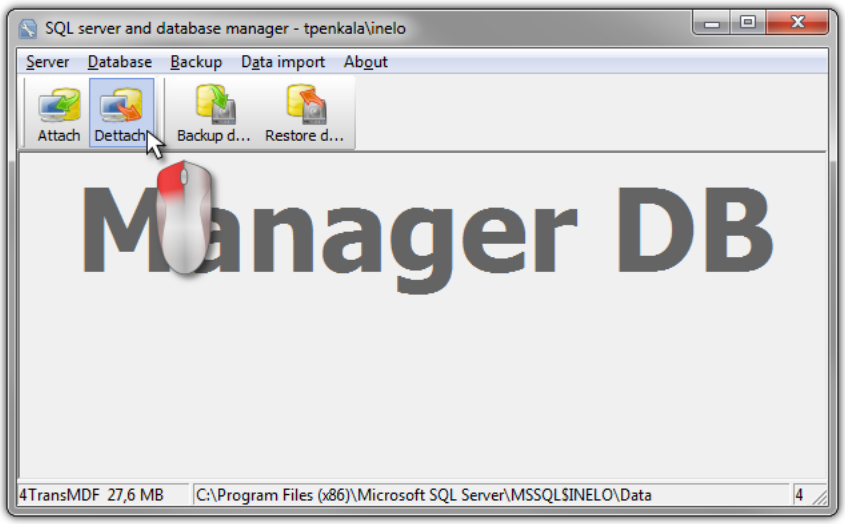
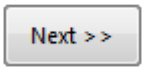


Fig. Choosing the option "Dettach".

2. In the next box press the button: 

, OR mark before:
   - option: "**After executing copy 4Trans database files to directory**" (Fig. bellow), that will copy files to that database directory.

     If this option is not selected the program will detach the database files and will leave them in the same folder in which they are located,

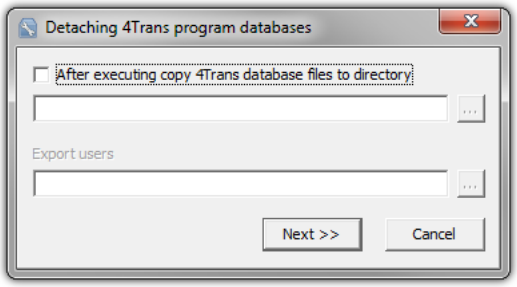


Fig. Selecting the destination of copy of database files.

3. The program will proceed to complete the database detaching job in accordance with pre-selected options. After it is finished a window will appear (Fig. bellow):

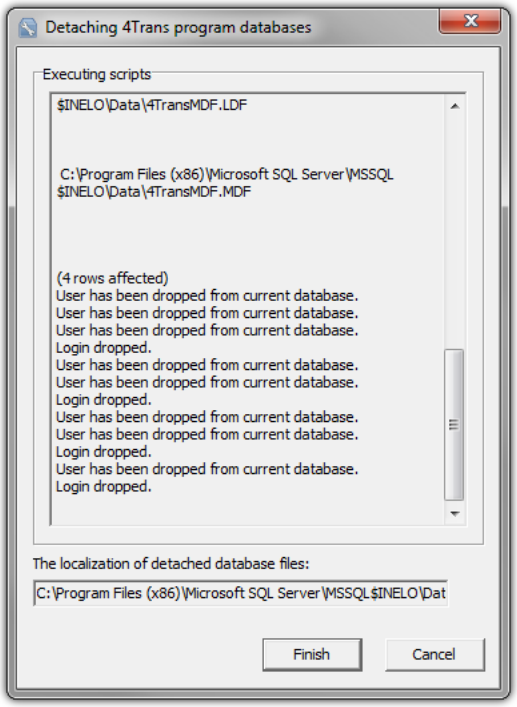


Fig. Finishing of database detaching process.

*In the course of the operation server generates messages which are visible on the screen and saved to a file "**ManagerDB_log.txt**" in the directory in which "**Database Manager**" is run . The destination file is named: "**manager_db.exe**".*

*In case of doubt whether the operations were performed correctly, please send the file "**ManagerDB_log.txt**" to support@inelo.pl.*

The move program will only work properly on computers running MSSQL Server.

Services and SQL Server Agent must be running to the proper operation of the program.

3.4. HASP Manager

We install HASP Manager depending on the possessed Windows®:

3.4.1. Windows® 10, Windows Server® 2008

To install and set up HASP License Manager under the Windows® 10, Windows Server® 2008 operating system, do the following:

3.4.1.1. Set up the installation file

1. Go to the website: "http://download.inelo.pl/drivers/HASP_LM_setup.zip" to download the installation file.
2. Extract the file "**lmsetup.exe**" to a local drive.
3. Change the properties of "**lmsetup.exe**" as follows:
   a) Right-click the file in Windows Explorer.
   b) In the file menu, click "**Properties**". The lmsetup.exe Properties dialog box is displayed.
   c) Click the "**Compatibility**" tab.
   d) In the "**Compatibility mode**" pane, select "**Run this program in compatibility mode for:**" then choose "**Windows Vista (Service Pack 2)**" from the list.
   e) In the "**Privilege Level**" pane, select "**Run this program as an administrator**".

   The dialog box should now appear as follows:

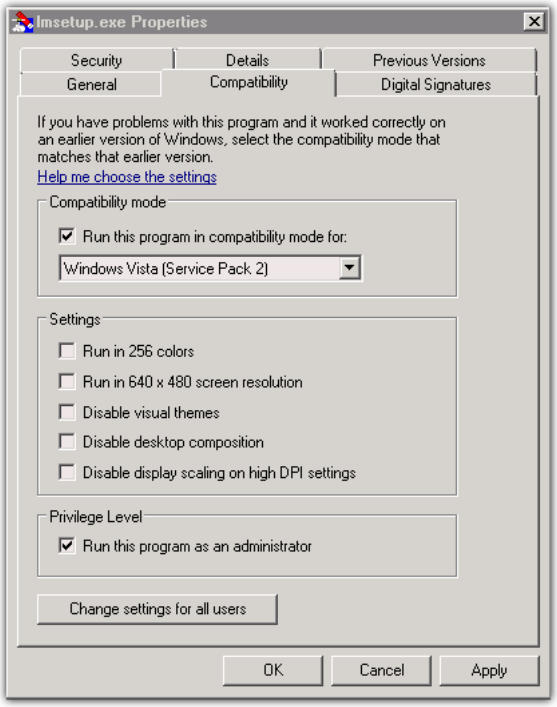


Fig. File's properties.

