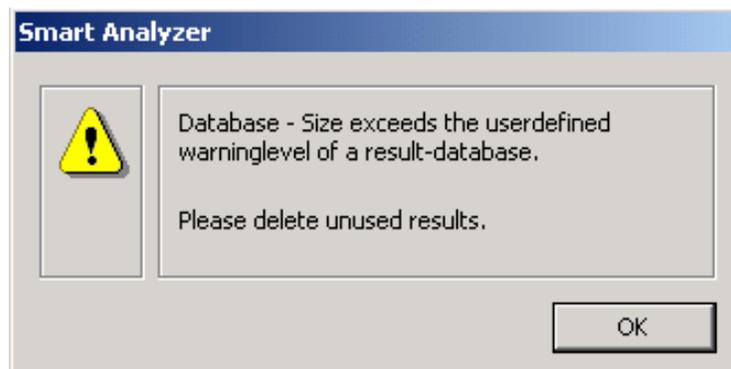# How to perform a Backup of data, used by the SmartAnalyzerVision Software
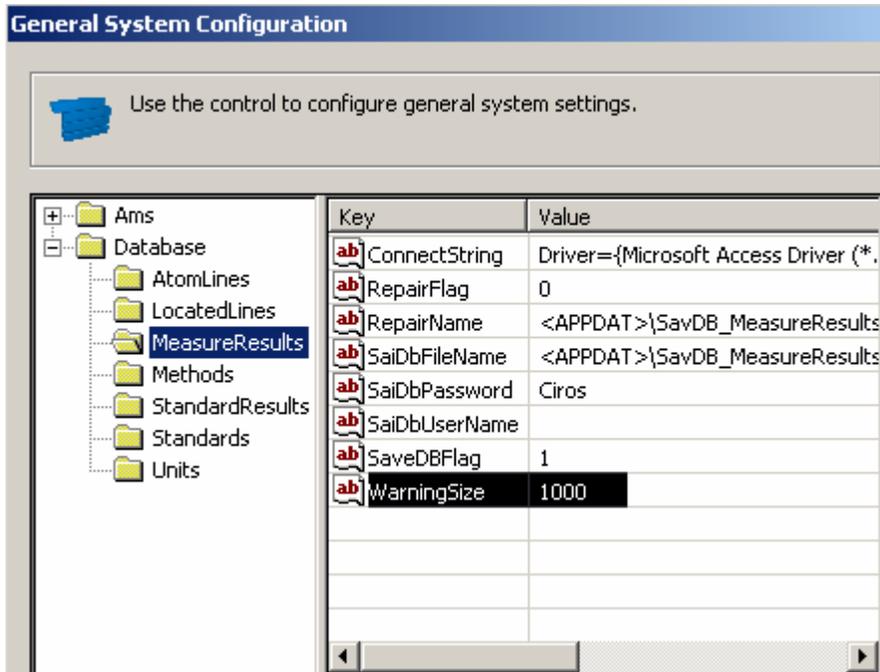
1   General Information

The Vision Software operates by default with Jet-databases with limited capacity. If one of the databases reaches a volume of approx. 1 GB, the system slows down. If the database reaches 2 GB, the data cannot be handled anymore and loss of the complete database is possible.

To avoid this scenario by default a warning message pops up, as soon as a 'Warning Size' of 1000 MB (=1GB) is reached.
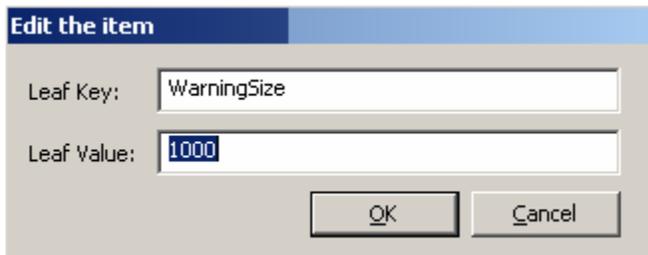

The warning size can be modified, by entering the appropriate **config** file: **'SaiData_Settings.cfx'**

To open this file switch to **CONFIG**-View, open the **CONFIG EDIT**-Dialog and select the **SaiData_Settings.cfx** file.

CLICK on **Database** to get access to the subfolders and select the database of interest.

To **change** the **WarningSize** double-click to open a new dialog

Change to the value (size in MB) you want to get the warning message

Once you get reach the size you have several options to backup and save the data.

