

## Release Notes

### Chromeleon 7 Chromatography Data System

Software Version 7.2.6 • August 2017

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## 1 Introduction

The Thermo Scientific™ Chromeleon™ 7 Chromatography Data System (CDS) is a new-generation chromatography data system that provides the fastest path from samples to results. Building upon market-leading innovations of prior Chromeleon software releases – such as dynamic interactive data displays, an integrated database for rapid data retrieval, and spreadsheet-based reporting – Chromeleon 7 features a modern user interface, comprehensive new tools for peak detection, and an innovative workflow management framework, all of which speed up learning, simplify operation, and deliver results with greater efficiency than any other chromatography data system.

This new version, Chromeleon 7.2 .6 CDS, provides updated and new instrument control for instruments from Thermo Fisher Scientific and other vendors. Improvements and enhancements have been made in a number of areas related to data processing and visualization. In addition, this release introduces Chromeleon XPS - a highly streamlined and simplified optional user interface for Chromeleon to support walkup automation lab environments. Please see below for more details on these and other enhancements present in this release.

The software is developed using modern software development tools and technologies that improve performance, sustainability and extendibility.

Backward compatibility with Chromeleon 6 is maintained to the greatest practicable extent, to provide an easy migration path.

## 2 Other Documentation

Chromeleon is provided with many other documents that will help you to learn more about the software. Their scope is described in the Document Overview, which is delivered in printed form with the Chromeleon installation media, but also available in electronic form on the installation disk in the Documents folder.

Please refer to the Installation Guide for information regarding:

- System Requirements
- Supported Operating Systems and Databases
- Required Third-Party Software
- Compatibility with Previous Versions
- Installing and configuring the Chromeleon software

**Tip:** The Glossary describes Chromeleon-specific terms and common abbreviations used throughout the documentation.

## 3 What's New in Chromeleon 7.2.6

Chromeleon 7.2.6 implements a number of new features, including support for new hardware, Chromeleon XPS (a new simplified user interface for open access walkup automation labs) and improvements to data review and processing of MS data. This document will only give a short overview of all features without going into much detail. For more details, refer to the Online Help.

### 3.1 New and Updated Thermo Scientific Instrument Drivers

This chapter lists new and updated Thermo Scientific™ drivers added to Chromeleon 7.2.6. For details on supported options, required licenses, installation, and control, refer to the Online Help or the List of Supported Instruments document found on the Chromeleon 7.2.6 DVD.

#### 3.1.1 New ISQ EC Mass Spectrometer Driver [SWFR-1214]

This release includes support for the new Thermo Scientific ISQ EC, which is a single quadrupole mass spectrometer for HPC and IC.

#### 3.1.2 Updated Vanquish Horizon Binary Pump (VH-A10) Driver [SWFR-2700]

The Vanquish Horizon Binary Pump driver and ePanel have been enhanced to include the ability to perform a pump leak test.

#### 3.1.3 Updated TRACE 1110 FPD [SWFR-2474]

The TRACE 1110 GC driver has been enhanced to support an updated Flame Photometric Detector with a higher temperature range.

#### 3.1.4 Updated TRACE 1300 GC Driver [SWFR-1518, SWFR-1512, SWFR-1558]

The TRACE 1300 GC driver has been enhanced as follows:

- An option has been added to the configuration dialog to allow the GC hardware keyboard to remain unlocked while still connected to Chromeleon.
- An option has been added to the method editor to restore default values for all of the method settings on a page or for an entire method.
- It is now possible to start detector acquisition at a time other than 0.0 min.

#### 3.1.5 Fraction Collection Wizard Support For Multiple Channels [SWFR-1192]

The existing fraction collection wizard has been enhanced to include the setup of multiple channels and all fraction collection parameters.

### 3.2 New and Updated Third Party Instrument Drivers

This chapter lists new and updated drivers added to Chromeleon 7.2.6. For details on supported options, required licenses, installation, and control, refer to the Online Help and the List of Supported Instruments document found on the Chromeleon 7.2.6 DVD.

