



## Enjoy operational simplicity

### Thermo Scientific Chromeleon 7 Chromatography Data System

**The Thermo Scientific™ Chromeleon™ 7 Chromatography Data System (CDS) software delivers rich, intelligent functionality with Operational Simplicity™. See how the thoughtfully designed user interface and visual cues guide you naturally through your chromatography. Chromeleon 7 CDS gets you from samples to results quickly and easily—boosting your overall lab productivity.**

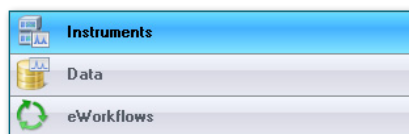
#### **Console and Studio: Tools for accessing and managing instruments and data**

The Chromeleon 7 CDS user interface achieves Operational Simplicity by following specific design principles:

- Minimize the steps needed to perform any task
- Make all steps easy to understand and easy-to-use
- Minimize the time it takes to perform any task

By adhering to these principles, all actions become fast and intuitive. The software provides a balance between mainstream capabilities and specialized functions, and between focusing on the immediate task and creating awareness of greater possibilities.

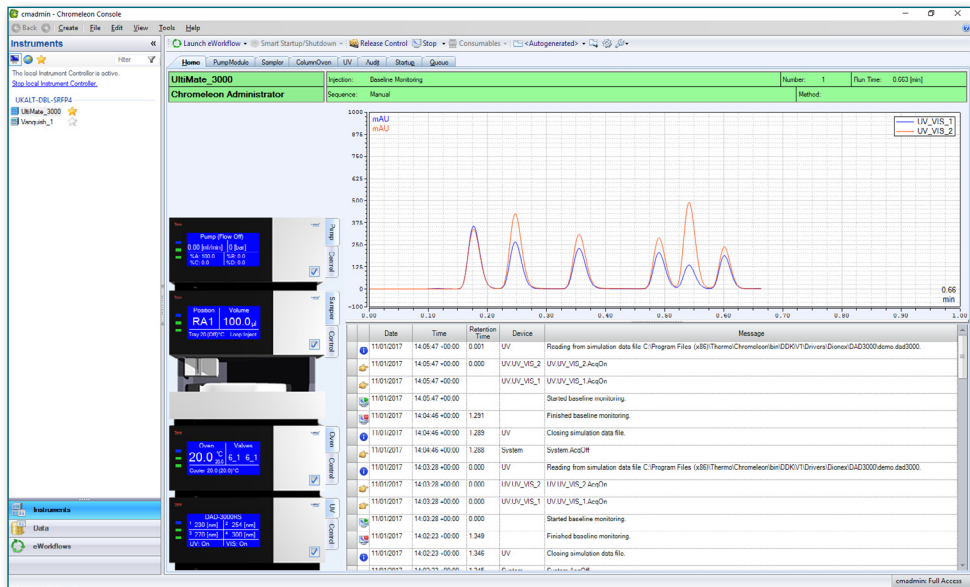
The system's top-level user interface—the Console—provides direct access to instruments, data, and eWorkflows.



