

Product Spotlight



Streamline your Workflows

Introduction

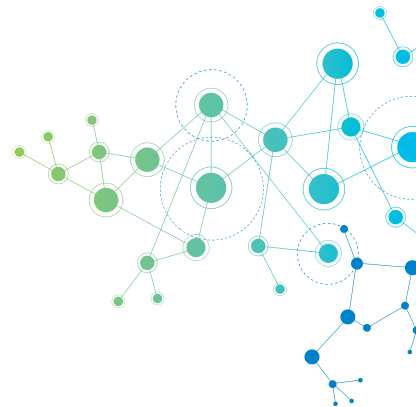
The Thermo Scientific™ Chromeleon™ 7 CDS (Chromatography Data System) simplifies your analysis without sacrificing flexibility, using innovative eWorkflow™ procedures.

Chromeleon 7 CDS streamlines your workflows and gets you from samples to results quickly and easily, boosting your overall lab productivity.

The tools for streamlining your chromatography processes

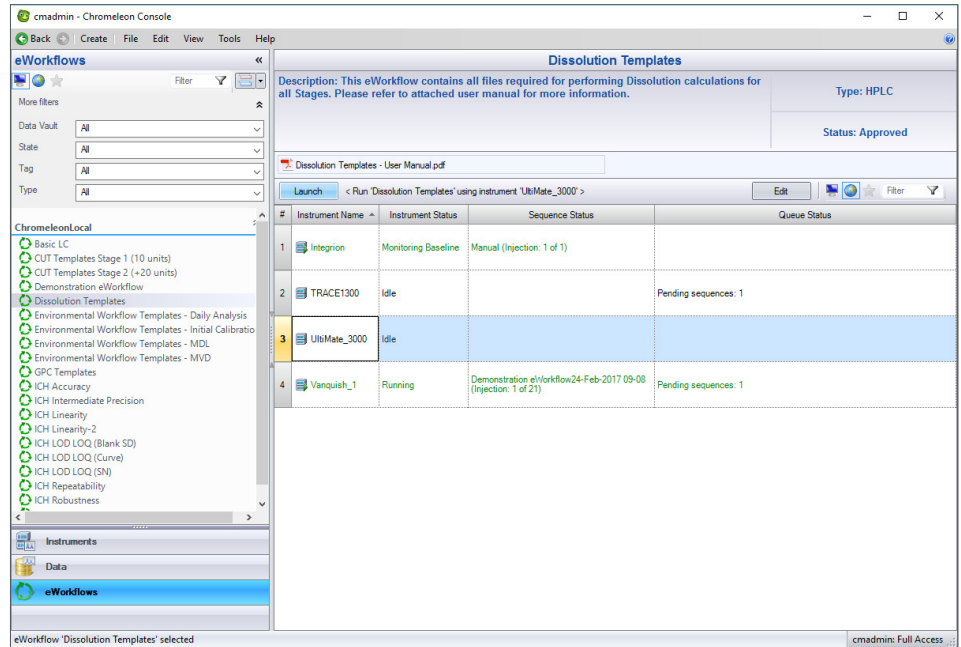
Fundamentally, all chromatography and mass spectrometry (MS) workflows are similar: samples are injected, separations are performed, signals are captured, and results are generated. Where workflows differ is in the details, such as the instrument conditions, injection sequence requirements, and the techniques by which results are calculated. These differences create complexity for operators, reducing their efficiency and increasing the risk of errors.

Chromeleon 7 CDS solves these problems using eWorkflow procedures. An eWorkflow procedure is a set of rules that captures all the unique aspects of a chromatography or MS workflow and guides the operator through a minimal number of choices needed to create a complete, correct sequence with predefined files and a well-defined structure.



Using an eWorkflow procedure drastically simplifies correct sequence creation—the operator just selects an instrument, specifies the number of samples, the starting vial position in the autosampler, and begins the analysis. The software then runs the analysis, processes the data, and produces final results.

eWorkflow procedures take you from samples to reliable results in as little as two clicks, minimizing the amount of training required and delivering ease of use. Users can create and start a run, process the data, and generate results very quickly and intuitively.