### 3.2.1 New Markes Thermal Desorber Driver [SWFR-1234]

This release includes a new instrument driver to control the following modules from the Markes Thermal Desorber product line:

- TD-100-xr Standard (including the Tube IS accessory)
- TD-100-xr Advanced (including the Tube IS accessory)
- Unity-xr (including the Air Server accessory)
- Kori-xr

## 3.3 IQ/OQ/PQ

### 3.3.1 Linking an IQ Template to Multiple Sequences [SWFR-2567]

It is now possible to create and store a single instance of the qualification report templates in a folder outside of a sequence and link multiple qualification sequences to that template.

### 3.3.2 HPLC IQ for new ISC EC LC/IC MS [SWFR-2649]

The HPLC IQ templates have been updated to support for the new Vanquish ISQ EC MS module.

## 3.4 Chromeleon XPS

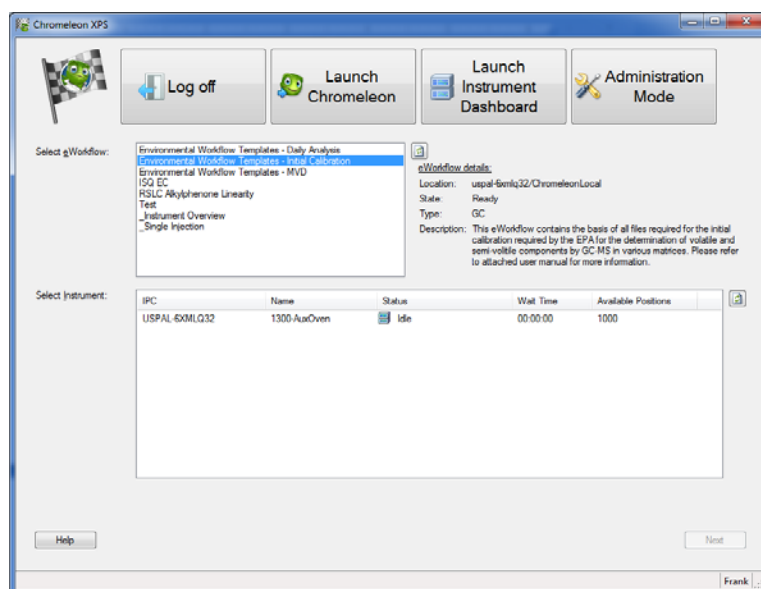
### 3.4.1 Chromeleon XPS Optional User Interface [SWFR-2207]

Chromeleon XPS is a highly simplified user interface for Chromeleon that provides walk-up, multi-user access for routine analysis by non-chromatographers.

Features include:

- Clean, streamlined “walk-up” interface
- Utilizes the full power of Chromeleon’s user management, instrument control, data processing and reporting
- Provides access to all instruments in an Enterprise environment
- Supports IC, LC, GC, LCMS, GCMS and ICMS analysis
- eMail notification of run completion and analysis results
- Management console with advanced customization options





**Important:** Chromeleon XPS is a licensed option for Chromeleon, Please contact your local Thermo Fisher Scientific representative for details on enabling this functionality.

### 3.4.2 Chromeleon XPS User Privileges [SWFR-2430]

The User Management permissions set have been enhanced to control the ability to use and manage the Chromeleon XPS software.

The new permissions include:

- Manage User Interface
  - Allows a lab manager to customize the Chromeleon XPS user interface, specify available eWorkflows and define default behaviors
- Use Client User Interface
  - Required in order for a user to be able to log into Chromeleon XPS

## 3.5 Email Notification Enhancements

### 3.5.1 Send E-Mail on Sequence Completion or Abort [SWFR-2281]

With this release, it is now possible to have an e-mail notification sent to one or more users when a sequence completes or is aborted. The e-mail includes basic information such as sequence name, instrument, and time/date as well as a link to the sequence itself.

### 3.5.2 Notification of License Grace Period [SWFR-2841, SWFR-1090]

With this release, when the software license dongle is inaccessible (e.g. due to a network problem) a notification is displayed in the message bar of the Chromeleon Console.