**Category bars in the Console provide instant access to instruments, data and eWorkflows.**

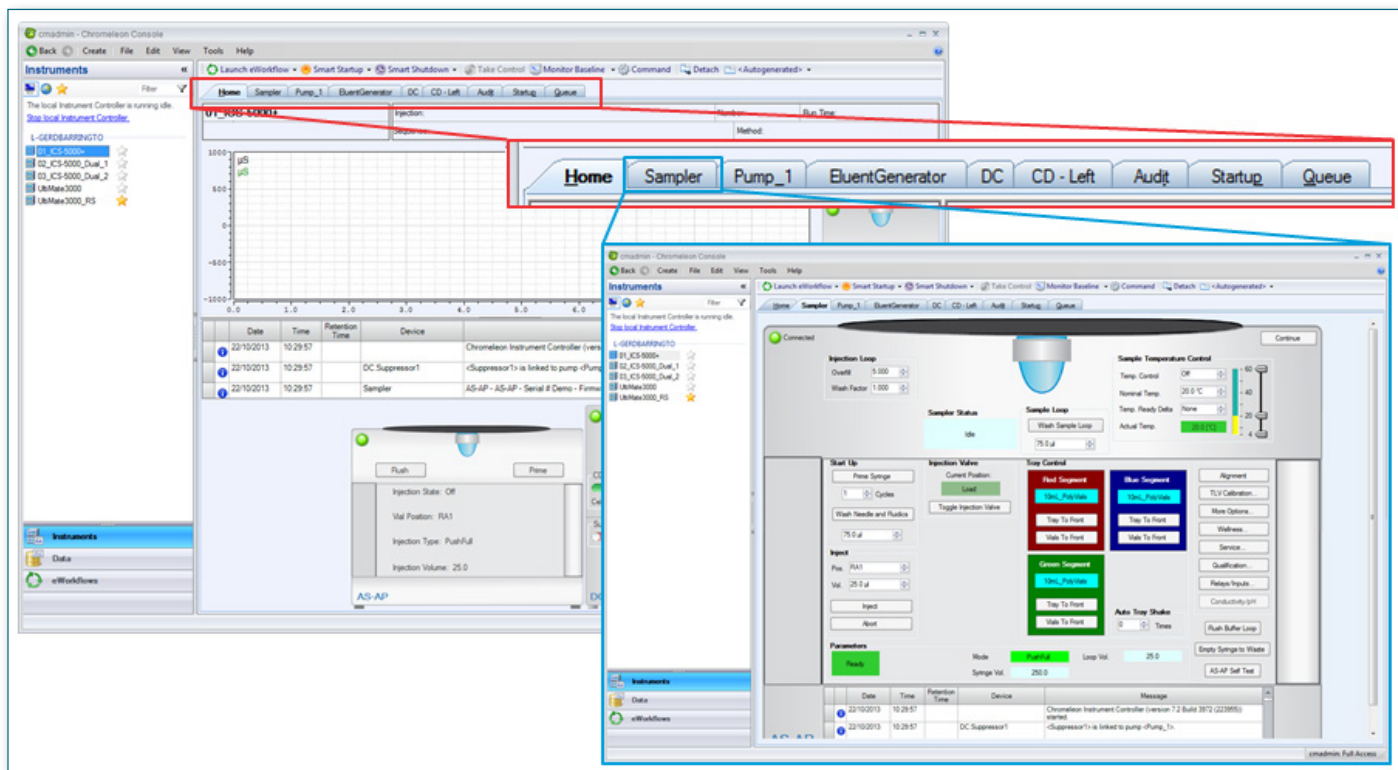


One click on the **Instruments** category bar will display all instruments accessible to the user, and automatically generate a set of live control panels (ePanels) for the selected instrument. Uniquely, these ePanels can be user customized based on their company requirements and access level. An expanded range of display, switch, button and gauge options allow the creation of ePanels to help users navigate more easily and learn operations more quickly.



The Chromeleon CDS Console: Instrument category and autogenerated ePanel.

Dedicated tab pages provide instant access to the Queue of injection sequences and to an Audit Trail listing the complete event history for the instrument. Control panels can be detached from the Console to monitor and control instruments while using other areas of Chromeleon CDS.



ePanel tabs give access to all controls per module, the instrument audit trail and sequence queue.



The **Data** category of the Console displays a standard navigation tree. Folders can be easily organized and rearranged to fit project needs. Special icons in the tree indicate injection sequences—when one of these is selected, the full contents of the sequence are shown in the integrated Sequence Editor.

MiniPlot™ thumbnail images next to the injections provide an instant visualization of the actual acquired chromatograms, and enable analysts to evaluate data at a glance. For example, QC chemists can spot anomalies, method developers can see which injections have well-resolved peaks, and researchers can check if target compounds are present in samples without opening a single chromatogram!

The screenshot shows the Chromeleon Console interface. On the left is a folder tree under the 'Data' category. The main area displays a table of injection sequences for 'Demonstration eWorkflow10-Jan-2017 13-27'. The table includes columns for #, Name, Type, Level, Position, Volume [μl], Instrument Method, Processing Method, and Status. MiniPlots are shown to the left of each row. A 'Running' status bar is at the top right. Below the table is a list of associated items.

