

8.6 VS 8.5

Clarity (Lite)

ENG

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Sections of the manual connected only to the **Clarity Full** version are marked with the  icon.

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To facilitate the orientation in the **8.6 vs 8.5** manual and **Clarity** chromatography station, different fonts are used throughout the manual. Meanings of these fonts are:

Instrument (blue text) marks the name of the window to which the text refers.

Open File (italics) describes the commands and names of fields in **Clarity**, parameters that can be entered into them or a window or dialog name (when you already are in the topic describing the window).

WORK1 (capitals) indicates the name of the file and/or directory.

ACTIVE (capital italics) marks the state of the station or its part.

The bold text is sometimes also used for important parts of the text and the name of the **Clarity** station. Moreover, some sections are written in format other than normal text. These sections are formatted as follows:

Note: Notifies the reader of relevant information.

Caution: Warns the user of possibly dangerous or very important information.

Marks the problem statement or trouble question.

Description: Presents more detailed information on the problem, describes its causes, etc.

Solution: Marks the response to the question, presents a procedure how to remove it.

1 Preamble

This document will guide you through the news and improvements in the **Clarity** Chromatography Station version **8.6** compared to version **8.5**.

The most interesting features of version 8.6 include:

- User Accounts – new user right to take control over locked Instrument
- Sequence – new option to set routines being run after the sequence finishes
- Report Setup – Sample Parameters option more granular
- Report Setup – possibility to report also vial number and injection number
- Miscellaneous – new system for programmer logging (replacing the logging.ini settings)

The list of all changes is available in the What's New document available from the software.

2 Clarity

2.1 User Accounts ✓ Full version

2.1.1 A new user right to take control over locked Instrument

A new *Take Control of Locked Instrument* user right ① has been added to the **User Accounts** dialog, it allows users to unlock **Clarity** Instruments locked by different user. This allows for changing shifts without having to interrupt the running sequence.

Fig 1: User Accounts - Take control over locked Instrument

The possibility to lock the **Instrument** was in **Clarity** before and it allows to prevent unauthorized access to the **Clarity** Instrument even at moments when analysis is running. However, before **Clarity 8.6** users can control only the **Instrument** which was locked by themselves earlier.

Newly, the user in whose account the *Take Control of Locked Instrument* option is checked can unlock also the **Clarity** Instruments locked by any other user and take control over them.

Note: The user can take control over the Instrument only if he has allowed access to the specific Instrument (in section Access to).

2.1.1.1 Discarding of unsaved changes

Since **Clarity 8.6**, when the **Instrument** is being locked, the modal dialogs (e.g., **Method Setup**, **Single Analysis**, **Report Setup**, ...) will be closed and unsaved changes will be discarded. Changes to files opened in other windows (calibrations, chromatograms, sequences) will be discarded only after another user takes control of the locked Instrument. A warning will be displayed about any non-saved files in the moment of the manual locking of the **Instrument** window by original user.

2.1.1.2 Logging

Any operations that happen automatically on the **Instrument** while it is locked are logged under the name of the last user logged to the **Instrument**, any changes taking place after the **Instrument** has been unlocked by a different user will be logged under the name of the new user. This allows to monitor and report clearly what changes each user made on the station.

2.1.1.3 Different access right of the users

Please note that, after unlocking the **Instrument** by different user, new user may not have some access right to files or actions the original user had (e.g., new user may not be able to start the analysis or edit the calibration), but the analysis/sequence under way already performs such actions. Such actions are still completed as they were started by a user who had the right to perform them, the new user will not be able to change the course of actions in any other way then stopping or aborting the analysis or sequence.

2.1.1.4 Shared desktop

The desktop file (user settings) ② used on the **Instrument** is the desktop file of the original **Instrument** user. It is thus advisable to set the station in a way that users share the same desktop file (see **User Guide** for more details).