In addition, it is possible to enable an email notification be sent to alert appropriate people.

### 3.5.3 Notification of Pending Expiration for Temporary Licenses [SWFR-2899]

With this release, it is possible to enable an email notification when a temporary software license is about to expire.

## 3.6 Processing Method Enhancements

### 3.6.1 Identify Peaks Based on Mass Spectrum [SWFR-967]

It is now possible to specify an MS spectrum and match criteria in the processing method which can be used to identify or confirm the identification of components.

### 3.6.2 Support for Target Mass Screening [SWFR-1483]

With this release, it is now possible to specify target screening masses on a per-injection basis. The specification also includes support for positive and negative adducts. Mass spectrum plots may be tagged with the target mass (if detected) and report variables can be used to display and test if the target mass was detected.

### 3.6.3 BioPharma Workbook Import with Exactive Acquisition List [SWFR-2093]

The Compound Import feature of the processing method has been enhanced to support Biopharma Finder workbook export files.

### 3.6.4 Perform ISTD quantitation Based on Ratio (Resp) vs Ratio (Amt) [SWFR-2374]

With this release, when using variable internal standard amounts the default calibration option for new sequences is now to compute the response factor based on Response Ratio vs. Amount Ratio.

## 3.7 Other Chromatography Studio Enhancements

### 3.7.1 Labeling a Chromatogram Peak with the Detected Mass [SWFR-1482]

When performing targeted mass screening, it is now possible to label a chromatographic peak with the detected mass.

### 3.7.2 Fixed Axis Scaling For MS Components Plot [SWFR-2655]

The MS Components report object has been enhanced to allow specification of a fixed signal scale. This response range may be directly supplied by the user or may be automatically extracted from a reference injection.

### 3.7.3 Relative Standard Error as a Report Variable [SWFR-2467]

Relative Standard Error (%RSE) is now being required in a number of EPA standard methods. This release includes %RSE as a standard report variable.

## 4 Resolved Issues

This chapter describes the issues that have been resolved with the release of Chromeleon 7.2.6.

Many trivial and minor issues have been resolved, but are not mentioned here. If you require information about the status of an issue observed in a Chromeleon 7 release, but which is not listed here, please contact your local Thermo Fisher Scientific representative for more information.

The numbers in the first column of the table below refer to the Thermo Fisher Scientific tracking IDs.

ID	Description
CM7-23867	A2D: Occasionally when an A2D was unplugged from an IPC, the Audit Trail would contain repeated "{A2D} Data out of sequence" errors until the A2D was reconnected. The Audit Trail now shows two new messages: "{A2D} A2D USB communication error" and "{A2D} Driver has disconnected", each of which is reported just once.
CM7-23552	AS/AI 1310 Sampler: Occasionally, a new sampler from the factory was unable to connect to Chromeleon.
CM7-22328	Calibration: Injections used for fixed calibration with MS were not written to the chromatogram cache so that results had to be recalculated whenever accessed causing poor performance.
CM7-23893	Calibration: Response level tolerances were always computed using the amounts specified in the processing method, without taking into account normalization for sample weight, dilution factor, inject volume and amount ratios.
CM7-23925	Calibration: When calculating confidence limits, applied injection weight or dilution factor corrections were not taken into account meaning that <code>peak.confLowerLimit("computed")</code> was equivalent to <code>peak.confLowerLimit(peak.amount)</code> . The same applied also for the upper limits.
CM7-8269	Chromatogram Plot: If a Chromeleon 6 sequence displaying Retention Time and Component Name as Peak Labels on the Chromatogram plot was opened in Chromeleon 7 the Peak Labels would not be shown correctly.
CM7-23995	Console: In rare cases, the data category navigation tree icons would not display properly.
CM7-23771	Copy/Paste: When the MS Components plot was smart linked, expanding a single plot then copy-and-pasting the plot resulted in pasting of the smart linked plot rather than the expanded plot.
CM7-23852	Electronic Report: The report variables 'gen.reportTime' and 'gen.reportOperator' did not display current value when used in a report variable in the grid, since they were not updated in report tables and plots after each action. The report variables are now properly updated.
CM7-23833	Electronic Signatures: When signing a sequence that was currently in the process of being uploaded to the Enterprise Data Vault, the data audit trail did not contain entries recording the electronic signature event. A warning is now displayed and the user is no longer permitted to sign sequences that are being uploaded.
CM7-23419	eWorkflows: Adding additional samples to a Sequence that was created from an eWorkflow would always place the new samples after the Footer block. Chromeleon now provides an option to "preserve" the [Header][Sample][Footer] layout when additional samples are added by re-running the eWorkflow.
CM7-6793	eWorkflows: In the eWorkflows editor, an option has been added to specify if the bracket block should also be included before the footer block
CM7-23401	eWorkflows: When using an eWorkflow to append injections to a sequence that was created by a different eWorkflow, if the sequence contained injection custom variables, an error stating "Different field definition for an existing injection custom variable" was generated.

