

1 Purpose

This document describes the differences between the new software version **MagIC Net 2.0** and its predecessor, MagIC Net 1.1.

2 New features

New instruments

- New model versions of the 850 Professional IC with the **MSM-HC** module (Metrohm Suppressor Module – High Capacity):
 - 2.850.2050 Professional IC Anion MSM-HC
 - 2.850.2070 Professional IC Anion MSM-HC MCS
 - 2.850.2120 Professional IC Anion MSM-HC MCS Prep 1
 - 2.850.2140 Professional IC Anion MSM-HC MCS Prep 2
 - 2.850.2180 Professional IC Anion MSM-HC MCS Prep 3
 - 2.850.2230 Professional IC Anion MSM-HC MCS LP Gradient
 - 2.850.2240 Professional IC Anion MSM-HC MCS Gradient
 - 2.850.3040 Professional IC AnCat MSM-HC MCS
- 883 Basic IC plus
- 814 USB Sample Processor / 815 Robotic USB Sample Processor XL
- 872 Extension Module Liquid Handling
- 846 Dosing Interface

Additionally, MagIC Net 2.0 supports the communication with RS-232 devices.

General news

- A log file is generated when critical problems with devices / modules occur during initializing. This file contains all information necessary for the service technician.

News in the program part Workplace

- Sample data (sample tables) can also be exported in **csv** format.
- The application note of a method can be displayed while editing the sample table.
- Acoustic signal during data import in the workplace.

News in the program part Database

- Importing calibration points and exporting calibration points.

News in the program part Method

- The following devices and modules can be released in the time program with the **Release** command, allowing for them to be used in other (parallel) methods.
 - 800 Dosino
 - 801 Magnetic Stirrer, 803 Ti Stand, 804 Ti Stand
 - 814 USB Sample Processor, 815 Robotic USB Sample Processor XL
 - 858 Professional Sample Processor
 - 863 Compact Autosampler
 - Remote Box MSB
 - High pressure pump
 - High pressure gradient pump
 - Low pressure gradient pump
 - Injection valve
 - MSM, MSM-HC, SPM
 - Peristaltic pump
 - 10-port valve
- New statistics results
 - Mean value of the concentrations
 - Standard deviation of the concentration mean value
 - Confidence range for the concentration mean value
 - Detection limit from linear calibration function
- New function **Tinv (Quantiles of the Student's t-distribution)**.
- Device-independent time program command **Calculation** for calculating results while the time program is running.
- **Automatic stepping to next position** can be configured for the modules MSM, MSM-HC and SPM (Sample Preparation Module).
- In the formula editor of the time program the **sample data variables of the next sample line** are available.
- In the formula editor of the time program the **variables of the IC measuring results** are available.
- The duration of the analysis can also be defined with the aid of a formula.
- The formula editor contains a molar mass calculator.
- Methods can be sent directly via E-mail from the Method manager.
- The text editor supports hyperlinks.
- New component result: Number of injections actually carried out.

News in the program part Configuration

- New function **Initialize** in the menu of the device table – allows to initialize the following devices: 814 USB Sample Processor, 815 Robotic USB Sample Processor XL, 846 Dosing Interface, 858 Professional Sample Processor.
- New function **Ignored devices** in the menu of the device table – allows to administrate a list of devices which (after their automatic recognition) are *not* to be permanently added to the device table.
- If the option **Password monitoring by Windows** is activated in the security settings, then a test login will be demanded automatically. This ensures that a user does not inadvertently lock himself or herself out of the program by activating this option.

- Export and archive files of the audit trail now contain a checksum. The new **Verify export/archive** function in the Audit Trail section can be used to check whether these files were modified afterwards.
- Each export and import is being recorded in the Audit Trail.

News in the program part Manual Control

- In the manual control of the 800 Dosino the command **Aspirate** is additionally available.

3 Improvements

General

- MagIC Net starts faster.
- The module assignment has been unified in the program parts Configuration, Method and Manual control for the sample changers 814 USB Sample Processor, 815 Robotic USB Sample Processor XL, 858 Professional Sample Processor and 863 Compact Autosampler.
- The dialogs for selecting files and directories have been standardized.

Database program part

- Faster opening of determinations in the reprocessing as well as faster reprocessing, by improved compression of raw data.
- In the subwindow **Information** the version of MagIC Net used for reprocessing a determination is additionally displayed.
- Faster reprocessing when the integration parameters have not been modified.
- PDF reports now contain extractable text, e.g. for further editing with LIMS.

Method program part

- The time program command **Step** of the modules MSM, MSM-HC and SPM has been extended by the parameter **Execution condition**. This allows to make the execution of the stepping conditional on the period of time passed since the last stepping to the next position.
- A method now contains its own entire history when it is exported and imported.
- The method test now also checks whether the sample data used in formulas has been selected in the properties of the method.
- The computer name is now contained in the text of E-mails which are generated automatically by the program.

Configuration program part

- The concentrations of standards, check standards and standard addition solutions can be entered with up to **6** decimal places (previously 3).
- The user administration can be configured in such a way that only methods which are signed at Level 2 can be carried out.
- Improved export and import of configuration data.
- It is possible for all of the users of the same user group and administrators to log in again when a user is logged off automatically.
- Program start and program end are recorded in the Audit Trail.

4 Fixed bugs and problems

General

- Fixed: In rare cases submenus have not been opened at the correct screen position and could not be used.
- Fixed: Error in the English version of MagIC Net, when the same Cyrillic words were used in batch names.

Devices

- Fixed: When the cation pump of an 850 Professional IC AnCat system was combined to a gradient pump with an 872 Extension Module IC Pump, then mistakenly the pressure of the anion pump was displayed after the start of the gradient pump.
- Fixed: When the correction factor of a high pressure pump was edited while the corresponding device was not connected, then the correction factor was not applied after connecting the device.

Database program part

- Fixed: In rare cases points in the graph were joined by lines in the detail view.
- Fixed: Statistics results which have not been defined until the reprocessing, were not calculated.
- Fixed: The retention time was not displayed in the component results and could not be used.
- Fixed: Error in the reprocessing, when the table was modified while a chromatogram was being loaded.
- Fixed: Error in the reprocessing of a determination, when sample data has been imported from a **csv** file which contained numbers with wrong decimal separators.
- Fixed: In special cases, not all calibration curves were displayed during the reprocessing of determinations with several analyses.

Method program part

- Fixed: After the modification of sample data during a running multiple determination, the determinations were not reevaluated with the modified values.
- Fixed: A time program could re-access a sample changer which it had released before with the command **Release**.
- Fixed: When in the evaluation of a method the calibration mode has been changed to **Moving average**, then the calibration data became invalid and no calibration curve was drawn.

Configuration program part

- Fixed: In the editor for report templates there were not all functions available anymore after the MagIC Net user has logged himself out and in again.

Manual Control program part

- Fixed: A column thermostat started in the manual control was not switched off when closing MagIC Net.

5 Compliance

Modifications made to the current software version, which are relevant to 21 CFR Part 11 and GAMP, are fully compliant to these standards.

Herisau, 19 August 2009

A handwritten signature in black ink, appearing to read 'D. Strohm', is centered on the page. The signature is fluid and cursive.

D. Strohm

Vice President, Head of R&D