DataApex
Clarity™
CHROMATOGRAPHY SOFTWARE

7.3 VS 7.2

Clarity Software   ENG

Phone: +420 251 013 400   DataApex Ltd.

Fax: +420 251 013 401   Petrzilkova 2583/13

clarity@dataapex.com   158 00 Prague 5

www.dataapex.com   The Czech Republic

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

Contents

To facilitate the orientation in the **7.3 vs 7.2** 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 **7.3**.

- -

Note: Version **7.3** serves primarily as service packs, concerning stability and fixing of found bugs and thus number of new features is limited.

The most interesting features include:

- Improved *Method* logic.
- Improved GLP logging - tracking version of documents.
- Audit Trail improvements - new columns to read localized information.
- New GLP option prohibits to overwrite existing files.

2 Clarity

2.1 New Method editing logic

There was some misunderstanding about which method is opened on the Clarity instrument or which is being used to acquire chromatogram. Therefore we have decided to re-think it and improve it.

2.1.1 Basic terms

In Clarity we do not differentiate between acquisition part of a method and a processing part. Both parts are interlaced within the method.

Method that is opened on the Instrument may however differ from method that is being used to acquire chromatogram. In majority of cases, it will be the same, but it's important to note that there is a difference.

For example in **Fig 1** on pg **2**., method *Demo1* is in terms of Clarity method opened on the Instrument ①

Method *Ethanol in Blood* ② is on the other hand is being used in the currently running analysis.

This situation can be achieved by starting an analysis (either *Single Run* or *Sequence*) and then creating/opening a different method in the Instrument window. In this way a user can work with a different method without the need to stop the current analysis.

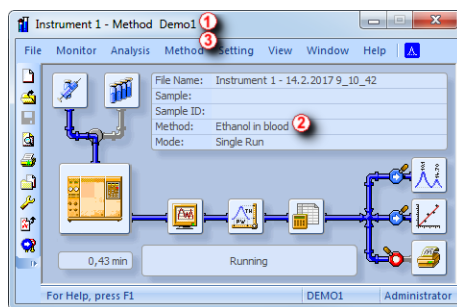*Method* menu ③ opens respective tabs of Method Setup for method opened on the Instrument, i.e. for Demo1.

Fig 1: Instrument window

Information in the header of the Single Analysis dialog clearly displays the method (*Demo1* ④) which will be used for the subsequent analysis. *Method* button ⑤ invokes Method Setup dialog for the method opened in the Instrument window. Similar logic applies to the *Send Method* button ⑥ which sends the method opened in the Instrument window. In both cases, *Demo1* will be used.
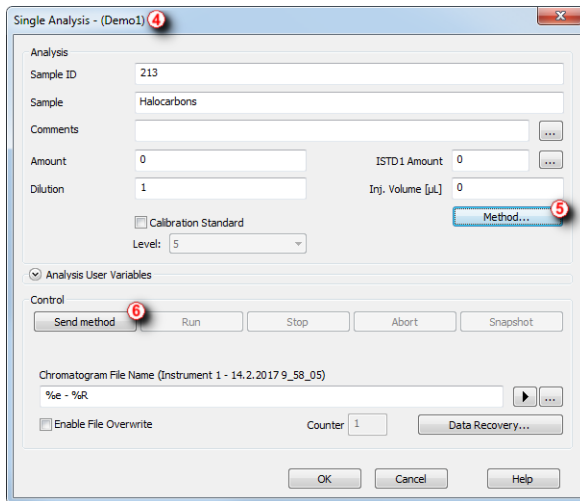
Fig 2: Single Analysis *dialog*

Methods modified directly from Sequence are automatically saved upon clicking *OK* in the Method Setup dialog in order not to lose the changes.

2.1.2 New Method

Since Clarity **7.3**, pressing the *New Method* or ![icon] ① will open Method Setup on the *Measurement* tab.
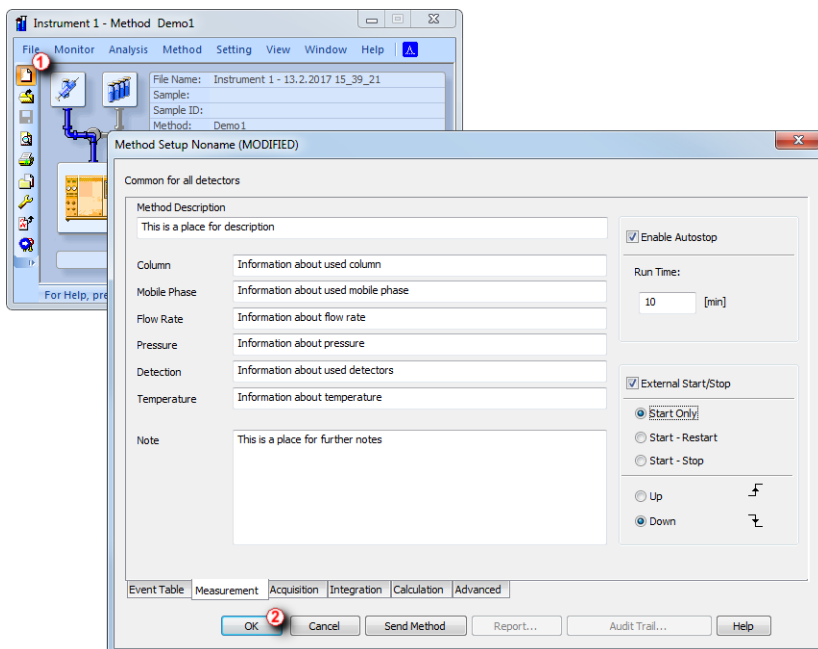