Launch from the eWorkflows category in the Chromeleon Console

The eWorkflow procedures can be launched from multiple locations in the Chromeleon Console:

1. The eWorkflows Category

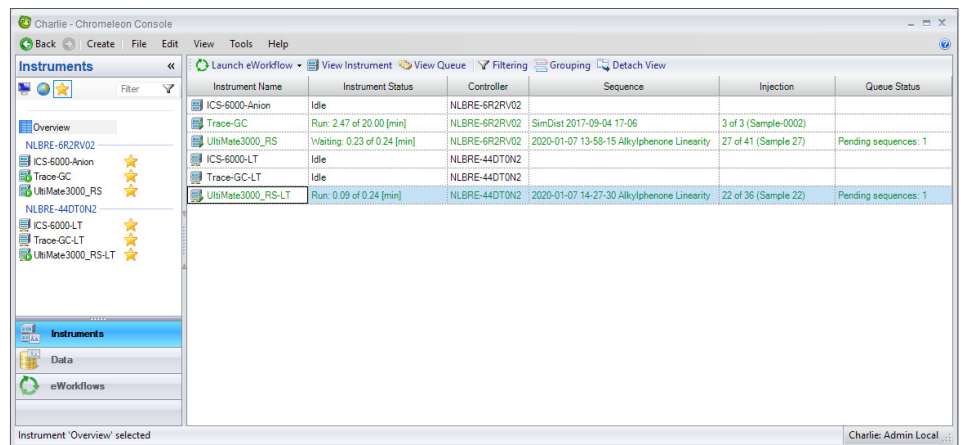
- Select an eWorkflow procedure, select an instrument and press the Launch button

2. The Overview pane in the Instruments category

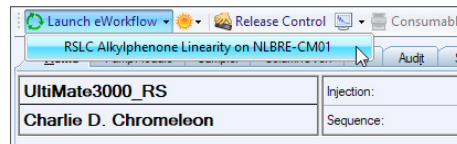
- Select an Instrument and launch via an automatically filtered (to the selected instrument) drop down list

3. The Instrument ePanel in the Instruments category

- Launch via an automatically filtered (to the selected instrument) drop down list



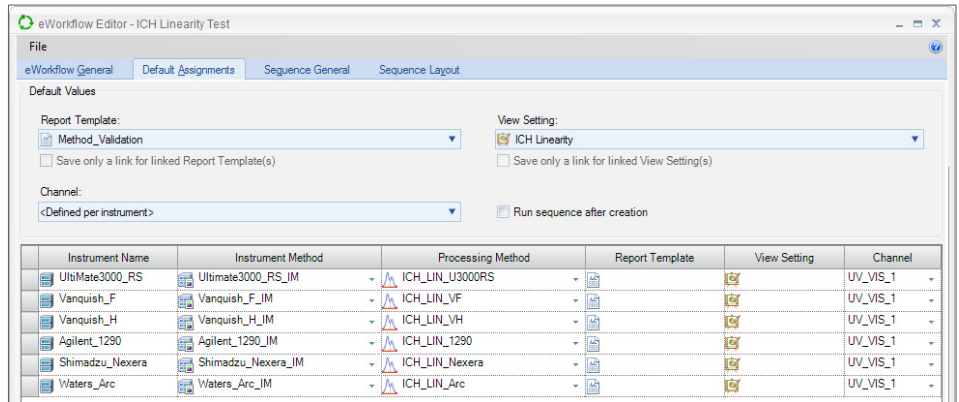
Launch from the Overview pane in the Instruments category



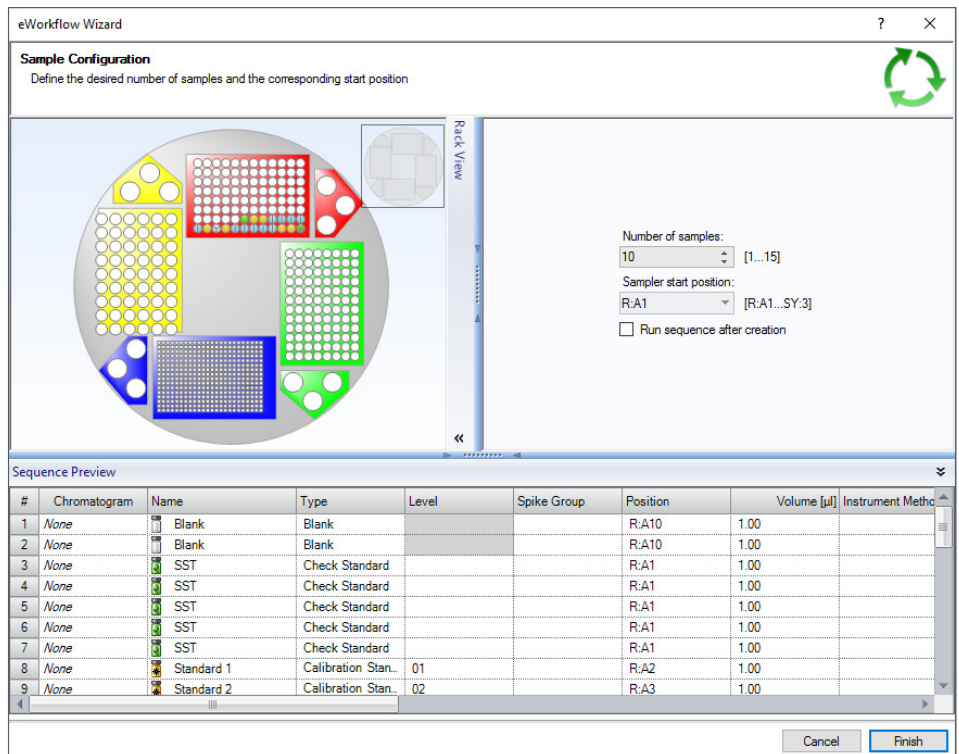
Launch from the Instrument ePanel in the Instruments category

