

MeasurementDbConverter.exe

Measurement database converting software for

smart-chart 3

Documentation

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1. General

1.1 *System Description*

MeasurementDbConverter.exe is a database converting software for smart-chart 3. Because smart-chart 3 uses the Microsoft SQL Server Compact 4 data provider and has different database structure as smart-chart 2, it is needed to read and convert all the data from the old measurement databases in order to let the users work further with their measurement data with smart-chart 3. The software can manage data migration from old databases directly to MS SQL Server databases.

2. Installation and Start-up

2.1 *Technical Specifications*

Minimum hardware requirements:

Processor:	2GHz or faster
RAM:	2 GB
Available disk space:	500 MB

Software

Operating system:	Windows XP SP3, Windows Vista, Windows 7
Framework:	.Net 4

Installation

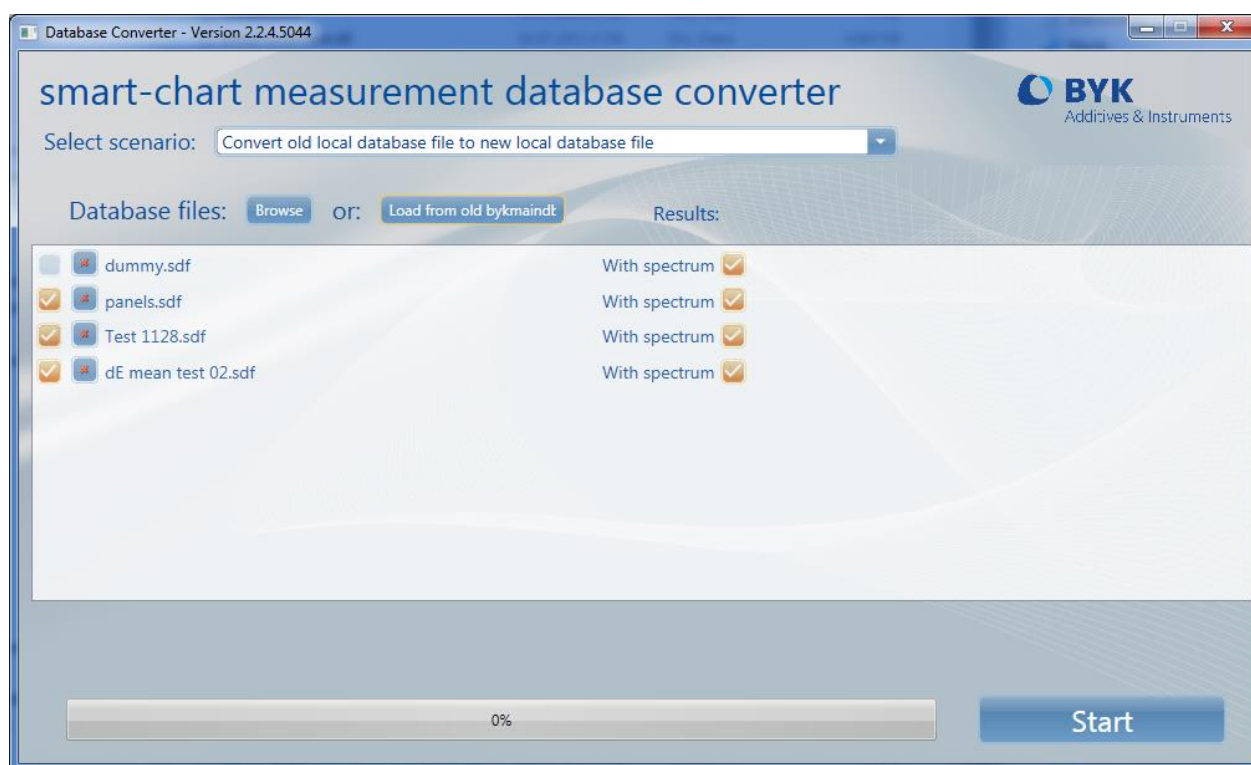
Install smart-chart. You can read the smart-chart installation details in the documentation. MeasurementDbConverter.exe is part of the installation. It is placed in the directory smart-chart 3\Converter\

3. Functions

The software has 4 functions. The first 3 are different conversions and migrations of old databases to the new format; the 4th is a data migration from a new local database file to an SQL server database.