ID	Description
CM7-23950	eWorkflows: XVault sequence was not used when appending injections using eWorkflows, to a running sequence.
CM7-23250	Extracted Ion Chromatograms: In some instances, the start or end times of a component extracted ion chromatogram for a specific injection would vary depending on which other injection in the sequence was selected.
CM7-24036	Extracted Ion Chromatograms: When extracting an ion chromatogram from MS data, the data extracted was correct, but the channel name indicated an incorrect extraction window by default.
CM7-23895	GCMS Environmental Extension Pack: The Ad Hoc BFB Tune Report incorrectly evaluated m/z 173 criterion.
CM7-23963	Help and Manuals: Shimadzu LC-20A and LC-30A - The online help did not describe fully the necessary steps for using Inject Synchronisation.
CM7-23732	Import/Export: Export of sequence data to Microsoft Excel occasionally caused Chromeleon to generate various errors due to exceeding GDI limits.
CM7-24083	Import/Export: If a Sequence imported from Chromeleon 6 contained a large number of history entries, attempts to copy the Sequence, or Send to CMBX could result in an "Exception of type 'System.OutOfMemoryException' was thrown" error message.
CM7-24021	Import/Export: Occasionally, after importing a Chromeleon 6.8 CMB file, Chromeleon would report an error "Chromeleon is no longer working and needs to be closed."
CM7-21418	Import/Export: Producing PDF and Excel exports simultaneously resulted in incorrect page numbering in the exported files.
CM7-23600	Installation: When upgrading an Instrument PC from Chromeleon 7.2 SR4 to 7.2 SR5, if there were sequences still in the instrument queue that had not been uploaded to the remote server, an "Upload Failure" error would be displayed and reported in the DataError.log and TxpStatistic.log log files.
CM7-24055	Interactive Results: When displaying Interactive Results in the Studio for unknowns, if calibration-related settings (e.g. dilution factor) are changed in the console for a calibration standard, the Interactive Results table was not automatically refreshed to display the updated amounts.
CM7-23567	Non-Targeted MS Data Processing: Modifying only the table filter parameters did not trigger a save option.
CM7-23723	Non-Targeted MS Data Processing: The Relative Reference Injection number setting now starts at 1 instead of 0.
CM7-23883	OQ/PQ: If the Station PQ was run more than once within the same client session, the following actions were skipped after the first run: "Ready Check for Queue", "Check Instrument Status", "Check Instrument State", "Start Queue", "Stop Queue", and "Edit Sequence in Queue."
CM7-23364	OQ/PQ: If an action was set to be not executed during the PQ, any actions depending on this would also not be executed during the PQ.
CM7-23769	Printing: When performing an ad hoc print of the processing method, the settings for the Concentration Level Tolerances were not included in the printout.
CM7-23843	Processing Method: Under certain circumstances, it was not possible to display the processing method (or open a sequence with the processing method displayed). This occurred when the number of frozen columns = number of columns and the size of the Studio window was too small to show all columns of the table.
CM7-23740	Query: When searching for injections by date using the operator "Is Not During Previous", the query result would also return injections created/modified during the current day.
CM7-23009	Report Designer: When closing print preview, GDI objects for plot objects were not released, resulting in a memory leak.
CM7-23230	Report Variables: An incorrect value was reported when extracting the 2nd and higher "By Intensity" masses from a library spectrum.
CM7-23724	Report Variables: In some instances, the Non-Targeted MS Data Processing Result Status variable would not update in real-time, resulting in incorrect in-spec / not-in-spec results being displayed in the report template.