This small tutorial describes two ways to perform the **BACKUP**-procedure.

a) Using the **DATABASE ADMINISTRATION** tool of the software

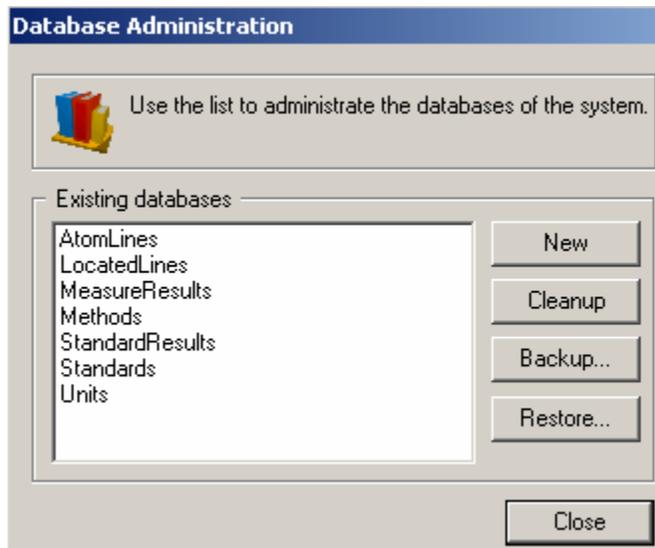b) Using the **Microsoft Explorer** (or similar programs) of your operating system (**RECOMMENDED**)

Both procedures lead to a copy of your data to make databases accessible in the future to check for old data. Spectro can only recommend a procedure; please contact your IT-department for a proper data-backup-strategy.

2 Backup (only) databases, using the Database Administration tool of the SmartAnalyzerVision-software

The Database Administration tool can be found in the **CONFIG**-View of the SmartAnalyzerVision-software:

Double-click on the appropriate icon to open the main dialog

On the left side you find a list of all existing databases. Each of the databases can be selected separately.

The four buttons on the right side can be selected to start a action

Creating a **NEW** database. The software will overwrite the existing with an empty one.

TAKE CARE: You will **LOOSE** your data, if you have **NOT** performed a **BACKUP** before!!!

Cleanup

This operation is requested by Microsoft to free database-capacity whenever you have deleted database-entries.
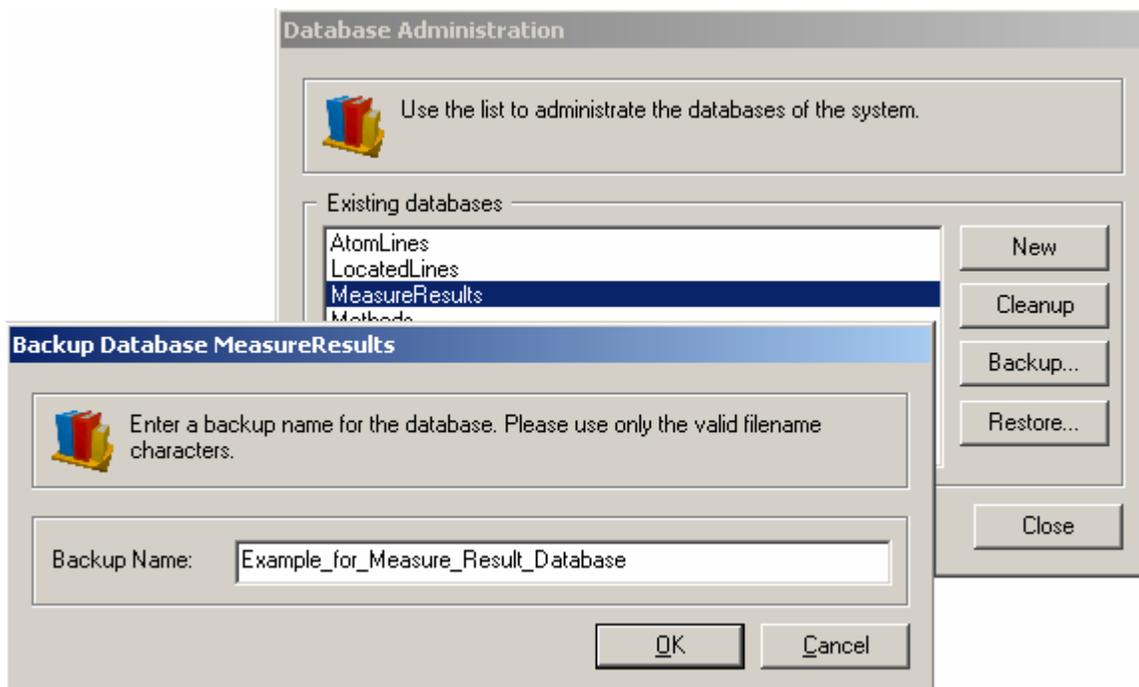
Backup...

Opens the dialog to **BACKUP** the selected database

Restore...

Opens the dialog to **RESTORE** the selected type of database.
TAKE CARE: The existing database will be replaced. **WITHOUT** performing a **BACKUP**, this data will be **LOST**!!!

To perform a **BACKUP**, please select the database to be back-upped, click on **BACKUP** and give a valid filename in the opening dialog:

Click **OK** and the backup will be performed, following a specified protocol:

1) Secure the database with a **MASTER**-password

2) Copy the database from the database-folder: **C:\Spectro Smart Studio\Smart Analyzer Vision\Database** into the Backup-subfolder **C:\Spectro Smart Studio\Smart Analyzer Vision\Database\Backup**, removing the file-extension '*.mdb'

3) Writing necessary information for **RESTORING** the database in the **SavDB_BackupInfo.mdb**, located in the database-folder of the software.

