DataApex
Clarity™
CHROMATOGRAPHY SOFTWARE

8.1 VS 8.0

Clarity (Lite) ENG

Code/Rev.: M227/80A
Date: 11/22/2018

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

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Contents

To facilitate the orientation in the **8.1 vs 8.0** 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 **8.1** compared to version **8.0**.

The most interesting features of version 8.1 include:

- Changes in the Instrument window related to acquisition control
- Improvements in MS Extension
- New and updated control modules

2 Clarity

2.1 Instrument

2.1.1 Acquisition Controls

Option to control analysis directly from the Instrument window has been implemented. The icons for controlling the analysis are located in the *Status* line. They change contextually depending upon the *Status*. For example, in the image below, the *Status* reads: No method sent.

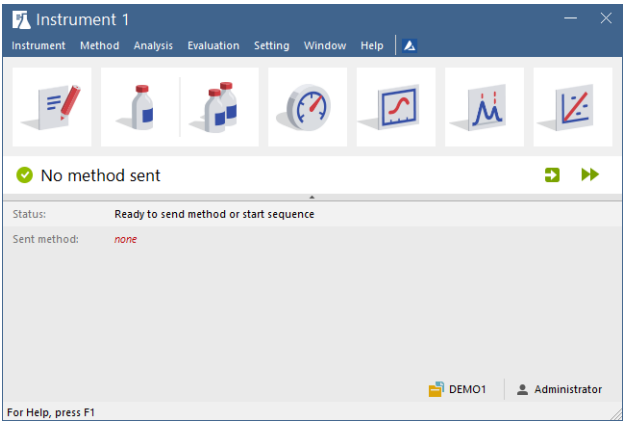

Fig 1: Instrument - No method sent

In this particular situation the user has the option to either:

- *Send Method* by pressing icon which sends method selected in the Single Analysis dialog or
- *Run Sequence* by pressing icon - Sequence window must be opened

Once a method has been sent and the Instrument is *Ready*, user can *Run Single Analysis* .

When the Instrument is *Running*, the available options are to *Stop* and *Abort*

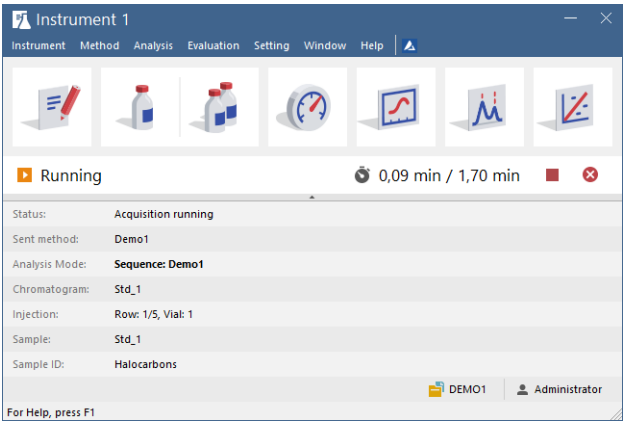

Fig 2: Instrument - Running

2.1.2 Pre-configured Acquisition Controls toolbar

The contextually displayed icons for controlling analysis do not show all possibilities. Thus if you require to have other icons for controlling analysis, we have prepared a pre-configured toolbar with additional icons such as *Snapshot*, *Repeat Vial* and *Skip Injection* as well.

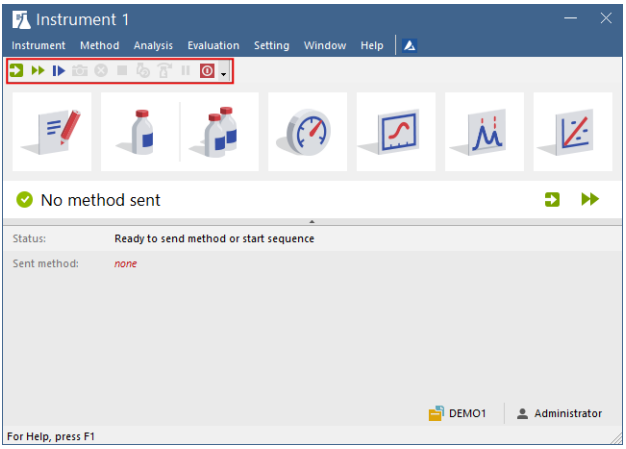

Fig 3: Instrument - Acquisition Controls toolbar

If you wish to add the pre-configured toolbar into the Instrument window, simply go to menu *Setting - Toolbars - Acquisition Controls*.
New toolbar is then placed below the main menu. Using the *Customize* it can also be placed vertically on sides of the Instrument window.