ID	Description
CM7-23616	Report Variables: The peptide category report variables displayed "n.a." when used in a summary table.
CM7-23306	Report Variables: When specifying a custom percent height for the calculation of peak width, only integer values were accepted. This has been updated to support decimal values.
CM7-23749	Report Variables: When using different injection volumes in a calibration curve, the amount deviation report variable was calculated incorrectly.
CM7-23592	Sequence: Appending a new injection to an existing sequence or inserting a new injection in an existing sequence caused an error message stating 'The privilege "Copy Injection" is missing.' These operations now require only the privilege "Add New Injection".
CM7-17326	Sequence: If a value was entered in a table column that had a greater number of decimal places than the precision specified for the column, an error that there were too many digits was displayed. The entered value is now accepted but rounded to match the column's precision.
CM7-23911	Sequence: If the ESC key was pressed very quickly after stating the New Sequence Wizard, it was possible for a Null Reference Exception error to occur.
CM7-23072	Sequence: Importing a Chromeleon 6.8 report into Chromeleon 7 that contains a large number of images (plots, etc.), then attempting to submit the sequence in Chromeleon 7 would cause the software to crash.
CM7-23913	Sequence: It was possible to make and save changes to the associated items and some other fields in an unconverted imported sequence.
CM7-24141	Sequence: Use of default export template defined per sequence when running a multi-sequence queue resulted in only the use of the default template for the first sequence for the entire queue.
CM7-24140	Sequence: Use of default report template defined per sequence when running a multi-sequence queue resulted in only the use of the default template for the first sequence for the entire queue.
CM7-18753	System Status Report: If the SSR encountered a file which had the Read-only flag set, it would fail with an error "Deleting temporary files: Unable to remove the temporary files: Access to path <filepath> denied".
CM7-18754	System Status Report: If the SSR failed to delete a temporary file, it was not included in the report.
CM7-19607	System Status Report: If the SSR was not able to access the Instrument Audit Trails, the Instrument Audit Trails section of the Summary Report would report this, but with an unclear message.
CM6-23654	TRACE 1110 GC: Although the instrument front panel supported values from 0 to 100 ml/min for the inlet flow rate, the maximum value allowed by the instrument method editor was 70 for a Packed inlet with EPC, and 25 for a PTV inlet with EPC.
CM7-20118	TRACE 1110 GC: On the PTV page of the method editor, the Split Ratio parameter was not checked to ensure a valid value was entered.
CM7-14454	TRACE 1300 GC: It was not possible to use custom injection variables or custom sequence variables as part of the instrument method script.
CM7-23317	TRACE 1300 GC: On the Aux Columns ePanel, the Column Parameters for Aux Columns was set incorrectly when more than 2 Inlets were configured.
CM6-24124	TRACE 1300 GC: On the Inlet method page, the He Saver Delay Time was limited to a maximum of 0.5 minutes, even though the hardware supported a time up to 2.0 minutes.
CM6-23871	TRACE GC Ultra: If an instrument method with an isothermal oven segment at the beginning was used for a sample type blank, the isothermal section was ignored.
CM6-24109	TriPlus 300 HS: Although the hardware supports an optional bar code reader, there was no way to report the bar code value that was read.
CM6-24169	TriPlus RSH and TriPlus 100LS: After Editing Custom Cycle Parameters, it was not possible to save the edited method until a change was made elsewhere in the method.

