DataApex

Clarity ™

CHROMATOGRAPHY SOFTWARE

7.4 VS 7.3

Clarity (Lite)   ENG

Code/Rev.: M222/70B
Date: 9/20/2017

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 **7.4 vs 7.3** 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 **7.4** compared to version **7.3**.

The most interesting features of version 7.4 include:

- Improvements in the Calibration window
- Improvements to GLP compliance
- Changes related to Agilent ICF
- Various Clarity improvements and bug fixes
- New and updated control modules

2 Clarity

2.1 Calibration

Calibration window has undergone a major change - new option to (re)calibrate *on All Signals* / *on Active Signal* has been implemented.

Note: This option makes sense only for standards with more than one signal. For single signal chromatograms, this function has no effect to *Add All*, *Add Existing*, *Add Peak*, *Add Group* and *Add Named Group* commands - in the sense that the outcome will be same as in the previous versions.

This option governs on what signal will be the peaks (compounds) from the standard chromatogram added - whether it will be on all signals or only on the active signal.

New calibration will always be created with the default option - *on All Signals*.
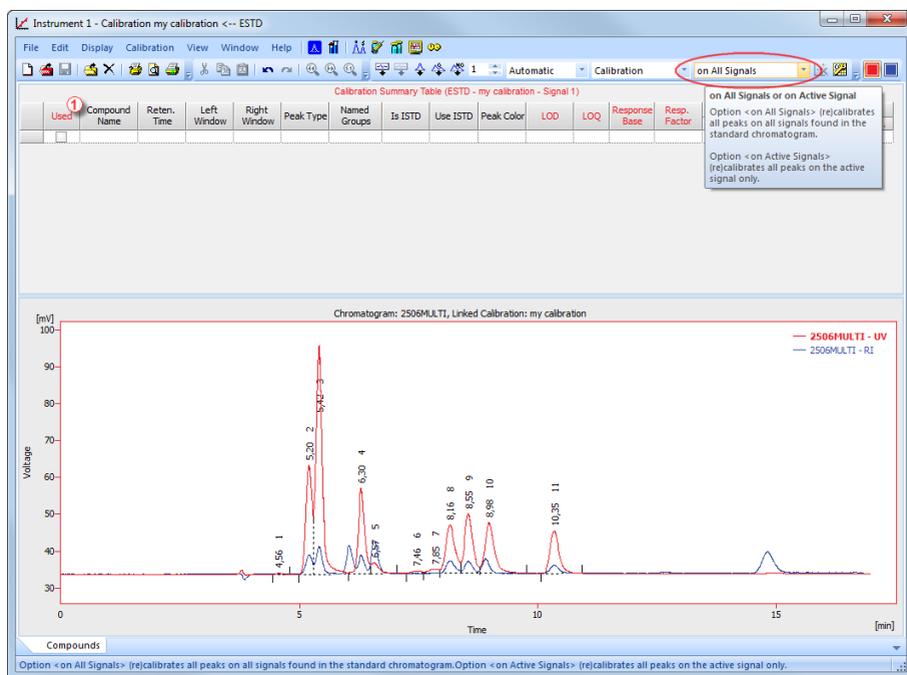
Fig 1: Calibration - on All Signals

Pressing the *Add All* icon in the example above, adds all peaks from the active signal (2056MULTI - UV) and because option on *All Signals* is selected, automatically performs *Add Existing* command on the 2056MULTI - RI. This means that all peaks from the 2056MULTI - UV signal will be added (filled *Response*). Peaks that are found on the

2056MULTI - RI but not on 2056MULTI - UV signal, will not be added. This is because command *Add Existing* is performed - no new peaks are added on the subsequent signals while option *on All Signals* is selected.

The *Used* checkbox ① (from the *Calibration Summary Table*) of a compound serves multiple purposes:

- It allows to prohibit the use of a selected compound - meaning that unchecked compound will not be used for quantification.
- It serves as a check that two compounds do not have the same retention time on one signal - if this situation occurs, user is notified via a message box.
- Only compounds with checked Used checkbox will be (re)calibrated.

Note: If you are not sure what a specific command does, simply point mouse cursor over it and a tool tip with explanation appears (like in the image above).