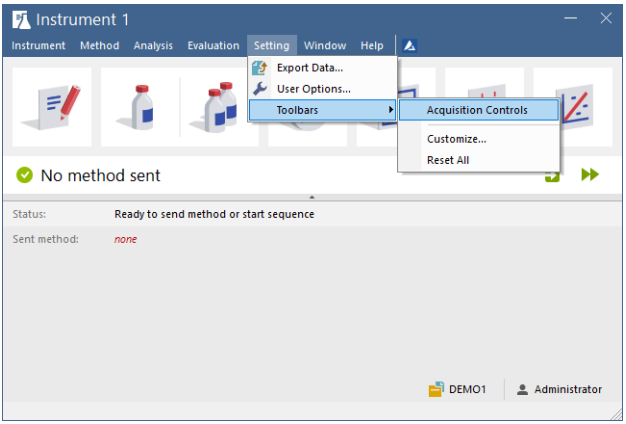

Fig 4: Instrument - menu Setting

2.1.3 Improved tooltips

Tooltips now provide more information about what file(s), if any, will be opened in the respective window/dialog. See example tooltip for Method Setup:

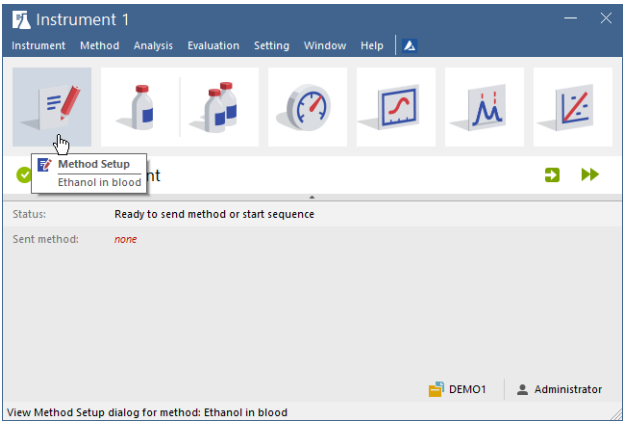

Fig 5: Instrument - Method Setup tooltip

2.2 MS Extension - enhancements Full version

2.2.1 Add Temporary m/z Signal Manually

This function was improved by allowing to set multiple discrete m/z values as well as insert an interval (range of m/z values). Simply go to *MS* menu in the Chromatogram window and select *Add Temporary m/z Signal Manually* option.

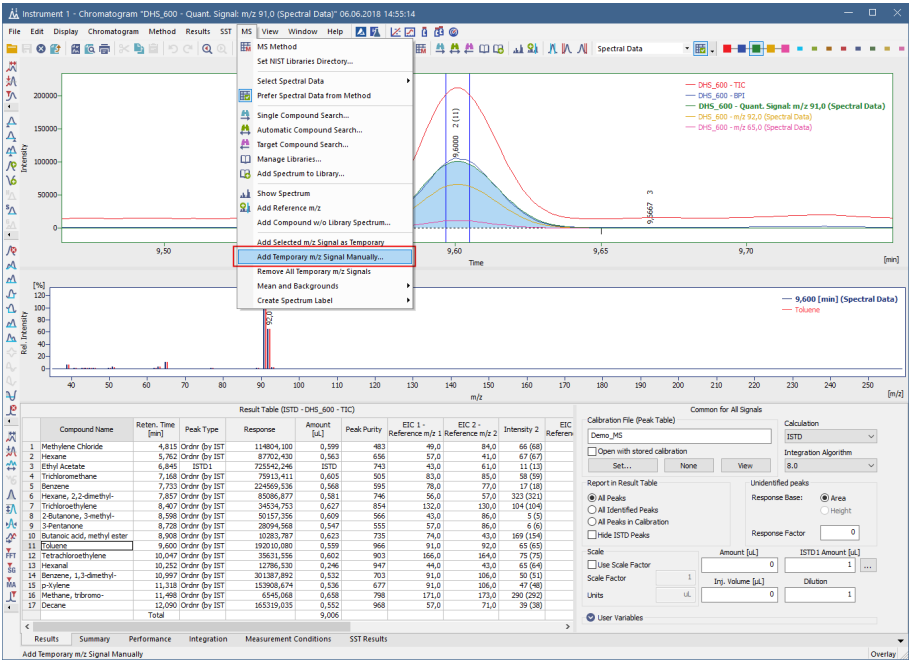

Fig 6: MS menu - Add Temporary m/z Signal Manually

Upon selecting the option, dialog for inserting values (either discrete m/z or range of m/z values) pops up. Move mouse cursor over the information icon to see how to insert multiple values.