ID	Description
<b>CM7-23177</b>	TriPlus RSH and TriPlus 100LS: After opening and closing the Virtual Terminal, it was not possible to restart the Chromeleon Console.
<b>CM6-24212</b>	TriPlus RSH and TriPlus 100LS: If a sample fished acquiring before the sampler finished its injection cycle (e.g. due to post-injection washes), the sequence would interrupt with following error in the audit trail: "Timeout while waiting for the instrument to finish, the current injection will be aborted."
<b>CM7-23711</b>	TriPlus RSH and TriPlus 100LS: When running sequences on an instrument using version 2.4 of the firmware, occasionally the sequences would abort with an error message stating "There is a problem with accessing the instrument."
<b>CM7-21564</b>	TriPlus RSH: Although it was possible to condition the SPME fiber as part of an instrument method, it was not possible to do so manually.
<b>CM6-23479</b>	TriPlus RSH: When operating in SPME mode, the TriPlus RSH would schedule samples so as to overlap oven programs, but did not optimize based on the various SPME incubation steps.
<b>CM7-24009</b>	TriPlus RSH: It was not possible to manually condition the SPME Arrow tool
<b>CM6-24161</b>	TriPlus RSH: It was not possible to start a sequence if one of the agitator positions was configured as a Reserved Position using a different vial type.
<b>CM6-24168</b>	TriPlus RSH: With an instrument configuration that included both a TriPlus RSH and a Manual Inject module, occasionally the state for an injection would never transition to 'Finished', effectively hanging the sequence. The issue was only seen for injection rows that used the Manual Inject option.
<b>CM6-24151</b>	TSP UV 6000 PDA, Surveyor PDA, Surveyor Plus PDA and Accela PDA: Occasionally during acquisition, an "Access Violation" error was generated, halting the sequence.
<b>CM7-19507</b>	UltiMate AFC-3000, WPS-3000 (FC variants): When creating an instrument method with fraction collection, the option for fraction pooling was always disabled.
<b>CM7-23624</b>	URG-9000: When installed on the French version of Windows 7, a format error would be displayed instead of the floating point calibration values.
<b>CM6-23927</b>	Vanquish Autosampler: When using a Waters48 Rack type, it was not possible to address the last two columns of the rack (7/8).
<b>CM7-23178</b>	Waters Acquity: If an Acquity instrument had previously been configured and then deleted, it was not possible to see the modules when attempting to configure an Acquity instrument at a later point. While the problem has been solved in Chromeleon 7.2 SR5 MUa, users of versions older than this should contact Thermo Fisher Scientific for further information.

## 5 Limitations and Known Issues

The following sections list known issues and limitations. The numbers in the first column of the table below refer to the Thermo Fisher Scientific tracking IDs.