Only one eWorkflow procedure is required per analysis method. Each can support multiple instruments, even with differing configurations, with automatic selection of the correct methods, reports and channels ensuring more ‘right first time’ sample analysis.

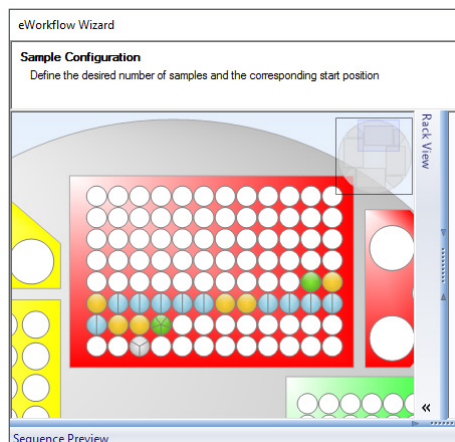
Intelligent instrument recognition in the eWorkflow Editor ensures correct linkage between instruments and methods, eliminating failed sequences.



Default assignments in the eWorkflow Editor ensure correct method, report and channel selection for each instrument



The eWorkflow Wizard shows a sequence and autosampler rack preview with easy selection of the number and positions of samples



The eWorkflow Wizard supports zooming into the rack display to graphically select the starting vial position

Upon completion of the wizard the sequence is automatically created and can be immediately started. All relevant files are incorporated for a complete solution. You can even include other external documents in the eWorkflow sequence, such as the SOP, so the analyst always has them to hand.

Conclusion

The Chromeleon eWorkflow procedures deliver Operational Simplicity™, reducing the number of steps needed to perform chromatography and mass spectrometry workflows, ensuring that procedural rules and guidelines are followed accurately. These benefits are important for routine analyses in quality control and compliance monitoring; they also help with common R&D and method development tasks, such as column scouting, method development and method validation.

The screenshot displays the Chromeleon eWorkflow interface. The main window shows a sequence of 16 injections. The columns include #, UV_VIS_1, Name, Type, Level, Position, Volume [µl], Instrument Method, and Processing Method. The sequence includes blank injections, SST (Sample Standard Test) injections, and calibration standards (Standard 1 and Standard 2) for Ascorbic Acid Vanquish analysis. The interface also shows a file explorer on the left, a toolbar at the top, and a list of associated items at the bottom.

#	UV_VIS_1	Name	Type	Level	Position	Volume [µl]	Instrument Method	Processing Method
1	None	Blank	Blank		R:A10	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
2	None	SST	Check Standard		R:A1	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
3	None	SST	Check Standard		R:A1	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
4	None	SST	Check Standard		R:A1	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
5	None	SST	Check Standard		R:A1	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
6	None	SST	Check Standard		R:A1	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
7	None	Standard 1	Calibration Standard	01	R:A2	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
8	None	Standard 2	Calibration Standard	02	R:A3	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
9	None	Sample_1_1	Unknown		R:A4	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
10	None	Sample_1_2	Unknown		R:A4	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
11	None	Sample_2_1	Unknown		R:A5	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
12	None	Sample_2_2	Unknown		R:A5	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
13	None	Standard 1	Calibration Standard	01	R:A6	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
14	None	Standard 2	Calibration Standard	02	R:A7	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
15	None	Chk Std	Check Standard		R:A8	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis
16	None	Blank	Blank		R:A10	1.00	Ascorbic Acid Vanquish...	Ascorbic Acid Analysis

The sequence is created with all the correct files and can be started immediately

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