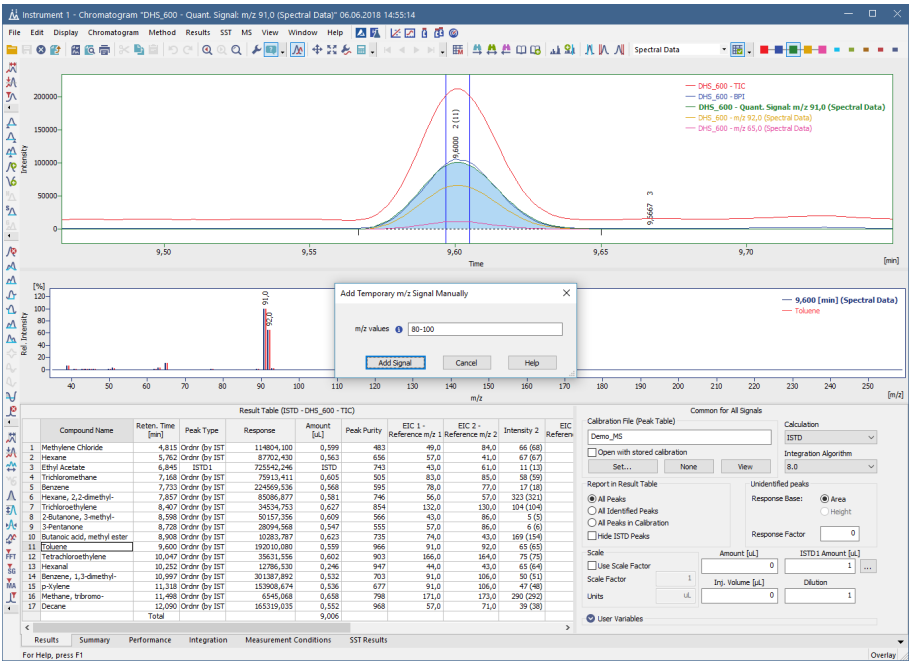

Fig 7: Add Temporary m/z Signal Manually dialog

Confirm the inserted m/z values by clicking the *Add Signal* button.

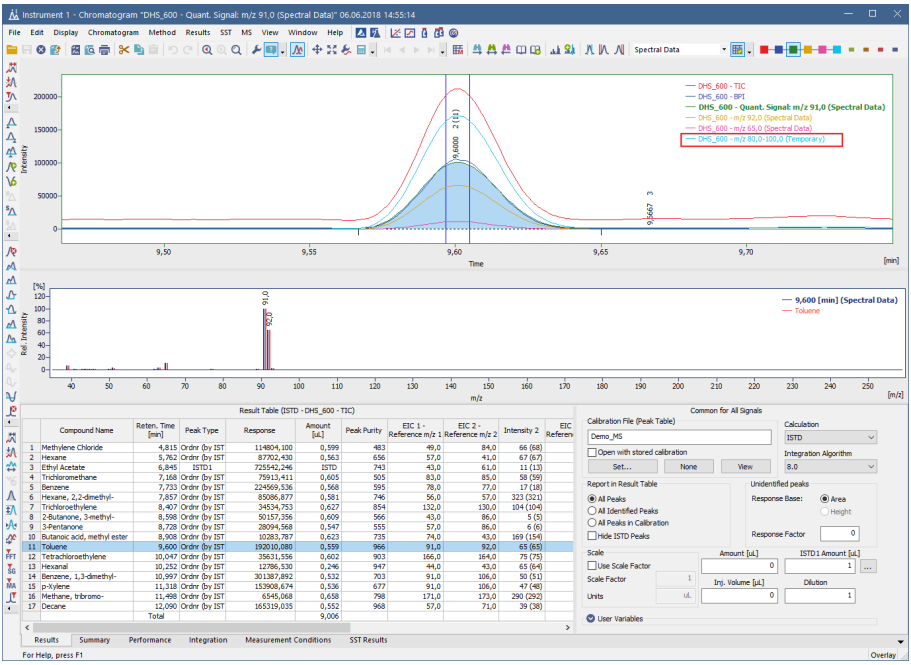

Fig 8: Added Temporary m/z Signal (see legend)

Notice that your chosen m/z signal is displayed along with the rest of the signals in the legend of the chromatogram view. Generated signal is only temporary which is indicated by a *TEMPORARY* suffix within the legend. Since the signal is only temporary, it will not be saved upon closing the chromatogram or the Chromatogram window. Therefore next time the chromatogram is opened, such generated signal will not be displayed.

2.2.2 Show Spectrum

The *Show Spectrum* function has been improved by displaying spectrum immediately while moving cursor in the chromatogram view, thus allowing to display spectrum without the necessity to click in the chromatogram.

2.2.3 Target Compound Search

Edit box for a more convenient and precise insertion of value for minimum match factor was added onto the *Target Compound Search* tab in the MS Search dialog.

