tiamo™
titration and more

Release Notes tiamo 2.0

1 Purpose

This document describes the differences between the new software version **tiamo 2.0** and its predecessor tiamo 1.3.

2 New features

New instruments

- Titrandos
    - 901
    - 902
    - 904
    - 905
    - 906
    - 907
- Avantes Spectrometer
- 856 Conductivity Module
- 867 pH Module
- 864 Balance Sample Processor
- 874 Oven Sample Processor

New commands

- MEAS TC Cond
- MEAS Ref
- MEAS Spec
- MEAS Opt
- CAL Cond
- CAL Spec

News in the program part Workplace

- Ongoing determinations can be protected against unintended live modifications while importing data from balances and barcode readers with the new option **Confirmation necessary to accept data during determination**.
- One can configure which sample data is to be transmitted from one single determination to the next.
- An ongoing command can be interrupted from the live display.
- The application notice of a method can be displayed while editing the sample table.

- Acoustic signal during data import at the workplace.

News in the program part Database

- Determinations can be searched and filtered in accordance with serial numbers (of instruments, dosing units).
- Determinations can be sent per E-mail directly from the database.
- A second y axis can be displayed in the **Curve evaluation** while reprocessing.
- It shows whether the method of a determination was modified live or during reprocessing.

News in the program part Method

- The measuring point list can be exported automatically as a CSV file.
- The formula editor contains a molar mass calculator.
- Methods can be sent directly via E-mail from the method administration.
- **Fixed values** for sample data can be defined in the properties of the method.
- One can specify in the configuration whether or not each track in the method is to be displayed or suppressed in the live display of the workplace.
- The text editor support hyperlinks.
- New look & feel.

News in the program part Configuration

- The user administration can be configured in such a way that only methods which are signed at Level 2 can be carried out.
- RS-232 instruments (balances, Titrinos) can now be connected to or disconnected from the program in the device table manually.
- If the option **Password monitoring by Windows** is activated in the security settings, then a test registration will be demanded automatically. This ensures that a user does not inadvertently lock himself or herself out of the program by activating this option.
- Contact data of E-mail recipients can be saved as E-mail templates.
- New configuration table **Sample solutions (TC conductivity)** for saving the calibration of temperature coefficients.
- Export and archive files of the audit trail now contain a checksum. The new **Verify export/archive** function in the Audit Trail sector can be used to check whether these files were modified afterwards.

News in the program part Manual Control

- Manual operation is now an autonomous program part that is accessible at all times through the vertical toolbar on the left-hand edge of the program.
- Measurements are now possible in manual operation.

3 Improvements

General

- Improved emergency stop which also shuts off pumps.
- *tiamo* starts faster.

Commands

- MEAS Cond
  The command has been completely revised. If MEAS Cond has already being used in a method that was created with *tiamo 1.x*, then the command parameters must be checked.

Workplace program part

- The designations of the sample data fields from the method are now displayed when a line in the sample table is being edited.
- The number of sample identifications has been increased from 8 to 16.
- Calculated and external measured values can be displayed as a live measured value.
- The statistics counter of the method is reset again with the new statistics series if it was increased in the preceding series.
- Configuration data of intelligent solutions is used even if the solution name is not defined in the method.

Database program part

- PDF reports now contain extractable text, e.g. for further editing with LIMS.
- Once the reprocessing has been completed, the determination remains selected in the database that had also been chosen during reprocessing.
- Any data field may be selected for display as a legend for the curve overlay. Furthermore, one can modify the configurations to determine whether all of the curves or only the last curve of the same command is displayed.

Method program part

- A wizard provides the user with support for adjusting the result templates to match the current method.
- The computer name is now contained in the text of E-mails which are generated automatically by the program.
- The **Round** arithmetic function of the formula editor now uses commercial rounding instead of bankers rounding.
- A method now contains its own entire history when it is exported and imported.
- Up to 9 fixed endpoints can be evaluated. The measured quantity which is evaluated can be selected separately for each fixed endpoint.

Configuration program part

- Improved handling of intelligent solutions and intelligent sensors.
- New type of **Conductivity sensor** with calibration data.
  The standard sensor **Conductivity sensor** is a new type of **Conductivity sensor**. The standard sensor **Conductivity sensor** from *tiamo 1.x* was of the type **Other sensor** and will be renamed in *tiamo 2.0* and no longer treated as a standard sensor.
- 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 one user is logged off automatically.
- Program start and program end are recorded in the Audit Trail.
- New USB 2.0 driver.

4 Fixed bugs and problems

General

- Exception errors when layouts are rearranged.

Devices

- Problems with Sartorius balances when weighing data is entered with more than 4 decimal points.
- Exception errors when filling at Titrino.

Commands

- Exception errors with MEAS pH when the measuring point list is absent.
- RECEIVE Start and End does not work for tracks.

Workplace program part

- Query of the modification comment with REQUEST, even when nothing has been entered there.
- Determination series statistics are deleted when one switches to single determination and back again.
- Exception errors with invalid measured values.
- Exception errors when compiling reports that contain JPEG files.

Database program part

- Exception errors when a curve has too few points and smoothing is set.
- Report output window can be empty.
- The backup directory is not automatically updated at the time databases are automatically backed up.
- Report templates are not found during recalculation if the determination was ended in the run via the error track.
- Exception errors when signing determinations if the database is being resorted at the same time.
- Smoothing of the curves in the report does not work.
- Problems with renaming databases if one database has a name with which the name of another database begins.
- Exception errors in the control chart dialog
- Partially incorrect sorting of endpoints if these are deleted manually and then reinserted.

Configuration program part

- Exception errors when importing the user administration in a client/server if it is open at the same time on another client.
- Problem with the focus in the user administration
- Exception errors with automatic sign-off when the user administration is open at the same time.
- Installation of a *tiamo* clients fails when the user administration is open on one client in the client/server system.
- The **Restore configuration data** dialog may appear to be empty.

Manual Control program part

- Volume display in the manual operation is not reset.

5 Compliance

The current software version does contain improvements regarding 21 CFR Part 11 and GAMP.

Herisau, 16th December, 2008

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