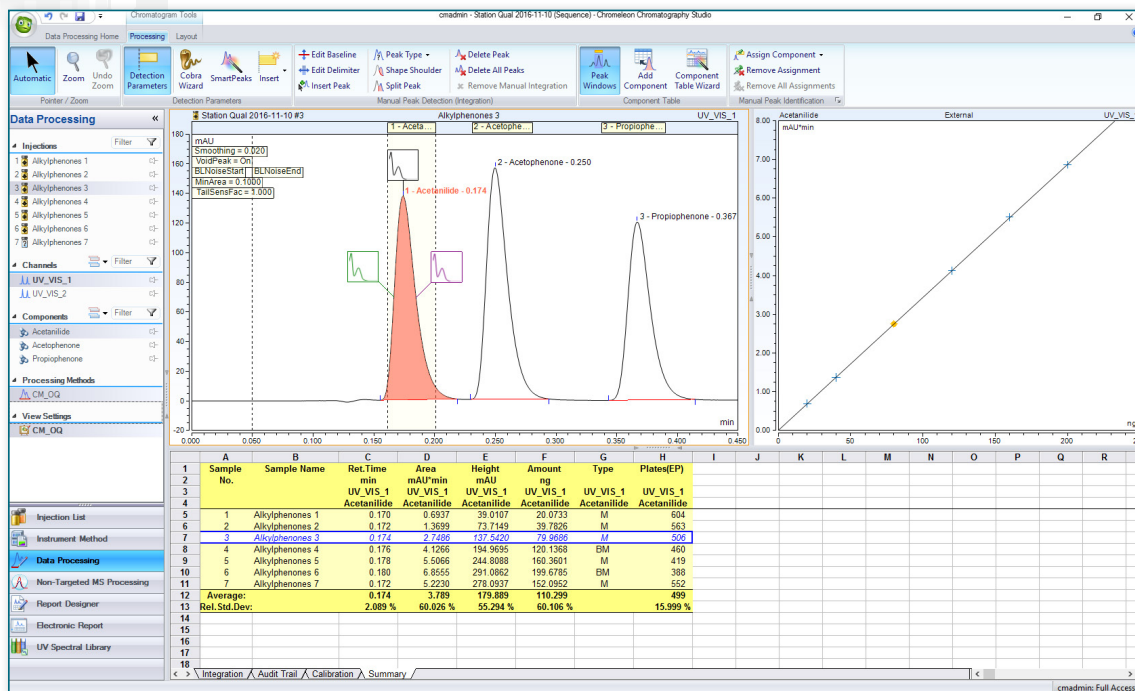
#	Name	Type	Level	Position	Volume [μl]	Instrument Method	Processing Method	Status
1	Blank	Blank		RA10	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Finished
2	SST	Check Standard		RA1	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Finished
3	SST	Check Standard		RA1	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Finished
4	SST	Check Standard		RA1	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Finished
5	SST	Check Standard		RA1	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Finished
6	SST	Check Standard		RA1	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Finished
7	Standard 1	Calibration Standard	01	RA2	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Running
8	Standard 2	Calibration Standard	02	RA3	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Idle
9	Sample_1_1	Unknown		RA4	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Idle
10	Sample_1_2	Unknown		RA4	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Idle
11	Standard 1	Calibration Standard	01	RA5	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Idle
12	Standard 2	Calibration Standard	02	RA6	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Idle
13	Chk Std	Check Standard		RA7	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Idle
14	Blank	Blank		RA10	1.00	Ascorbic Acid Using Vanquish UHPLC	Ascorbic Acid Analysis	Idle

Name	Type	Date Modified	Version	Comment
Ascorbic Acid Analysis	Processing Method	11/01/2017 12:30:45 +00:00	2	
Ascorbic Acid Demo Data.cmbx	Associated File	18/05/2016 15:33:48 +01:00	1	
Ascorbic Acid Using Vanquish UHPLC	Instrument Method	11/01/2017 13:38:46 +00:00	4	
Ascorbic Acid Report	Report Template	11/01/2017 12:29:21 +00:00	2	
SOP Ascorbic Acid Analysis.pdf	Associated File	09/01/2017 09:48:17 +00:00	1	
View Settings	View Settings	11/01/2017 13:41:42 +00:00	3	

The **Data** category of the Console provides a folder tree for navigation (left), and includes an integrated **Sequence Editor** that displays thumbnail **MiniPlots** of acquired chromatograms.

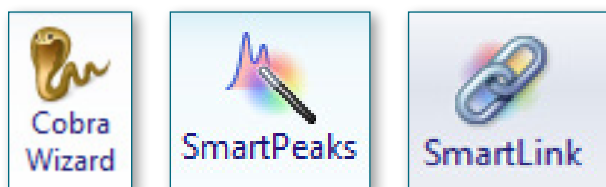
The final Console category is **eWorkflows**. An eWorkflow is a set of rules that capture all the unique aspects of a chromatography workflow, and guides the operator through a minimal number of choices needed to run it. The software then runs the chromatography, processes the data, and produces final results, getting you from samples to results quickly and easily. For more information on eWorkflows, see the Streamline Your Workflow product spotlight.

Of course, chromatographers often need more than a cursory look at the data, and sometimes need to make adjustments. For these tasks, Chromeleon 7 CDS software presents the **Chromatography Studio**, an information-rich data viewer that provides immediate access to key items associated with the data set, such as the instrument conditions, the processing parameters, and the report. The Chromatography Studio's contextual user interface (ribbon) provides easy access to features most relevant to the current task, and keeps secondary features out of the way (but within easy reach when needed).



The Chromatography Studio provides easy and efficient access to all aspects of an injection sequence within a single window frame. The integrated design eliminates the need to launch and manage different windows when working with a data set

The Chromatography Studio provides access to many unique time-saving tools for processing, reviewing and reporting data including the Cobra™ Peak Detection algorithm and wizard, SmartPeaks™ Integration Assistant, and SmartLink.



The Cobra algorithm and SmartPeaks help user's process chromatograms with minimal effort: The Cobra algorithm uses advanced signal processing to determine the true underlying baseline of the chromatogram accurately and consistently and correctly integrate all types of chromatograms. The Cobra wizard aids the setting of just a few simple parameters to fine tune the Cobra algorithm, while the unique SmartPeaks integration assistant gives you the baselines you want quickly, easily, and intuitively.

**To learn more about streamlining data processing see the Speed Up Data Evaluation product spotlight. The Simplified Data Evaluation product spotlight demonstrates how SmartLink aids data review and reporting by giving the operator the information they need to process data faster than ever.**

Find out more at [thermofisher.com/chromeleon](http://thermofisher.com/chromeleon)

**ThermoFisher**  
SCIENTIFIC