4. Click **[OK]**. The dialog box closes.

3.4.1.2. Install the HASP License Manager as a Service

1. In Windows Explorer, double-click "**lmsetup.exe**". The HASP License Manager installation wizard starts.
2. On the Installation Type screen (shown below), accept the default selection "**Service (nhsrvice.exe)**".

The application (nhsrvw32.exe) will not be executable.

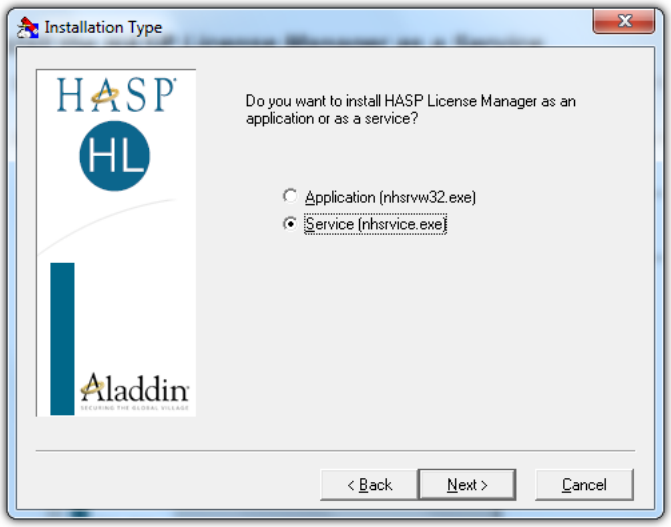


Fig. "Installation type" window after changing the settings.

3. Complete the installation wizard.

*When the installation of HASP Manager is finished, the start-up type for **HASP Loader** and **HASP License Manager** services must be changed from manual to **automatic**.*

("Control Panel -> System and Security -> Administrative Tools -> Services").

3.4.1.3. Configure "Data Execution Prevention" to Allow the Service to Run

If Data Execution Prevention (DEP) is turned on for all programs and services, you must enter the HASP License Manager service executable as an exception. Do the following:

1. From the "**Start**" menu, select "**Control Panel -> System and Security -> System**".
2. In the System Properties dialog box, click the "**Advanced**" tab.
3. In the "**Performance**" pane, click "**Settings**".
4. In the Performance Options dialog box, click the "**Data Execution Prevention**" tab.
5. If option "**Turn on DEP for all programs and services except those I select**" is selected, do the following:
   a) Click **[Add]**.
   b) Using the resulting dialog box, add to the list of DEP exceptions:
      - For 32-bit: "**c:\windows\system32\nhsrvice.exe**".
      - For 64-bit: "**c:\windows\SysWOW64\nhsrvice.exe**".

   The dialog box should now appear similar to this:

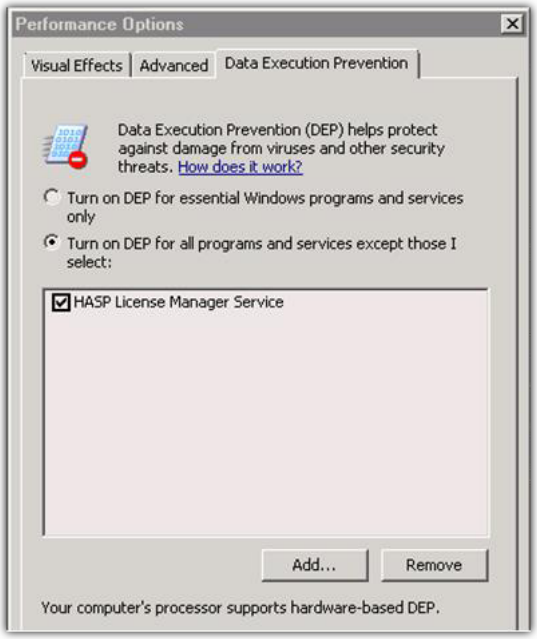


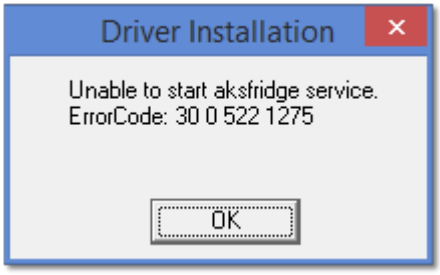
Fig. "Data Execution Prevention" tab after adding the exception.

After this setup process is completed, the HASP License Manager operates without any additional special handling.

3.4.2. Windows® 8

1. Go to the website: "http://sentinelcustomer.safenet-inc.com/sentineldownloads/" and click on **Sentinel HASP/LDK - Windows GUI Run-time Installer** to download the installation file.
2. Unpack the file: **HASPUserSetup.exe** to the local drive.
3. Double-click on **LMB** in the file: **HASPUserSetup** to install **Sentinel Runtime Setup**.
4. After having installed the above controllers proceed with installation of **HASP Manager** – description of installation and configuration can be found in: "HASP Manager -> Windows® 10, Windows Server® 2008 29".

*During installation of **HASP Manager** controllers the installer shall display an error window:*



*Ignore it and click **[OK]**.*

3.5. Device installation

This section addresses the topics of the installation of devices available from INELO Polska Sp. z o.o..

*This topic presents you with information concerning installation of devices included in the installation package[5]. An extended document describing the installation process is available in the manual: "**Other devices - tutorial.pdf**".*

3.5.1. License key

There are two types of license keys you may find in the program installation package:

LOCAL license key

The local license key has no additional markings on the casing.

To install the (**local**) license key in the computer, simply insert it in the USB port and wait until Windows® installs it automatically.

Fig. LOCAL license key.

Upon detecting a new device, the Windows® will install it automatically as the HID interface device.

NETWORK license key

The network license key has the marking: " **- NET -** " on the casing above a consecutive key number.

To install the (network) license key, first install the HASP Manager program (see: "HASP Manager 29").

Then insert it to USB port and wait until Windows® installs it automatically.

Fig. NETWORK license key.

3.5.1.1. No licence key is inserted

The software is supplied with a so-called license key. Without the key the program will not start and will not work.

If a message appears informing the user that the license key is not present, check the following:	
Local key	**Network key**
1. Whether the license key is inserted in a USB port of the computer on which the program is to be run. 2. If the key is inserted into a USB port check if it has been installed properly (see: "LOCAL license key 33").	1. Whether the license key is inserted in a USB port of any PC connected via network with the computer on which the program is to be run. 2. If the key is inserted into a USB port check if it has been installed properly (see: "NETWORK license key 33"), 3. Whether the license key options in the login window are set properly (see: "Advanced logging 49"). 4. Whether the key and HASP Manager are able to communicate with the computer on which the program is to be run (see: "HASP Manager 29").