3.1 Function 1:

„Convert old local database file to new local database file “



This is the default selection. First the user has to define the source files. There are 2 ways to do it:

1. With “File open” after clicking on the “Browse” button (multi selection is possible).
2. Pressing the “Load from old bykmaindb” button populates the selected file list with the measurement database files registered in the bykmaindb.sdf (of smart-chart 2).

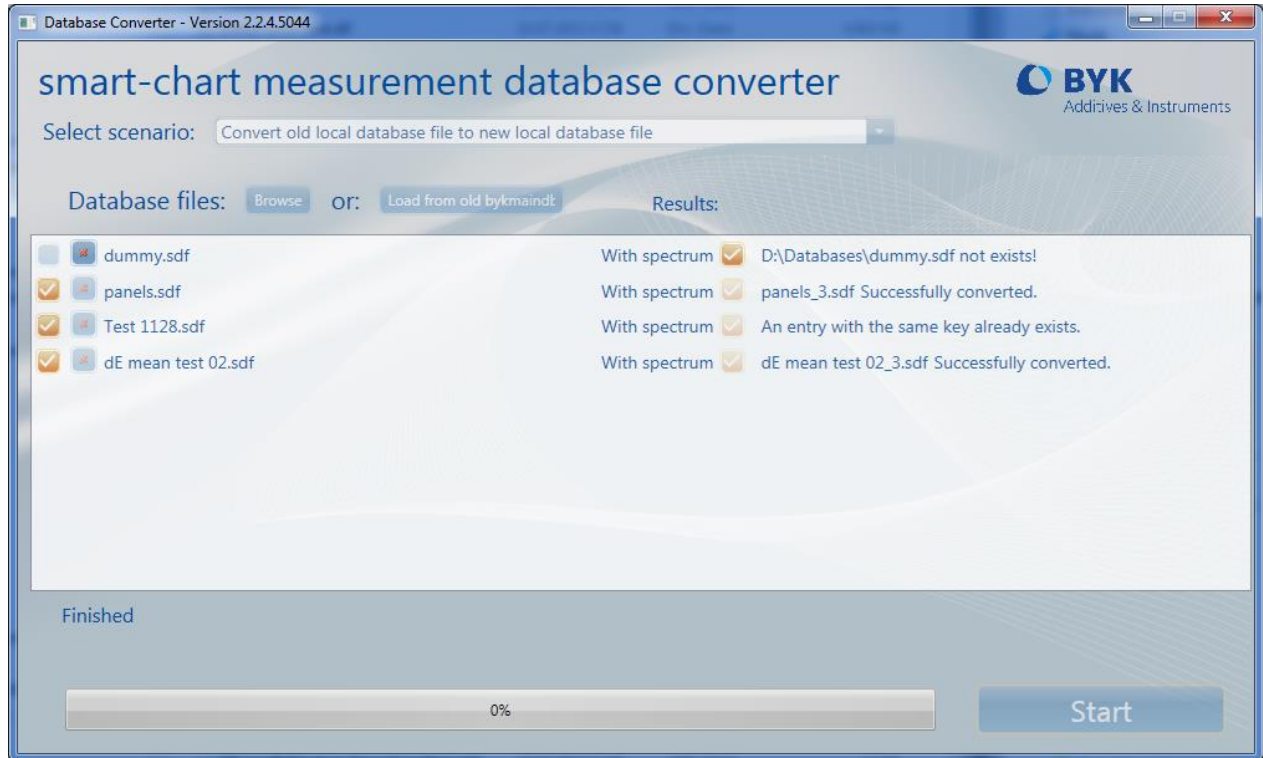
If the checkbox next to the file name is grey and not checked, the file is not available. (See dummy.sdf above). The user can remove a file from the list with the red cross button.

After pressing the “Start” button the software opens the first file, reads all data, converts the data into the new database format and writes the data into a new database file. The new database file name is the old name extended with “_3”. For example the new database file converted from “panels.sdf” gets the name “panels_3.sdf”. The name of the currently converted files is shown together with the information of the progress.