4) Removing the **MASTER**-password and putting back the system-based.

TAKE CARE: Depending on the database size, the process can take up to 60 minutes. During this time the software is not responding. If you interrupt or abort the process, shut down the computer, perform a de-fragmentation, you risk the loss of data. Worst case scenario leads to a complete loss of data, due to the re-writing process of the database.

Even if the database is still uncorrupted an interruption can cause access problems. The database can still be protected with the MASTER-password. This password is used by the software and only the IT-department in Germany can remove the protection and replace with the original one. Without the system-password, there is no way to store data in the database!!!

HINTS:

1) The information for restoring the back-upped data is written in the **SavDB_BackupInfo.mdb** – database. A loss of the hard disk also leads to loss of restore-information. Make always sure, that you have stored important data on a second source. This data includes the restore-database!!!

2) Whenever you delete data out of the backup-folder, the appropriate entry will be deleted out of the **SavDB_BackupInfo.mdb**-database and therefore **NOT** be **available** for **RESTORE** anymore.

3) Before you restore a database, make sure that the actual database of your system is back-upped, since this database is replaced by the back-upped one. There is no way to work with both databases at the same time.

3 Backup important data of your SmartAnalyzerVision-Software, using Microsoft explorer (or similar programs)

A different option to backup your data and avoid the loss of important files is the use of a **file explorer** to manually copy all files.

Compared to the use of the Backup tool, you are able to copy not only the databases, but also the configuration files and templates. These files enables you to restore your complete system in case of the loss of the hard disk or if the software itself is corrupted within a few minutes.

Please make always sure that you copy all data to a second source. Contact your IT-department for a proper place and strategy. SPECTRO is not responsible for the loss of data.

Important data, which is needed to restore you system are:
   a) config-files
   b) inst-data
   c) templates
   d) databases

The following procedure describes **SPECTRO's** recommendation for the backup of your data:

1) Select a source to store frequently your data. This can be a second computer (office computer), a network device or a DVD.

2) Copy **ONCE** the **COMPLETE** SpectroSmartStudio-folder (**C:\Spectro Smart Studio**). Now you have a valid starting point for your frequent data-backup.

3) Perform a frequent backup of the following folders (whenever you change important settings):

C:\Spectro Smart Studio_\Smart Analyzer Vision\Config

C:\Spectro Smart Studio\Smart Analyzer Vision\InstData

C:\Spectro Smart Studio\Smart Analyzer Vision\Script
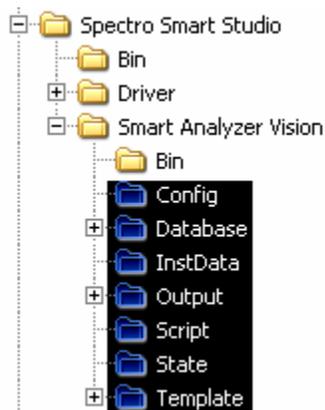
C:\Spectro Smart Studio\Smart Analyzer Vision\State

C:\Spectro Smart Studio\Smart Analyzer Vision\Template

Each of these folders contains some important data for your system or information about Jobs, Templates or Tray-definitions.

4) Perform a frequent backup of your complete database folder. Only if you copy the complete folder, you can easily work with old data, if necessary.
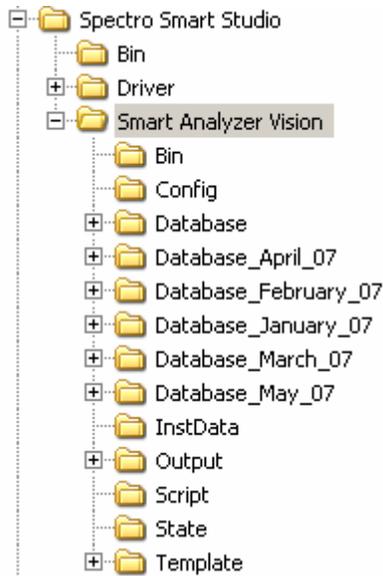
If you need to work from time to time with old data, the best way to realize both, backup and access to old data is to install the **SmartAnalyzerVision**-software on a separate computer, e.g. your office PC and only work on this computer with back-upped databases. Doing it this way avoids confusion with restoring and back-upping actual databases and the possible loss of data.

Also you can work with the corresponding data (method-data fits to measure results).

Replace the folder, highlighted on the left side with the actual data from your instrument PC.

Ask SPECTRO technical support how to switch the software into 'DEMO MODE'

Rename the database-folder from '**Database**' to a unique name, representing the actual date, e.g. '**Database_January_08'**.

Whenever you now perform a backup of your database-folder, copy the complete folder into the **SmartAnalyzerVision**-directory and rename similar.

To work with any of the back-upped databases you need to select the one you need, rename it to '**Database'** (that is the name, our software is looking for) and start the program. You will have access to the old data and be able to work with real spectral information.

For any further explanations, don't hesitate to contact me in my office.

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