If during the attempt to start the TachoScan program continues to report the license key error you should contact the manufacturer's service 54

3.5.2. Canon flatbed scanner

The Canon flatbed scanner is a standard device for scanning images. Due to its low price, high accuracy and speed of operation, it is recommended by INELO for scanning tacho discs.

Fig. Cannon scanner.

Before connecting the scanner to the computer, install the drivers from the installation disc that comes with the device.

After installation of the drivers, simply connect the scanner with the USB port and wait until the Windows® installs it automatically.

3.5.3. Roller scanner

The SmartOffice PS283 scanner from Plustek is a standard device used to scan images. It is recommended by INELO to scan tacho discs owing to its low price, high precision and speed.

Fig. Plustek SmartOffice PS283 scanner.

Before connecting the scanner to the computer install drivers from the installation disc delivered with the device.

After having installed the drivers, connect the scanner to a USB port and wait until Windows system installs the device automatically.

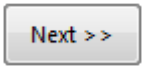
3.5.4. TachoReader

TachoReader device is meant for downloading data from driver's cards. This is a fast, reliable and simple to use device.

TachoReader device (USB)

TachoReader device (PCMCIA or EXPRESS CARD)

In order to install driver's card reader you need to:

- Insert original install CD in drive;
- Connect reader to computer USB port;
- When Windows® system shows Installation window you should choose the first option: "**Install the software automatically (Recommended)**" and press button 

;
- System will start to install drivers and the device itself;
- After the system has installed the reader, the window of completing the installation wizard will be displayed.

If the driver has been installed properly, a green diode should illuminate on the reader.

3.5.5. TachoReader Mobile II

TachoReader Mobile II is a download device and supports all established digital tachograph makes. Using the tachograph, it is also possible to download driver card data. That data remain in the device memory until they are transmitted via USB interface into other storage medium.

During the download TachoReader Mobile II is supplied with power by the tachograph (no extra

energy sources needed). The TachoReader Mobile II is a small, user-friendly and handy device.

Fig. TachoReader Mobile II.

The device is not supported by Windows® 2000 and earlier operating systems.

To install **TachoReader Mobile II** on a computer, simply connect it to the USB port and wait until Windows® installs it automatically.

When it detects a new device, Windows® automatically installs it as a new mass storage disk.

3.5.6. TachoReader Basic

The **TachoReader Basic** device allows you to download data directly from the tachograph without connecting other devices. Using the tachograph, it is also possible to download driver card data. The device can store data in its internal memory until it is transferred to another media (for example, to a computer disk).

TachoReader Basic uses tachograph power supply while retrieving data, so no external power source is required. It is small, easy and convenient to use.

Fig. TachoReader Basic.

The device is not supported by Windows® 2000 and earlier operating systems.

To install **TachoReader Basic** on a computer, simply connect it to the USB port and wait until Windows® installs it automatically.

When it detects a new device, Windows® automatically installs it as a new mass storage disk.

3.5.7. TachoReader Combo Plus

TachoReader Combo Plus device allows to download data directly from a tachograph or a driver's card, without having to connect other devices. What is more, the device makes it possible to store data in its internal memory until the data is transferred to a different data carrier (e.g. a computer disk).

Fig. TachoReader Combo Plus.

The kit

The device set includes:

1. Two 1,5V AA batteries to supply the device without having to connect it to a different source of electricity,
2. **Mini-USB cable** by means of which the device is connected with a computer (transfers data from the memory to a computer disk) and provided supply from the computer,
3. TachoReader Combo Cable (hereinafter referred to as the **Tacho RC cable**) - for reading data from the tachograph - the device uses the tachograph power supply

The device is not supported by Windows® 2000 and earlier operating systems.

Required elements for PC installation

1. The device **TachoReader Combo Plus**;
2. The cable MINI-USB.

Installation procedure

1. Connect the device **TachoReader Combo Plus** to USB port via Mini USB cable and wait till Windows® has performed the installation automatically.
2. In device manager you can find the installed **TachoReader Combo Plus** as USB Mass Storage Device.

3.6. Transferring the program to another computer

Before transferring data, please read the items below:

Notes before proceeding

If you have SQL Server **other** than SQL 2000 MSDE:

*SQL 2000 MSDE (**M**icro**S**oft **D**esktop **E**ngine) - obsolete version.*

1. Select "Mixed Mode" as "Authentication mode" in the system configuration window for Microsoft SQL Server.

2. Turn on xp_cmdshel and Agent XPs options support
(you can do this from the "Database Manager[54]" in "Server -> Configuration[55]" menu).

It is recommended that the same version of TachoScan as installed on the old computer, is installed on the new computer.

3. After making the copy of the database, transfer the license key to the new computer.

NET network license keys require HASP LICENSE MANAGER driver installation.

For Windows® 7 64-bit and Windows® Server 2008 64-bit systems, HASP installation instructions and the drivers for these systems can be found at: "http://download.inelo.pl/drivers/HASP_LM_setup.zip".

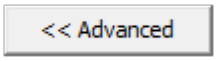
For 4Trans 3.10 version, all of the directories and path names below have the old name: PCNETSERVICE instead of INELO.

If you are migrating a database from SQL 2000 to SQL 2012 or higher version, the intermediate database migration to SQL 2008 R2 must be performed first.

Database

Making a backup copy of the database (on the old computer)

A copy of the database should be made using: "Database Manager[54]" software:

1. Run the program (see: "Running "Database Manager"[25]").
2. After logging in the Database Manager window menu, select: "Backup -> Backup database".
3. In the next window, click on: 

.
4. After setting the "database copy path" make a two consecutive FULL copies of **4TransKONFIG** and **4TransMDF** databases.

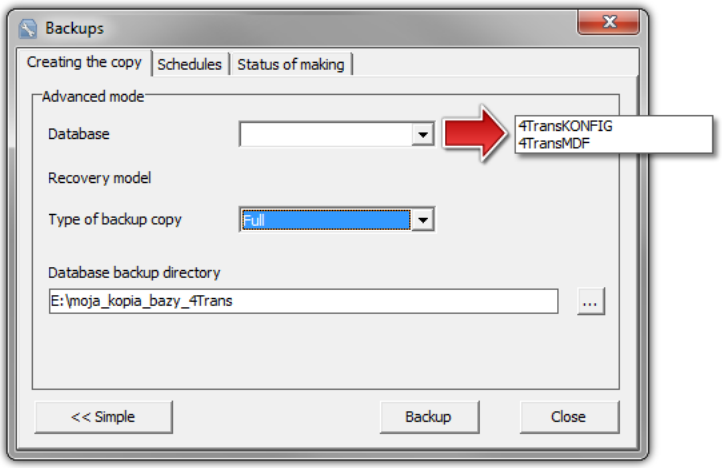


Fig. Creating database backup copies.