2.2 Sequence

2.2.1 A new option to set routines being run after the sequence finishes

Sequence Options dialog now contains a section that defines the behavior of the sequence after it finishes or is stopped by the user:

Fig 2: Sequence Options - sequence shutdown options

At the end of the sequence a set of actions may happen in the following order:

- A dedicated shutdown method will be sent to the instrument
- The same dedicated shutdown method may be run
- **SHUTDOWN** event will be sent to all control modules configured to the [Instrument](#)

2.2.1.1 Send shutdown method

Sending the dedicated method ① may be enough in case the method contains for example a command to switch off detector lamps or set 0 pump flow. The method will be sent to the hardware and the state of [Clarity Instrument](#) then changes to **NOT READY - NO METHOD SENT** to indicate that sending a method dedicated for the measurement is needed in order to continue working with the [Instrument](#).

2.2.1.2 Run shutdown method

In some cases, just sending the method is not enough. Such sent method may be then run ② in order to reduce flow very slowly not to damage a sensitive column or to also perform some program such as rinsing the injection needle thoroughly before the switch off. While such method is being run, it is displayed in the [Instrument](#) window. If the system contains also an autosampler, it may be also necessary to define some minimum parameters used for injection ③.

2.2.1.3 Perform shutdown

In yet another case, a shutdown command ④ may be sent to the connected hardware and the hardware may react on it in it's own way. In case the method is being sent and possibly also run, the shutdown happens after it has finished.

Note: The access to the [Sequence Options](#) is prohibited while the sequence is already running, so it is impossible to change the behavior ex post. The operations defined in the After sequence is finished section may be performed several times during the lifetime of the sequence (for example in a case when sequence has been run, finished, then new lines were added and then the sequence is resumed, it would perform the finishing routine again).

Note: When the user does not want the sequence to perform the finishing routine but wants the sequence to stop, the Abort command may be used to stop the running sequence without performing the routine. If the abort should happen after the current analysis is finished, Pause function should be used and the Abort should be used on the paused sequence.

Note: In case the sequence is paused during the last injection execution and no new lines are added, the sequence will be stopped after finishing the run and scheduled operations will be performed.

2.3 Report Setup

2.3.1 Sample Parameters option more granular

In the **Report Setup** dialog, the **Report Header** tab *Sample Parameters* option has been divided into multiple sub options:

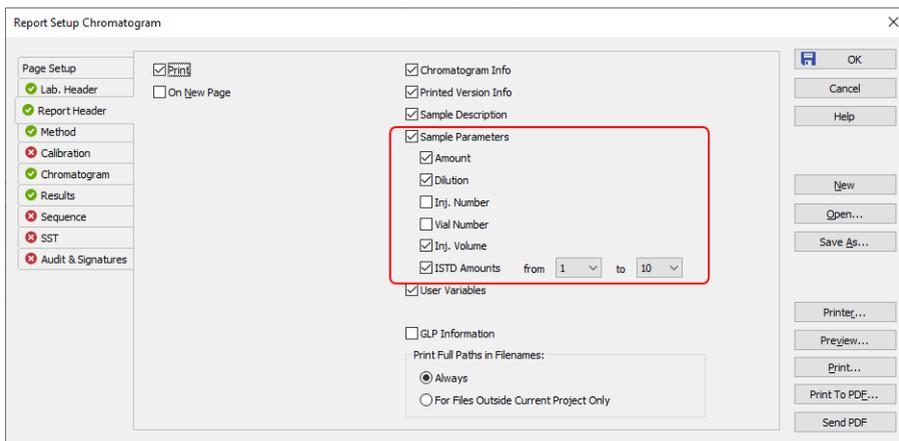


Fig 3: Report Setup - Report Header - Sample Parameters more granular

Individual parts from the parameters list may be now separately added or removed from the report and the number of the *ISTD Amount* values may also be customized.

2.3.2 Possibility to report also vial number and injection number

An option to report *Injection Number* and/or *Vial Number* has been added to the **Report Setup** dialog, **Report Header** tab:

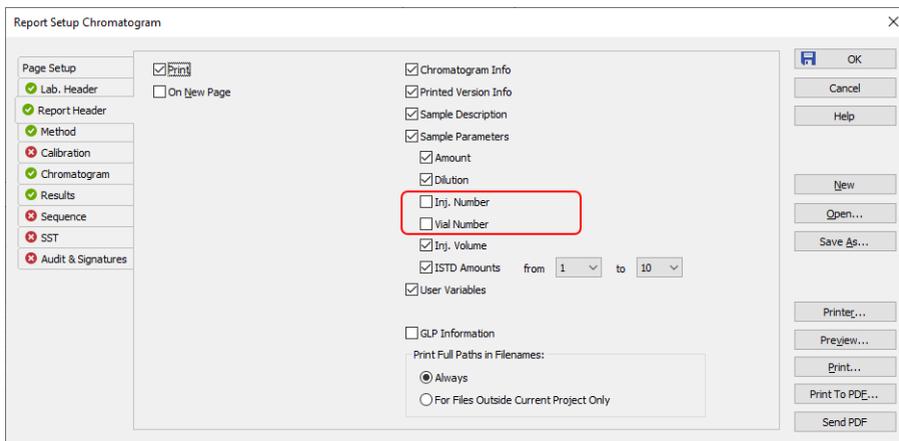


Fig 4: Report Setup - Report Header - added Vial Number and Inj. Number

These values may be stored in the chromatogram from the sequence (both *Vial Number* and *Inj. Number*) or single analysis (*Vial Number*) if they were defined. Chromatograms measured before **Clarity 8.6** may show *n/a* result for both values.

For autosamplers which allow alphanumeric vial numbering, the alphanumeric vial position is displayed along with ordinal position number.

2.4 Miscellaneous

2.4.1 New system for programmer logging (replacing the logging.ini settings)

A new system of events logging has been introduced in **Clarity** 8.6. It replaces the logging activated by the LOGGING.INI file. This new system makes the logs switched on by default and more complete, which helps in diagnosing possible station problems.

In order to prevent the growing log size on the hard drive, only recent log files are kept and older files are deleted.

Note: Logs are deleted when their overall size exceeded 50 MB. It is checked when closing Clarity, at midnight or when exceeding the maximum size of one log file, which is 1 MB.

Logs provide additional info to the Station Audit Trail. They will be newly added to the list of requested diagnostic files when reporting a problem.

3 New and updated control modules

This section contains new and updated control modules introduced in Clarity **8.6**.

Testing state is dedicated for new control modules.

Ready state is dedicated for existing control modules that have been updated or somehow improved.

3.1 CTC

Updated:

- PAL3 RC.NET driver for ICF updated to version 1.7.5.

3.2 Ecom

Updated:

- Ecom ECS2000 System - ECF 2000 control module is now in the Ready state.
- Ecom ECDA2000 control module is now in the Ready state.
- Ecom ECDA2000/Welch 5430 control module updated to version 2.7.0.0.
- Ecom ECP2000 control module updated to version 3.8.0.0.
- Ecom Toy control module updated to version 2.0.0.0.

3.3 Knauer

Updated:

- Knauer HPLC control module updated to version 8.5.0.6056.

3.4 PerkinElmer

Updated:

- PerkinElmer NexION control module updated to version 1.2.0.97.

3.5 Sykam

Updated:

- Sykam S150 control module updated to version 3.0.0.0.
- Sykam S1130 control module updated to version 2.0.1.21.

3.6 Unimicro

New:

- Unimicro EasySep-3030 Pump control module is now in the Testing state.
- Unimicro EasySep-3030 Thermostat control module is now in the Testing state.

- Unimicro EasySep-3030 UV Detector control module is now in the Testing state.
- Unimicro EasySep-3030 UV/VIS Detector control module is now in the Testing state.

3.7 Vici Valco

Updated:

- Vici Valco TCD3 control module updated to version 1.0.0.10.

3.8 Young In Chromass

New:

- Young In Chromass YL3050A control module is now in the Testing state.

Updated:

- Young In Chromass YCChroZenAS control module updated to version 1.0.0.11.
- Young In Chromass YCChroZenColumn control module updated to version 1.0.0.7.
- Young In Chromass YCChroZenPump control module updated to version 1.0.0.13.
- Young In Chromass YCChroZenUVD control module updated to version 1.0.0.11.
- Young In Chromass YCChroZenPDA control module updated to version 1.0.0.3.
- Young In Chromass YCChroZenGC control module updated to version 1.0.1.22.
- Young In Chromass YCChroZenGCMS control module updated to version 1.0.1.11.
- Young In Chromass YL9120 control module updated to version 4.0.4.21.
- Young In Chromass YL9130 control module updated to version 4.0.2.21.
- Young In Chromass YL9150Plus control module updated to version 1.0.1.13.