### 5.1 Limitations with Thermo Scientific Instruments

ID	Description
<b>CM7-16851</b>	<p>UltiMate 3000 MWD-3000 and DAD-3000: In the Instrument Method Editor for these devices, the script page offers one additional option for the data collection rate (20 Hz) that is not present in the Instrument Method Wizard. This additional option is a valid value for this parameter.</p> <p>Although it is possible to manually type in a value for the data collection rate that is not in the list, these values will be rejected by the Ready Check when a sequence is submitted.</p>
<b>CM7-17783</b>	<p>UltiMate 3000 WPS-3000FC: When using the WPS-FC, the needle will not automatically be flushed prior to collecting the first fraction. To work around this limitation, add the following lines to the instrument method command script:</p> <pre> Sampler.EndFraction Sampler.Collect Delay 10 Sampler.Drain </pre>
<b>CM7-21342</b>	<p>Vanquish Variable Wavelength Detector: For acquiring data on a single channel only using the Vanquish VWD it is necessary to use channel UV_VIS_1.</p>
<b>CM6-21321</b>	<p>Accela Open Autosampler: When using this autosampler, a dot ('.') must be used as decimal separator.</p>
<b>CM7-18098</b>	<p>Accela Open Autosampler: Sequences cannot be run when the sampler does not include the DLW option. This configuration is not supported and requires a custom script.</p>
<b>CM6-22760</b>	<p>TRACE 1300 GC: The autozero function does not work correctly for the FID, NPD, ECD and FPD detector types.</p>
<b>CM6-23614</b>	<p>TriPlus RSH: When using the TriPlus RSH in constant double pro headspace mode, starting a sequence that includes a constant double pro method will generate a validation error.</p>
<b>CM7-20295</b>	<p>TSQ 8000 and ISQ Series: When a GC-MS instrument method includes a scan event containing multiple SIM ions (e.g. "SIM 115, 152, 188") then data from matching filters collected at different time ranges will not be combined into a single filter in the data for that injection.</p>
<b>CM7-23669</b>	<p>TSQ8000 Series: If you attempt to abort an acquisition of multiple timed acquisitions while the MS is acquiring data, the MS will not cycle back to a Ready state and the sequence will not end. It is necessary to stop and restart the Instrument Controller to regain access to the instrument.</p>
<b>CM7-15632</b>	<p>TSQ Quantiva and Endura: When removing the source from a TSQ Quantiva or Endura in mid-acquisition, the sequence does not abort.</p>
<b>CM7-16030</b>	<p>TSQ Quantiva and Endura: With these instruments the standby state reports that the instrument is on, regardless of the real instrument state.</p>

ID	Description
<b>CM7-16154</b>	TSQ Quantiva and Endura: When creating an Instrument Method for the TSQ Endura or TSQ Quantiva, the MS run time is not the same as the Chromeleon run time. The user should enter the correct run time on the MS page of the Wizard.
<b>CM7-17668</b>	TSQ Quantiva and Endura: TSQ Endura and TSQ Quantiva instruments are usually shipped with a PC ("Endura/Quantiva PC") that includes all the necessary instrument data files, such as calibration files, for operating the MS instrument. If you want to control an instrument using a different PC, make sure that the specific instrument data files residing on the Endura or Quantiva PC are backed up and transferred to the new PC. For details on performing this process, please consult with your local MS field service engineer.
<b>CM7-18129</b>	TSQ Quantiva and Endura: After an upgrade of the TSQ Endura/Quantiva instrument driver, an error may occur when opening the Chromeleon Instrument Configuration. To resolve the error, remove the Chromeleon Mass Spectrometer driver from the configuration and then add it again. This will update the configuration information in Chromeleon to match the updated TSQ Endura/Quantiva instrument driver version.
<b>CM7-21967</b>	TSQ Quantiva and Endura: The TSQ Endura and Quantiva mass spectrometer method editor is supported on English operating systems with English/United States regional settings only.
<b>CM7-17500</b>	Exactive Series: Exactive Series instruments are usually shipped with a PC ("Exactive PC") that includes all the necessary instrument data files, such as calibration files, for operating the instrument. If you want to control an Exactive instrument using a different PC, make sure that the specific instrument data files residing on the Exactive PC are backed up and transferred to the new PC. For details on performing the data backup on the Exactive PC, refer to the Thermo Exactive Series 2.5 SP1 Release Notes, section Backup provided on the Chromeleon installation disk in the Packages\Thermo Exactive\Documentation folder.
<b>CM7-22490</b>	Exactive Series: When setting the divert valve parameters for an Exactive Series MS with a 2-position valve, the valve positions are recorded in the MS raw data opposite of how the divert valve parameters were configured.
<b>CM7-23295</b>	Exactive Series: Due to differences in how the Exactive 2.8 SP1 driver writes the scan header in MS data files during acquisition, non-targeted peak detection will not work correctly when data generated from both the Exactive 2.8 SP1 driver and older drivers are present in the same sequence.
<b>CM7-16557</b>	MSQ Plus and Tune Application: When using the MSQ Plus with Chromeleon the user has to wait for the Chromeleon Instrument Controller to be in idle mode before opening the Tune application. Without waiting, the MSQ Plus will not be able to change the operating mode (On, Off, Standby), or it will not be possible to run injections. To recover from this error both the PC and the MSQ Plus would have to be restarted.
<b>CM7-23138</b>	MSQ Plus: It is recommended to use only the MS driver provided on the Chromeleon installation medium. Other versions of the MSQ Plus driver may not be compatible with Chromeleon. Please consult your local field service engineer for additional details.