Fig 3: Method Setup- *Noname method*

Once you are satisfied with the changes, click *OK* ②, *Save As* dialog pops up allowing to save the newly created method. You will be asked whether you want to send the newly created method to the connected hardware.

If you do not wish to keep the changes, press *Cancel* and the previously opened method will be displayed in the *Instrument* window.

2.2 Good Laboratory Practice (GLP) ✓Full version

Good Laboratory Practice is very important to our users, thus we always try to respond to GLP issues with the utmost importance.

2.2.1 New GLP option ✓Full version

In order to give our users stronger tools regarding GLP, we have introduced the option ① to prohibit users from overwriting existing (using *Save As*) documents such as methods, calibration, chromatograms, etc.. Users are notified about the conflict and must choose a different filename in order to save it.

It is set in the GLP Options dialog, accessible from the main Clarity window in the menu *System - GLP Options....*
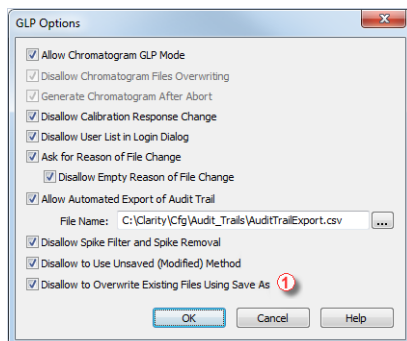

Fig 4: GLP Options

This option is among the settings necessary to comply with 21 CFR part 11 regulations. More information can be found in the M132 manual regarding Clarity in regulated environment.

2.2.2 Unauthorized and Development versions of CTRL modules
✓Full version

Unauthorized control module could mean several things:

- the control module has not been installed correctly
- the version of the control module was not intended for the respective installation of Clarity
- the control module has not passed DataApex internal testing procedures

In either scenario, DataApex is not liable for correct functionality of the given control module. It is important to acknowledge that any unauthorized control module may be responsible for incorrect functionality of Clarity.
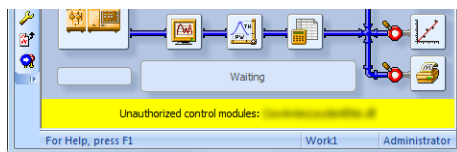
Fig 5: Unauthorized control module - stripe

Development version of control module means that it is still under development and have not yet passed DataApex all quality assessment tests. Once it will be tested and approved, it will be released and the yellow stripe will disappear.
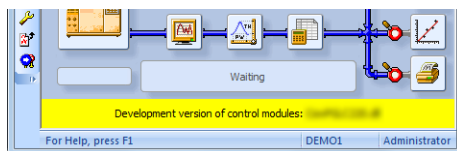

Fig 6: Development version of control module - stripe

From the GLP point of view, both of those situations pose a functional issue which can be attributed to third parties who also develop control modules for Clarity. **Therefore any chromatogram acquired with an unauthorized control module or a module under development will contain information about it in Audit Trail**.

2.2.3 Access to Digital Outputs ✓Full version

Digital Outputs dialog, accessible from the main Clarity window, now requires to have the right to open System Configuration in order to make changes. This is to ensure that only responsible person can set the initial state of the system.
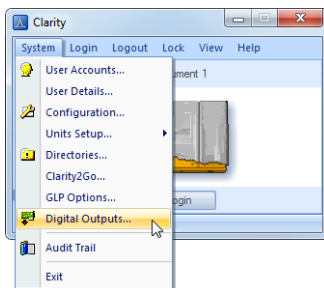

Fig 7: Main Clarity window - Digital Outputs... option

2.2.4 Other GLP changes ✓Full version

- More detailed Audit Trail logging was implemented regarding changes made in the Method Setup.
- Chromatogram opened with previous version from history is read only and cannot be edited.