Updated on August 5, 2015

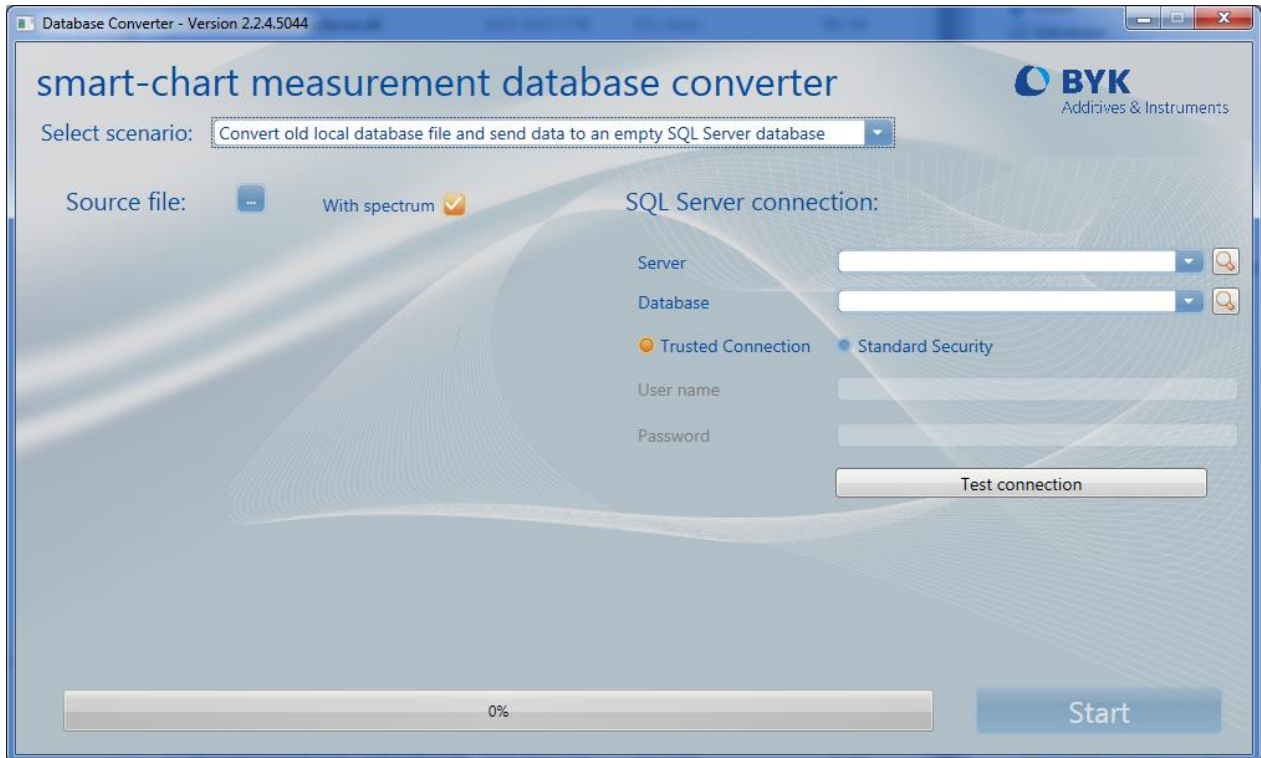
If “With spectrum” is checked, the software also stores the spectral data in the new databases. The converting process can take much longer depending on the data amount. Additionally, the database file will be bigger. Conversion “With spectrum” is recommended for users who are also utilizing smart-lab Color. For users who don’t work with smart-lab Color (and don’t want to work with it in the future) the “With spectrum” checkbox can be deactivated.


Information about the results are shown on the right side. See below:



3.2 Function 2:

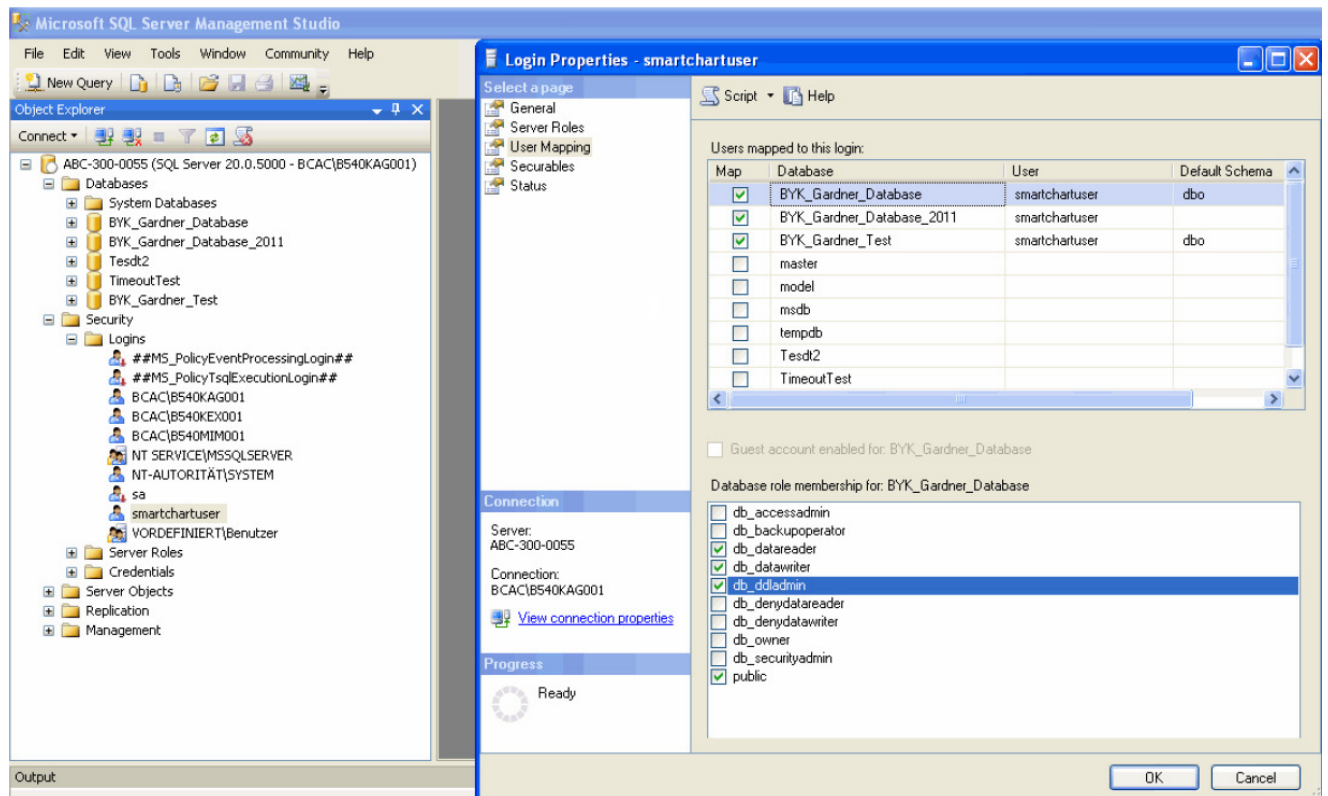
„Convert old local database file and send data to an empty SQL Server database“




The source file is an old measurement database file, which can be selected by pressing the browse button,  but the target database is an SQL Server database.


Preparing an SQL Server database for using with smart-chart

The converter needs an empty database to work with; otherwise the software stops and returns an error message. The user has to have the db_datareader, db_datawriter and db_ddladmin rights on the database to be able to let the converter run. It is possible to use the existing windows credentials (trusted connection) or registering a new user in the database directly (Standard Security). The picture below shows the settings in SQL Server Management Studio.



The Connection Settings

Server: it is possible to type it in directly, but the user can also get a list of the available servers on the network by pressing the  button and selecting the needed server from the list. It can take 20 -30 seconds depending on the network speed and the available server amount.

Database: it is possible to type in the name, but if the server name is already set after clicking on the  button the user can select the database name from the combobox.

Trusted Connection: this means, your windows credentials (user name and password) will be send to the SQL Server as log in parameters. This option can be used if they are registered on the server.

Standard Security: If this radio button is activated the user has to fill in the “User name” and “Password” textboxes within the database registered name and password. It can be common for all smart-chart user.

Test connection: A so called “Connection string” will be generated from the given information and used to connect the server database. With a successful connection a green check mark is shown on the window, otherwise it returns with an error message.

If the user is satisfied with the settings and the connection was successfully tested, the conversion can be started with the “Start” button. The name of the currently converted database file is shown together with the percentage of the progress.

3.3 Function 3: „Convert old SQL Server database and send data to an empty SQL Server database“

Database Converter - Version 2.2.4.5044

smart-chart measurement database converter

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Select scenario: Convert old SQL Server database and send data to an empty SQL Server database

SQL Server connection for old database:

Server: [text box] [icon]

Database: [text box] [icon]

☐ Trusted Connection ☒ Standard Security

User name: [text box]

Password: [text box]

Test connection

SQL Server connection for new database:

Server: [text box] [icon]

Database: [text box] [icon]

☐ Trusted Connection ☒ Standard Security

User name: [text box]

Password: [text box]