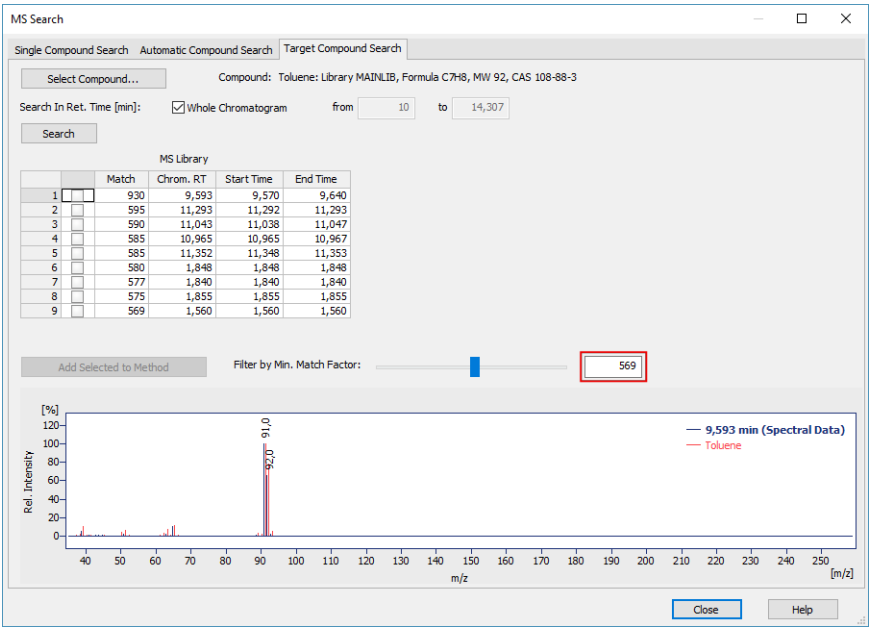

Fig 9: MS Search - Target Compound Search tab

2.2.4 Minor MS changes

- *Enhanced Format* option (located in the Graph Properties) allowing to set custom information for peak tags was not functioning correctly and was thus temporarily disabled in the MS extension.
- Improved labels for signals displayed in the Summary Table. Now it displays which *Result Table Signal* is being displayed. Signal can be changed on the Measurement Conditions tab - MS Method tab.
- Optimized and thus faster opening of MS chromatograms.
- Improved synchronization between peak selected in chromatogram and compound selected in the Result Table and MS Method.

2.3 Other changes

- System Configuration dialog is now re-sizable for better readability.
- Control modules communicating with Clarity via UNI-RUBY interface - used COM port will be closed upon closing Instrument window (previously at closing the entire station).
- Added support for *User Columns* using contextual menu (right mouse click) in the *Summary Table*.
- New folder DOCUMENTATION in the Clarity installation structure (includes manuals and datasheets moved from \BIN\DOC_PDF folder).
- LC - Initial value for *Max. Pressure* in the Set Flow dialog (invoked from Device Monitor) can be set in the Method Setup - LC Gradient tab - *Options...*.
- Various known bugs have been fixed. See *What's new* in the About dialog of your Clarity.

3 New and updated control modules

This section contains new and updated control modules introduced in Clarity **8.1**.

3.1 Agilent

New:

- Support for injection overlap for selected samplers is available for testing.

Updated:

- Agilent - ICF libraries have been updated to version A.02.05.

3.2 Analytik Jena

New:

- PlasmaQuant ICP-MS control module is now in the Testing state.

3.3 Analytical Technologies Ltd.

New:

- iUHPLC Series 3000Plus control module is now in the Testing state.

3.4 CTC

Updated:

- CTC PAL3 System driver updated to version 1.1.0.18.

3.5 ECOM

Updated:

- The following drivers had been updated:
  - ECD 2000 to version 3.4.0.0.
  - ECDA 2000 to version 2.4.0.0.
  - ECF 2000 to version 1.6.0.0.
  - ECO 2000 to version 2.8.0.0.
  - ECP 2000 to version 3.4.0.0.
  - Panda30HID to version 1.9.0.0.
  - Flash 06 DAD to version 2.5.0.0.
  - Flash 12 DAD to version 2.5.0.0.
  - IOTA to version 2.6.0.0.

3.6 Fuli

New:

- GC 9720 Plus control module is now in the Testing state.

Updated:

- GC 9720 control module was removed from installation.

3.7 PerkinElmer

New:

- NexSAR HPLC System (including NexION ICP-MS detector) control module is now in the Testing state.

3.8 YL Instruments

Updated:

- YL9150 Plus autosampler control module is now in the Testing state.
- The following drivers had been updated:
  - YL6500 GC to version 1.0.1.11.
  - YL9110 Pump to version 4.0.3.9.
  - YL9120 Detector to version 4.0.3.13.
  - YL9130 Thermostat to version 4.0.1.10.