2.2 Good Laboratory Practice (GLP) ✓Full version

GLP is for us the top priority and for this reason we are continually working on ways to ensure Clarity stays compliant ready. Based on experience from our customers and external auditors we have implemented the following features:

- Closing of a chromatogram in the Chromatogram window will be recorded in the Station Audit Trail.
- Changes in the PDA method will be recorded in the Method Audit Trail.
- Creating new sequence or calibration file will be recorded in the Station Audit Trail.
- *Ask for Reason of File Change* command from the GLP Options dialog is now applied also in the System Configuration dialog where the user must specify why has the configuration changed.

2.3 Agilent Instrument Control Framework (ICF) ✓Full version

Agilent ICF is a framework that allows us to control Agilent instruments and at the same time to have same functionality and visual appearance of control modules as in the software developed by Agilent.

Version **7.4** brings several changes:

- Listing of ICF control modules in the installer has been reorganized - ICF has its own section containing Agilent LC and Agilent GC.
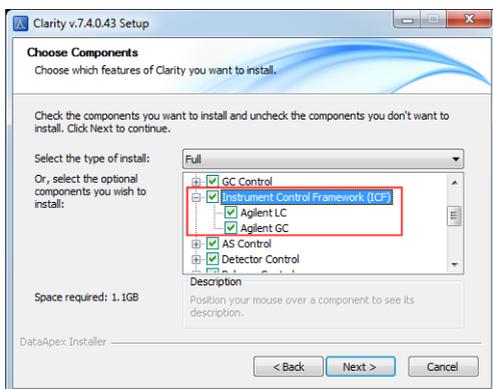
- It is no longer possible to install ICF on Windows XP and Windows Vista - Agilent itself does not officially support these operating systems.

Warning: Please note that any configuration regarding Agilent ICF for GC must be configured newly after update to Clarity 7.4. We are sorry for this inconvenience which has been caused by the reorganization of the installation.

2.4 Various changes in Clarity

- Check against invalid filenames and paths (such as length and invalid characters) has been implemented. Inserting invalid character triggers a warning which you have to remove.
- Extension CE: *Column Length* option has been removed from the *User Columns*.
- Extension EA: *Measurement* tab of the Method Setup dialog now displays amended description of the fields to better suit the terminology of the elemental analysis.
- Extension EA: *Sample Amount* column in the Sequence table has been renamed to *Sample Weight*.
- Extension GPC: added possibility to export *Ranges Table* and *Slice Table* to *.dbf format - export of *Result Table* in fixed format has been left unchanged.
- Graph Properties dialog as well as Verify Signatures dialog are now resizable.
- Device Monitor window is resizable, making it easier to organize Clarity windows on your display. Simply go to *View* menu and deselect the *Fit to Content* option - change size of the window to fit your needs.
- Support for Y- axis name in the chromatogram is now available for export/import of ASCII files. Additionally, *Preset* during import chromatogram has been improved.
- *Event Table* in the Method Setup newly supports variables for *Sample* (%q), *Sample ID* (%Q), *Chromatogram* (%K), *Method* (%J), *Sequence* (%s), *Vial Number* (%v) and *Injection Number* (%i) - all mentioned parameters can be used for external programs.
- *Fill Series* command in the Sequence table has been improved and now supports alphanumeric numbering of vials.
- Various known bugs have been fixed. See *What's new* in the About dialog of your Clarity.

3 New and updated control modules ✓Full version

This section contains new and updated control modules introduced in Clarity **7.4**.

3.1 Advion

Updated:

- Advion Expresion CMS - API updated to version 4.0.13.8.

3.2 Agilent

Updated:

- Agilent ICF libraries updated to version A.02.04.DU1

3.3 Knauer

Updated:

- Knauer AS 6.1L autosampler - control module is now in the Released state.
- Knauer drivers updated to version 7.04.000.5053.
- All Knauer control modules are now displayed under a single item within the Installer. Possibility to install only a single selected driver had been abandoned.
- Knauer drivers for Fraction Collectors are now available, Knauer FRC option is necessary. Contact directly Knauer company to purchase respective license.

3.4 Shimadzu

Updated:

- Shimadzu GC2011/2014 - value of detector flow gas had been implemented in the Device Monitor.

3.5 Spark

New:

- Spark SPH1299 pump - control module is now in the Testing state.

3.6 YL Instruments

Updated:

- YL Instruments YL9900 MS detector - control module is now in the Released state.