Restoring the database from backup (on a new computer)

Before restoring the database from the backup, you need to install TachoScan and TachoScan server on the new computer (server is installed automatically when you first run TachoScan).
*The server can be installed manually by downloading the installer from "www.tachoscan.com" -> **Download** tab.*

The database should restored using: "Database Manager 54" software:

1. Run the program (see: "Running "Database Manager" 25").
2. After logging in the Database Manager window menu, select: "Backup -> Restore database".
3. In the next window, click on: << Advanced.
4. Select the path to the database backup files (item 1 - Fig. bellow) - after the first path is selected, the program enters the same second path by default (item a).
5. Select each database (item 2).

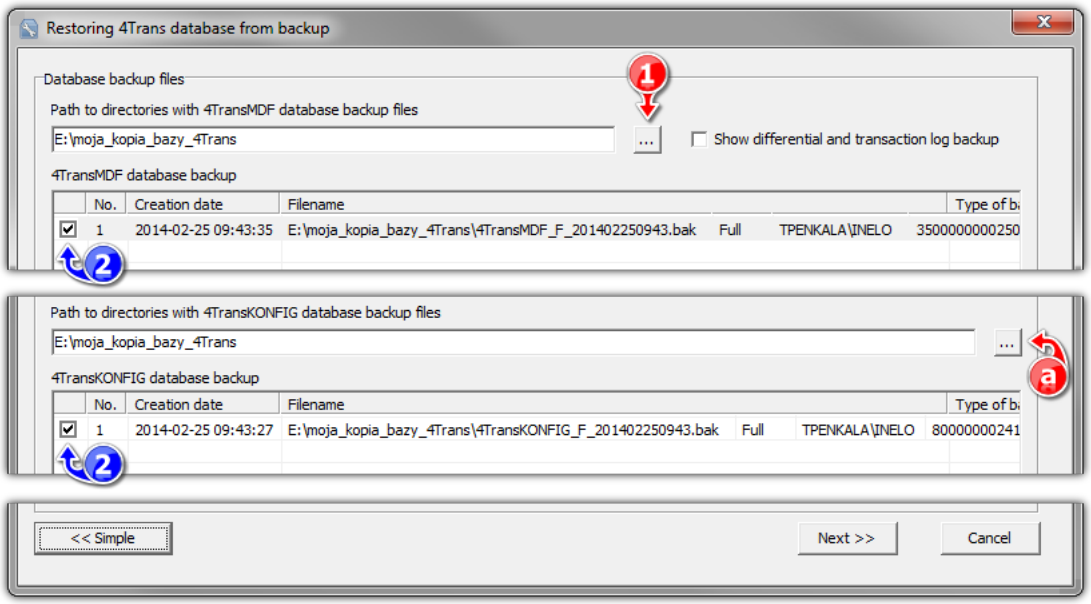


Fig. Restoring the database copy.

6. Click: Next >> .

Moving supporting folders

This operation is performed after the database is restored, before the first start of TachoScan.

After making the copy of the database on the old computer and restoring the backup on the new one, the final step is to copy from the old computer the folders in which, among others, digital readouts and record sheet scans are stored.

To do this:

On your old computer

1. Launch TachoScan, log in as administrator (the default password is "admin").
   - if the login window is not displayed when launching the program, re-run it from: "START -> Programs -> INELO -> 4Trans -> Administrator".
2. Open the program settings window ("Basic data -> Settings").
3. In the: **Paths** tab check the location of the directories:

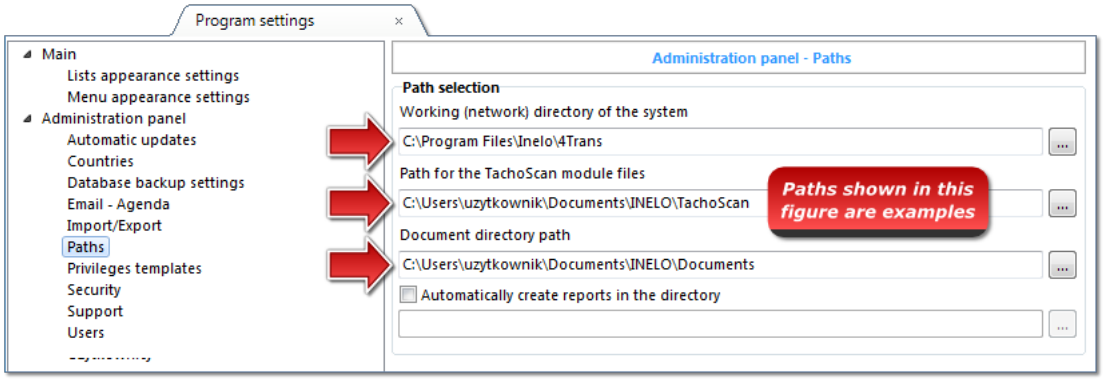


Fig. Program Settings -> Paths.

4. Copy the folders and their contents into any medium.

*If the **Path for the TachoScan module files** and **Document directory path** is within the **Working (network) directory of the system** path, it is enough to copy this directory.*

On your new computer

1. You can paste the contents of the directories (copied from the old computer) anywhere.
2. Run TachoScan, logging in as an administrator (see: "First launch 43").
3. In the settings window under **Paths** point to the location of the copied directories.

4. First launch

The topic below presents the program setup process before the first start.

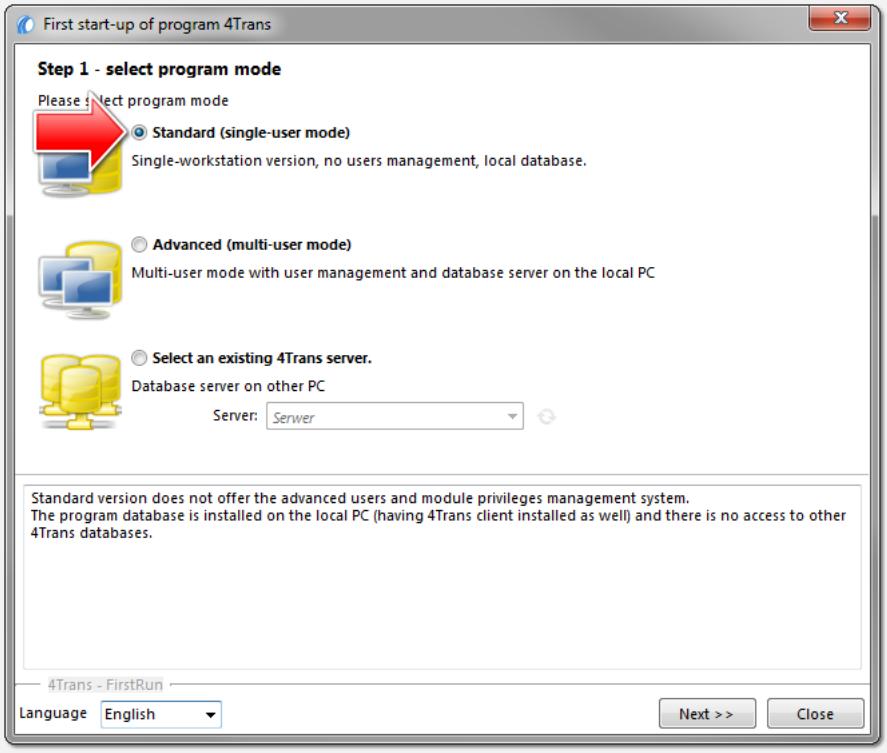
*Before the first start of the program it is **required** to sign in to an account with administrative privileges in the operating system.*