Test connection

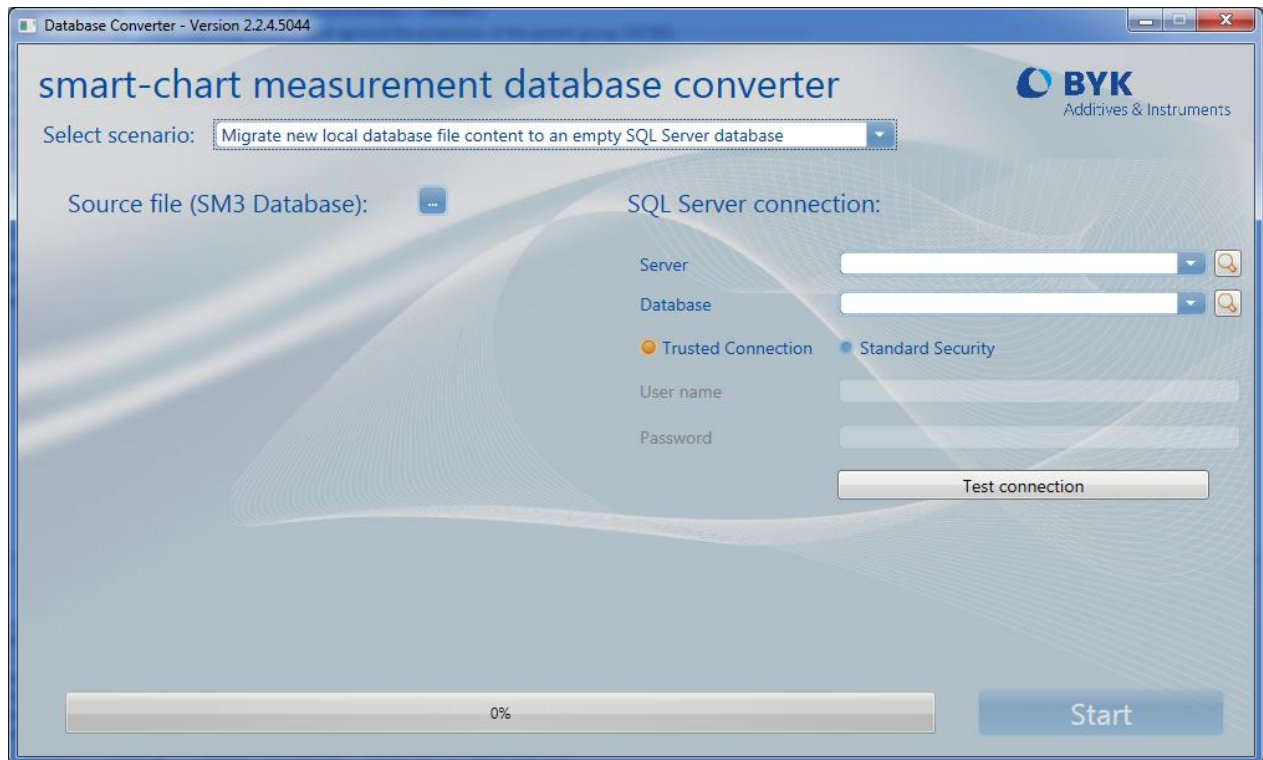
With spectrum ☒

0%

Start

For this function the source database is an SQL Server database in smart-chart 2 format. This option is **used by database administrators** after all smart-chart 2 installations have been updated to the new smart-chart 3 version. The software reads all data from the old SQL database and after conversion sends the data to a new empty SQL Server database. The “With spectrum” checkbox functionality is the same as explained in 3.1.

3.4 „Migrate new local database file content to an empty SQL Server database“



This function is very similar to the function explained in 3.2, but the source database file is a new measurement database file in smart-chart 3 format. This option is used when the user wants to move the data from a local measurement database file used / created by smart-chart 3 to an SQL Server database. All settings are the same as in 3.2.

4. Updates

The latest version of MeasurementDbConverter.exe can be downloaded from the following link:

<https://dc2.safesync.com/FgfhzWV/smart-chart%20converter/Converter.zip?a=XxeFumGeGnM>

Procedure:

1. Close smart-chart.
2. Download "Converter.zip" from the link above.
3. Extract the directory "Converter".
4. Copy the "Converter" directory.
5. Open smart-chart3 folder. The default folder is C:\Program Files\BykWare\smart-chart3 on 32-bit operating systems and C:\Program Files (x86)\BykWare\smart-chart3 on 64-bit operating systems.
6. Paste and confirm question for overwriting all existing files.