

1 Purpose

This document describes the differences between the new software version **tiamo 2.3 Patch 1 (Build 98-1)** and the version **tiamo 2.3 (Build 98)**.

2 New features

General

New determination examples for conductometric titrations are included in the delivery.

3 Improvements

Program part Configuration

- The limitation to two devices applies only for Metrohm devices (Titrino, Titrand, etc.); that means that balances and other generic (i.e. non-Metrohm) devices can be included without limitation.

4 Fixed bugs and problems

General

- Beginning with tiamo 2.3 (Build 98), communication between software and devices has been optimized.
- **Client ID** was output as text at various places (in the header of the PDF reports and of the report templates, in the program part **Database**, subwindow **Information** on the tab **Determination**, in the program part **Configuration**, subwindow **Global Variables** on the tab **Global Variable**), the associated value corresponded however to the name of the computer. **Client ID** has now been replaced by **Computer name**.

Program part Workplace

- If a method was programmed in which the check was required at the time of the Start for one or more method variables of the type **Number** (e.g. the **Sample size**) or **Date/Time** and which contained a **ERROR** track, then the exception wizard would appear in the program part **Workplace** at the start of the determination, after the message **014-152 Field empty** is exited (tiamo has crashed).
- If a method was written in which the file name did not have the extension **.pdf** in the **REPORT** command at the field **PDF file** (completely forgotten or only the period forgotten, e.g. **abc** or **abcpdf**), then this would lead to a crash at the start of a determination.
- If the digital output of the Avantes spectrometer was used (**CTRL** command), whereby a measuring command was also present in the method that used the same device, then the message **014-122 Device occupied** would appear.
- In the menu item **View ▶ Properties**, the properties of the respective live display have always been listed as **Properties Live display** instead of **Properties Live display #**.
- If it is determined during the Start Test that the wavelength of the calibration of the colorimetric sensor does not match the wavelength of the light source of the 089 Photometer in the command **MEAS Opt Conc**, then the message appears **014-042 Incorrect wavelength**. Instead of the value for the wavelength of the calibration of the colorimetric sensor, the value of the wavelength of the light source of the 089 Photometer would be specified in the message.

Program part Database

- If a determination was carried out with intelligent electrodes, then the ADC data (ADC type and serial number) of the analog (non-intelligent) measuring input at which the iConnect was connected was stored in the **Database**, subwindow **Information** on the tab **Configuration**.
- If a determination was carried out with the 089 Photometer, then the blank value was not subtracted in the database from the raw data **IME** and **EME** (initial and end measured values, respectively) associated with the commands **MEAS Opt** and **MEAS Opt Conc**.
- If determinations that were linked with one another statistically that also contained as results such things as the slope, the axis intercept and the correlation coefficient for linear regressions (variables **SLO**, **ITC**, **COR**) were recalculated in such a way that a determination or a result was switched off, then the recalculated results of slope, axis intercept and correlation were not correct.

Program part Method

- An 867 pH module present in the device configuration could in fact be selected as **Device type** in the command **ELT MEAS**, but not as **Device name**. This led to a situation where the electrode test could not be carried out with the 867 pH module.
- The description of **Fill automatically at end** was not correct in the online help for the **ADD** command.

Program part Configuration

- If a barcode reader and a balance were included first in the device configuration for the light version, then it was no longer possible to include Metrohm devices.
- The incorrect text designation for the colorimetric sensors was used (**Sensor** instead of **Colorimetric sensor**) in the user management under "Access rights for Group 'Group designation', Configuration, Functions".
- The online help for the dialog window **Limit values for colorimetric sensor – 'Name of the colorimetric sensor'** was not available.
- After a pH calibration, the calibration date is also entered on the tab **Calibration data** with the sensors, among other things. If, after a successful calibration, the intelligent sensor as deleted from the configuration and then included again, then the **Date ELT** could be seen in the field **Calibration date**.
- In the online help for **Export configuration data** and **Import configuration data**, the descriptions for **Export templates** and **Electrode type templates** were not available.
- If one cannot log in within the number of attempts specified in the security settings and if at the same time the option **Message by e-mail** is active, then an E-mail will be sent to the specified address. **Client name** was output as text in the subject line of this E-mail, for which the associated value corresponded to the name of the computer; **Client name** was replaced by **Computer name**.

Program part Manual control

- If the measurement of a spectrum with the Avantes spectrometer was aborted by pressing [**Stop**], then the Stop button would switch correctly to [**Start**], but the spectrum would continue to be recorded.

5 Compliance

The current software version does not contain any modifications that affect conformity of **tiamo** regarding 21 CFR Part 11 and GAMP.

Herisau, December 10, 2011



Dr. J. Kleimann
Vice President, Head of R&D



U. Kürsteiner
Head of Quality Management