4.1. Step 1 - select program mode

When you first start the program it displays a window: **Step 1 - select program mode**, where, depending on your needs, select:

Standard (single-user mode)

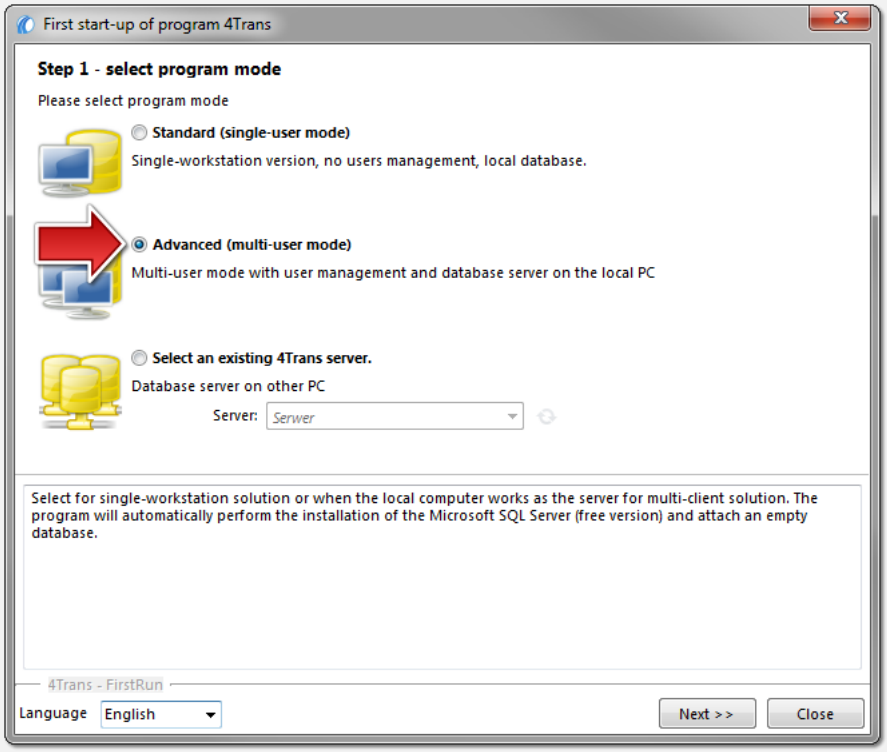
Please, read the description in the window (Fig. bellow).



If the above program mode is correct, left-click on the: Next >> - button - the program will display: "Step 2 - server initiation 47" window.

Advanced (multi-user mode)

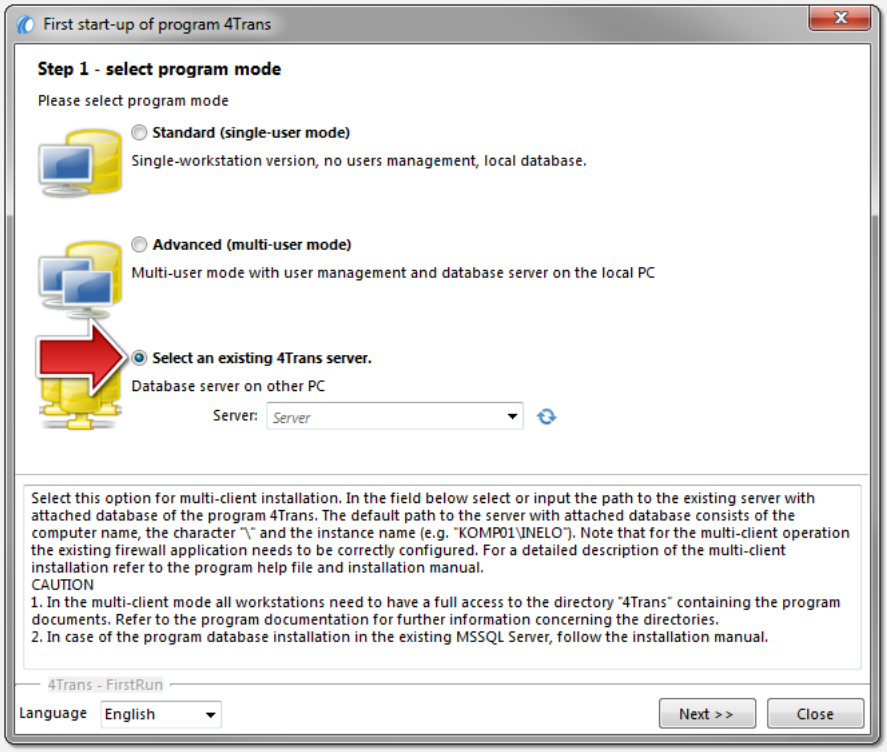
Please, read the description in the window (Fig. bellow).



If the above program mode is correct, left-click on the: Next >> - button - the program will display: "Step 2 - server initiation 47" window.

Select an existing 4Trans server.

Please, read the description in the window (Fig. bellow).



Summing up, this option can be selected only when:

- the program connects with an existing server that has the TachoScan database connected beforehand.

To connect to the existing server with the database:

- clicking on the icon: will refresh the list of servers;
- click the button: (item 1 - Fig. above);
- select a desired server from the list.