2.3 Installation

Clarity **7.3** is no longer supported on the following operating systems (OS):

- Windows Vista - in order to update to Clarity 7.3 or later, it's compulsory to update your OS to a newer version, i.e. to Windows 8.1 or Windows 10.
- Windows 8 - users can simply download the latest update package from Microsoft and thus easily migrate to supported Windows 8.1 where Clarity 7.3 is supported.

Note: Read the following link on how to update to Windows 8.1 from Windows 8 (https://support.microsoft.com/en-gb/help/15288/windows-8-update-to-windows-8-1)

2.3.1 Control modules using .NET ✓Full version

.NET is a framework developed by Microsoft. Several of our control modules are using .NET libraries and thus specific version of .NET may be required for correct functionality.
Control modules requiring some version of .NET are placed in the **FULL** installation. If your configuration does not contain any of the following control modules, simply select the **TYPICAL** installation. Alternatively, you can select **CUSTOM** and deselect the respective control modules:

- Agilent ICF
- CTC PAL
- Markes International BenchTOF

Because Clarity installer does not install necessary version of .NET automatically it's on the user to obtain a corresponding version. During the installation, user will be notified what version is necessary for correct functionality.
For more information about the specific version of .NET please visit our FAQ - Problems with control modules using .NET (http://www.dataapex.com/dotnet)

2.4 Various changes in Clarity 7.3

- Instrument window settings found in the menu *View - Options* was moved to the menu *Settings - User Options* where it is more relevant.
- Method Setup on the *Acquisition* tab, shows which detectors are Enabled/Disabled.
- Changes in the Method Setup on the Measurement tab made during acquisition are now propagated to the measured chromatogram.
- Changed behavior for methods edited from the Sequence window. Method edited from the Sequence window is automatically saved upon pressing the *OK* button in the Method Setup - different situation than editing method from the Instrument window. This is to make sure that after leaving the Method Setup dialog, no changes to the method will be lost.
- Support for export of auxiliary signals in txt format from the Chromatogram window has been implemented.
- New columns in the Audit Trail to ease reading localized information. Columns in English are hidden by *Default* but may be displayed upon request.
- *Amount* column is now displayed in the Calibration window - *Calibration Details*.
- New read only column called *Quantify On* was added to the Calibration - in the MS Extension.
- Improved behavior of zooming in the Chromatogram window upon selecting peaks - in the MS Extension.
- Upon applying *Global Filter Bunching* in the Chromatogram window, user is now notified about the value it has been changed from to.
- Size of communication records and program logs is limited to 100 MB (used during troubleshooting) - after exceeding this size, the log will be renamed by adding a consecutive number.
- Dialog for Sequence *Import* is newly re-sizable - for better viewing.
- *Fill Down* and *Fill Series* commands have been amended for the *SV* and *EV* columns to correctly paste data.

3 New and updated control modules ✓Full version

This section contains new and updated control modules introduced to Clarity.

3.1 Advion

Updated:

- Advion Expresion CMS - API updated to version 3.2.7.1.

3.2 Agilent

Updated:

- Agilent ICF libraries updated to version A.02.04.
- Device Monitor especially in the GC mode was improved.
- Option to start run in Clarity over communication line was implemented.
- Agilent 1100 - the GP-IB communication is not supported on Windows 7 and higher.

Note: Please note that control of the GC 6850, 6890, 7820 and 7890 using ICF libraries is still under development and issues may arise.

3.3 Dani

Updated:

- Master GC driver - updated to version 1.6.6.0.

3.4 DataApex

Updated:

- Column Usage Monitor - control module by UNI-RUBY script is now in the Released state.

3.5 Ecom

Updated:

- Ecom Kappa 10PP pump - control module is now in the Released state.
- ECDA2000 driver - updated to version 1.6.0.0.

3.6 Elysia-raytest

New:

- Gabi Nova - control module is now in the Testing state.
- Ramona Star - control module is now in the Testing state.

Updated:

- Gabi Star radiodetector - control module is now in the Released state.

3.7 HTA

New:

- HT1000L autosampler - control module is now in the Testing state.

3.8 Microsaic

Updated:

- Microsaic 4000 MiD mass spectrometric detector - control module is now in the Released state.

3.9 Postnova Analytics

New:

- Postnova Analytics PN5300 autosamopler - control module is now in the Released state.

3.10 Recipe

New:

- Recipe amperometric detector EC6000 - control module is now in the Testing state.

3.11 Sedere

Updated:

- Sedex Sedere 100 detector - control module is now in the Released state.

3.12 SSI

Updated:

- SSI Next Generation pumps - control module is now in the Released state.

3.13 Vici - Valco

Updated:

- Vici Valco multi-position valve set as an autosampler control module by UNI-RUBY script is now in the Released state.

3.14 YL Instrument

New:

- YL9600 MS detector - control module is now in the Testing state.

Updated:

- YL6900MS driver - updated to version 1.0.0.2.