If a desired PC is not on the list of servers, please make sure that PC-server communication has been unlocked through the ports:
*- **1433**, **1434** at **UDP** protocol;*
*- possibly for HASP Manager check **475** port at **UDP** and **TCP** protocol - if the network license key is installed on the same PC.*

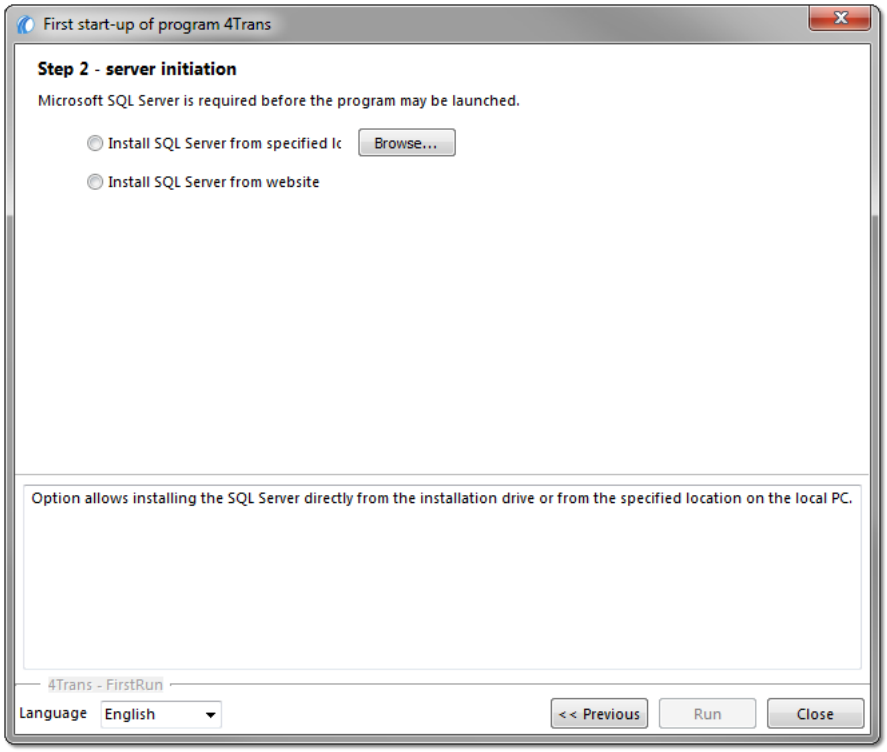
After installation of TachoScan program server IT IS NOT RECOMMENDED to change the name of the PC, on which the server has been installed.

If you want to connect TachoScan database to an existing MSSQL server, go to the topic: "Attaching and Detaching the database 24".

The program will be started after connecting to TachoScan, server is completed.

4.2. Step 2 - server initiation

If in the first step you selected: **Standard (single-user mode)** or **Advanced (multi-user mode)**, **Step 2 - server initiation** window appears in the next step.



Install SQL Server from specified location:

This option is automatically checked if TachoScan is installed from the original installation media.

Browse... - possibility of indicating any installation path:

- **Microsoft® SQL Server™ 2014 Express** for Windows Server® 2008 R1 and Windows Server® 2008 R2 (required filename: "InstallSQL2014.exe");
- **Microsoft® SQL Server™ 2017 Express** for Windows® 8.1, Windows Server® 2012, Windows Server® 2012 R2 (required filename: "InstallSQL2017.exe");
- **Microsoft® SQL Server™ 2019 Express** for Windows® 10 (required filename: "InstallSQL2019.exe");

Install SQL Server from website

If the TachoScan installer does not find the SQL Server installation file, it checks the above option - the installer is downloaded from the Internet.

During the first run, the database server is installed:
***- Microsoft® SQL Server™ 2014 Express** for Windows Server® 2008 R1 and Windows Server® 2008 R2;*
***- Microsoft® SQL Server™ 2017 Express** for Windows® 8.1, Windows Server® 2012, Windows Server® 2012 R2;*
*- **Microsoft® SQL Server™ 2019 Express** for Windows® 10.*

SQL Server™ 2014 Express database limitations:
- support for a single physical processor;
- 1 GB of RAM;
- the size of the database: 10 GB.

SQL Server™ 2017 Express database limitations:
- support for one physical processor;
- 1410 MB of RAM;
- database size: 10 GB.

If the maximum database size (10 GB) is not sufficient, you need to purchase the latest commercial version of Microsoft® SQL Server™.
When installation is finished you have to reboot your computer.

During the installation process the program will automatically create folders for saving of tacho disco images, files with readings from digital driver's cards, documents and backup of database.

*The default path: "**...\My documents\User\INELO**",*

*where: **User** - is the name of user who logged in to Windows® system.*

After installation, the database program may display the following screen:

[Company] New Company

In the **New company** window, enter your company's data

or in the window:

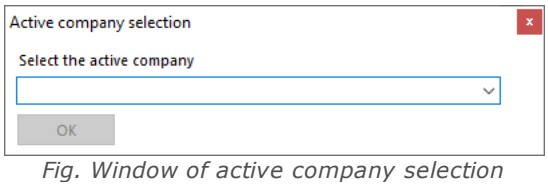


Fig. Window of active company selection

select the active company.

After selecting/saving, the proper program window will be launched.

4.3. Log in

4.3.1. Simple logging

> ***The option unavailable for Standard (local work) mode of program work.***
>
> *If you want to change the mode of program work go to topic: "The change of working mode to Advanced 53 ".*

After program installation in the database, there exists only one "Administrator" account, to which to log on. We enter: **administrator** as a user, password: **admin**.

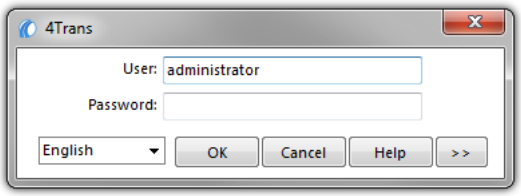


Fig. Simple logging.

4.3.2. Advanced logging

> ***The option unavailable for Standard (local work) mode of program work.***
>
> *If you want to change the mode of program work go to topic: "The change of working mode to Advanced 53 ".*

In order to change a server or network key option, select the button: >> (Fig. bellow):

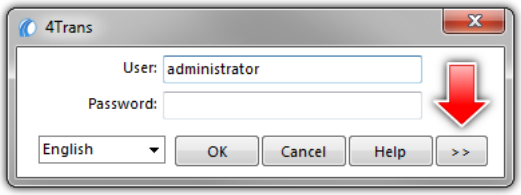


Fig. Button ">>"

The log window will be expanded with additional options:

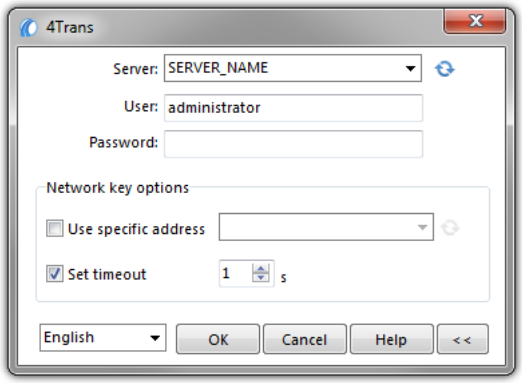


Fig. Advanced options

- **Server** (Fig. above)
  This is a drop-down list of MS SQL servers available (visible) in the network. In order to refresh the list, push the button: (Fig. above). If, due to some unpredictable reasons, the server which we want to connect to is not visible, then you can type in its name.
- **Use specific address**
  This is a drop-down list of available (visible) HASP license managers. In the case when a "HASP Manager 29" is active on the computer that is logging to a domain different than the computer with installed TachoScan client, then the client will not be connected to this manager as a default one. It is necessary to activate this option and type the IP address of the computer along with installed HASP Manager.
  If, however, this option is unchecked, the program searches the network for active HASP license managers (only in the domain to which the computer is logged);
- **Set timeout**
  This option makes it possible to set timeout ([s] – seconds) that the program should wait for response from computers when searching for key managers in the local network – increasing the time limit to more than 1 second is justified in the case of a low network transmission rates.

4.3.3. Paths settings

The option unavailable for Standard (local work) mode of program work.

If you want to change the mode of program work go to topic: "The change of working mode to Advanced 53 ".

After you have logged a window will be displayed on which three paths to directories should be set:

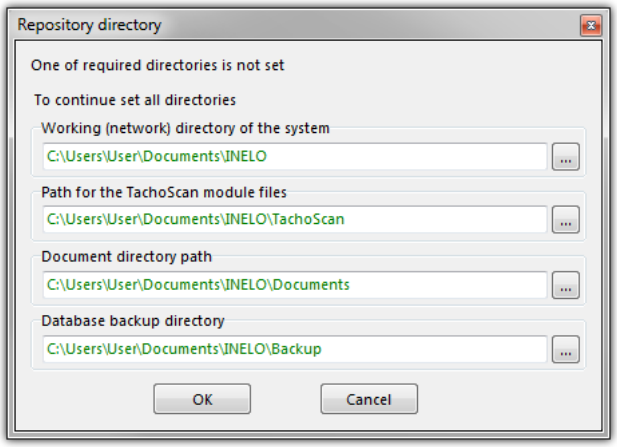


Fig. Repository directory.

- to the main 4Trans folder (default path "**...\Program Files\INELO**");

- *for 64-bit systems, depending on the Windows® version:*

➢ *"**...\Program Files (x86)\INELO**".*

- to working (network) directory of the system (default path "**...\Documents\INELO**");
- to TachoScan module files (default path "**...\Documents\INELO\TachoScan**");
- to back-up copy (default path "**...\Documents\INELO\Backup**");
- to the folder with documents (default path "**...\Documents\INELO\Documents**").

Paths can be typed using the keyboard or chosen by clicking the button: ....

If a path to a folder is correct, it will be shown in green. Similarly, an incorrect path will be shown in red.

If the system operates in the network with several positions, the paths need sometimes be set to remote computers.

A user logged on a computer must have full access to the INELO catalogue made available to him.

4.4. Granting rights / privileges

The option unavailable for Standard (local work) mode of program work.

If you want to change the mode of program work go to topic: "The change of working mode to Advanced 53".

The TachoScan can be used by many users simultaneously, each user works within the authorization set by the administrator. The administrator has control over users, creating their accounts and granting them appropriate **rights**.

The standard menus are not available for the administrator, but the advanced settings, such as directory paths, database backup parameters, user management and access rights settings are available.

In order to grant licenses to a user (users) you need to log on to the program as "**Administrator**" (see the topic above "Logging"), and then:

- from the menu **Basic data** select option **Settings** and add a new user in the option **users**.
- In the **Templates** add a new license pattern and attribute it to a user.

4.5. Database backup settings

The option unavailable for Standard (local work) mode of program work.

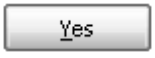
If you want to change the mode of program work go to topic: "The change of working mode to Advanced 53".

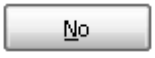
Use menu "**program settings**", option "**Database backup settings**", to define the frequency for the backup copy and the type of the copy to be created.

4.6. Program activation

After purchasing, TachoScan may require activation (unless you paid directly). Prior to activation, a window informing about the required activation appears and you are asked to enter respective code.

There are 2 possible reactions now:

- 

- the following window, for activation code input appears,
- 

-continue to work with the program without activation.

If the program is not activated within the specified time limit, it will be blocked.

If an improper activation code is entered 3 times, the license key will be blocked permanently. In this case it is necessary to refer to the producer's intervention service that is provided against payment, according to the actual INELO Polska Sp. z o.o. price list.

5. Program launch mode

5.1. The change of working mode to Advanced

To change from Standard (local work) mode to Advanced mode you have to:

- Close program – when it is open,
- Re-open it from menu: "**Start -> Programs -> INELO -> TachoScan -> Administrator**",
- In login window fill the field: "**User**" -> "**Administrator**", enter the default password – that is: "**admin**",

*The program will open with so called "**Administration panel**" without basic functions but with the possibility to make the advanced settings like the setting of paths for saving of files, managing the users (see: program help).*

- Once the program is open you have to move to program settings ("**Administration panel** -> **Settings**"), and in tab: "**Support**" change option for: "**Program launch mode**" from "**Standard**" to "**Advanced**".

If the program will work in Advanced mode you have to remember about adding new users and setting the privileges for them (see: program help).

5.2. The change of working mode to Standard

To change from Advanced mode to Standard (local work) mode you have to:

- Restart program and login as: **Administrator** - the default password is: **admin**,

*The program will open with so called **Administration panel** without basic functions but with the possibility to make the advanced settings like the setting of paths for saving of files, managing the users (see: program help).*

- Once the program is open you have to move to program settings ("Basic data -> Settings"), and in tab: **Support** change option for: **Program launch mode** from **Advanced** to **Standard**.

If the program will work in standard mode you have to remember that:
- program will not display login window during start up – this means that any person can open it and feel free to add, edit and delete records;
- program will run with all available functions written on the license key;
- to login again to Administrator's account you have to run program from the menu: "Start -> All programs -> INELO -> TachoScan -> Administrator".

6. Additional information

6.1. Support and service

INELO Polska Sp. z o.o.

Support and service

e-mail: support@inelo.pl

tel.: +48 33 496 58 74

6.2. TCP/IP Port for MS SQL Server

To read out the number of TCP/IP port for MSSQL server:

1. Start the program "**SQL Utility**" from menu:
   Start -> Programs -> INELO -> SQLDatabase.
2. Select the TCP/IP field in the right paneland click Properties.
3. A port created dynamically during installation, on which the created database operates, is displayed in a new windowin the Default Port field. Copy it (e.g.

) and configure existing firewall programs to enable communication with this port on TCP.
4. In case of program base malfunction, e-mail the content of the logging file (4Trans_log.txt in the directory "My Documents") to INELO Polska Sp. z o.o. (e.g., via email to serwis@inelo.pl). The file can also be opened from the menu:
   Start -> Programs -> INELO -> SQLDatabase -> Install Logs

6.3. Database Manager

Database Manager is a program used to manage the server and TachoScan database program. With the help of this tool it is possible to attach and detach a database, read the attached information on the database, create a backup of the database, etc.

Before the work in the program should connect to the database, including the steps:

1. Select: "Start -> All programs -> INELO -> Utils -> Database Manager -> **Database Manager**".
2. In window "**SQL server logging**" (Fig. bellow) you should:

- select the desired server - if the server is invisible on the list, press on the button beside;
- enter the administrator account password (default password: "admin");

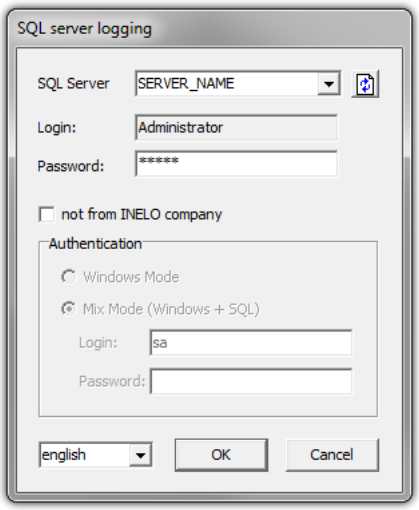


Fig. Login to database.

When the server was installed from the other source than TachoScan install CD

- mark the option as below "**not from INELO company**";
- the the field: "**Authentication**" will be displayed and authenticated login option have to be chosen (this information should be provided by the server administrator), for option "**Mix Mode**" you should type dbo(sa) user password for the selected server;
- press the button: Ok;

In program menu there are following options:

6.3.1. Server

Information

The clicking on this command opens a window containing information on selected technical data of the server.

Current connections

In the window "**Current connections list**" will appear the names of computers and applications, with the help of which users connect to the TachoScanserver. The window also includes the information about the time of user login and time of last activity.

Server configuration

The command is visible if the option: "not from INELO company 54" was checked during logging in (if the server was installed from a source other than the installation CD TachoScan).

In the new window, after clicking on the: Configure button the features: "CMD_SHELL" and "XP_AGENT" are activated.

Close

Use this command closes the Database Manager.

6.3.2. Database

Information

The window contains information about database files connected to TachoScan server.

Depending on the selected database file, you can view information on the location of the file, its size and status.

Attach

The subject of **attaching** the database was covered in the topic: "Attaching database 25".

Detach

The subject of "**detaching**" the database was covered in the topic: "How to DETACH the database? 28".

Shrinking transaction log

Using this command, you can reduce the size of the database files with the extension "**LDF**".

*The size of files with the extension "**LDF**" is reduced automatically when you create a backup of the database.*

*If for some reasons, the backup copy is not made the size of files "**LDF**" grows infinitely.*

There are two ways to reduce the file size:

- **Simple mode** - by pressing the button

- the size of ALL "LDF" files is reduced,
- **Advanced mode** -

- in the expanded view you can select the database file, which is to be reduced.

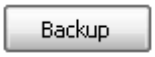
6.3.3. Backup

Backup database

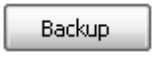
As a result of choosing this option, you'll see a window with three tabs:

- Creating the copy,
- Schedules - it is the same option as in the administration panel (see: program Help),
- Status of making - this is the same option as in the administration panel (see: program Help),

Creating copies

1. **Simple mode** - this mode is created from a backup copy of all database files.
   To create a copy:
   - first identify the directory to which you want to copy the database files,
   - Press the button: 

.
2. **Advanced mode** - this mode allows us the choice of the database file and the type of backup.
   To create a copy to:
   - Click the button:

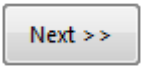
,
   - Select the database file,
   - Select the type of backup copy,
   - Identify the directory to which you want to copy the database file,
   - Press the button: 

.

Restore database

This tool allows restoring data from previously performed a backup of the database.
To do this you must:

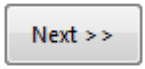
1. **Simple mode**:
   - specify the folder with a copy of the database files,

- press: 

.

2. **Advanced mode**:

- Click the button:

,
- Select the directory containing the file "**4TransMDF.bak**",
- Select the directory containing the file "**4TransKONFIG.bak**",
- Press the button: 

.

The program will proceed to restore data from backup. The result will be displayed in the Database Manager.

When restoring data from a backup copy the extreme caution is needed because the data contained in the currently attached database will be permanently lost.

6.3.4. Data import

Allows to copy data from the old TachoScan software to the new database of TachoScan.

If you need to import data from the old TachoScan software, contact the manufacturer's service.

6.3.5. Databases management

The menu is available after marking the option: "show options for managing the multiple databases".

New database

Using this command, you can create a new blank database, which will be automatically attached to the server.

Options for handling multiple databases are dedicated to the service version of program, so when you create a new database program will display the window in which abbreviation of company name should be given.

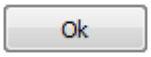
If you have previously selected: "**Create the full backup of database when changing the data**" the program will proceed to back up the detached database. Subsequently, the c

*The new database will be created in the directory set by using the: "**Parent directory**". In turn, the "**parent directory**" will create a folder with the name specified before in "**Company abbreviation**", and the database files will be placed in it.*

Current database will be detached and the new one will be attached.

Choose database

Using this command you can change database. This tool acts as a combination of options: "Dettach 56" and "Attach 56" the database.

To connect to another database if you select the above indicate the directory in which the database to connect and press the button: 

.

Parent directory

With this command you can set the directory, which will be stored in a newly created database.

6.3.6. About

Settings

In the settings window you can select the following options:

show options for managing the multiple databases

As a result of the selection of this option using the **Database manager** you can import data from several databases TachoScan Service version (see: "Data import 58").

Also, when you select this option is activated menu group: "Databases management 58".

Create the full backup of database when changing the data

During changing of databases the program creates the full backup of detached database.

About

In window "**About**" information on "**Database manager**" are displayed.

6.4. Glossary

Program Help - this is a file that contains basic information on the operation and maintenance of TachoScan program.

To view this file you should choose from the program menu, the: "**Help -> Help**" or press:

.

INELO

Zintegrowane rozwiązania
dla transportu

22 113 40 60

bok@inelo.pl

www.inelo.pl