## 5.2 Compatibility of Chromeleon 7.2.6 and SII for Xcalibur

At current time, SII for Xcalibur (SII) has not been validated for use with Chromeleon 7.2.6. As such any installation combining SII with Chromeleon 7.2.6 is not supported. At a time when SII is compatible with this release, documentation outlining support will be released which will supersede this known limitation.



## 5.3 Mass Spectrometers and Windows 10

Thermo Scientific Foundation 3.0 SP2 is required for mass spectrometer support under Chromeleon. As Foundation 3.0 SP2 is not compatible with Windows 10, no mass spectrometers other than the ISQ EC are supported under Windows 10 at this point in time.

## 5.4 Upgrading a Windows 10 PC From Chromeleon 7.2 SR5 to Chromeleon 7.2.6

When Chromeleon 7.2 SR5 is installed on a Windows 10 PC, upgrading that PC to Chromeleon 7.2.6 will appear to complete successfully, with no IQ errors or warnings. However, attempting to export a sequence to PDF will fail with an error stating "Printer not activated, error code – 30".

To resolve this problem, rerun the Chromeleon 7.2.6 setup, selecting 'Repair' on the opening screen of the setup program.

## 5.5 Compatibility with Foundation 3.1

Chromeleon is only compatible with Thermo Foundation 3.0 SP2. Users may encounter situations where PCs provided with mass spectrometers come pre-installed with Foundation 3.1 or newer. In these instances, the factory procedure to uninstall any MS instrument control component software must first be followed before reinstalling Foundation 3.0 SP2 and the mass spectrometer driver.

This procedure must only be carried out by individuals that have completed the necessary software and hardware training.

## 5.6 Limitations with the Waters Driver Pack

ID	Description
CM6-21040	Waters Acquity: Should a Waters instrument detect an IP address conflict during start up, the Chromeleon CDS driver will log the error message in the Audit Trail. If this message is ignored, it will be displayed again after 2 hours, which can result in a running sample being aborted.
CM6-21112	Waters 2998 PDA: Localization to a non-English regional setting for the PC (e.g., German) does not function correctly for the timed events table, e.g., using a Waters 2998 PDA detector and setting a timed event in the program file (e.g., wavelength change at 5 minutes). The event is recorded, but without the event time.
CM6-24158	Waters 2489 PDA: After changing the Instrument Method from single to dual-wavelength mode (without changing Channel A wavelength), the data rate for Channel B is set incorrectly and incomplete data collection occurs.
CM6-23194	After removing the Sample Organizer from the Instrument Configuration, the plate setup is not updated correctly. Manually updating the plate settings in the plate setup configuration dialog avoids this issue. If the total length of the instrument name plus detector name is more than 32 characters, the sequence will abort shortly after initial injection. The affected detectors are: 2489, 2998, and Acquity FLR.
CM7-19830	When using the Waters Acquity driver in a Citrix environment, the Acquity console does not update correctly and therefore doesn't show current log file entries. This is due to a problem in the Acquity console, and can be mitigated by using the instrument audit trail on remote clients.

ID	Description
<b>CM6-24164</b>	When the Waters Driver Pack 4 is installed in a Citrix environment, the World Wide Web Publishing Service is automatically disabled, so that after restarting the PC, the Citrix web application is no longer reachable. The service should be reset to automatic start, after which the application can be reached
<b>CM7-22872</b>	When using the Waters Acquity driver, some Chromeleon screens may not appear properly, such that text from the previous screen is still visible. This has been observed with the Sequence Properties and the Chromeleon Log on screen.
<b>CM7-23504</b>	In rare circumstances when the user configures and then deletes an Acquity PDA, the module will still be shown in the Acquity Console. If a command is then executed (e.g. lamp on), the module disappears from the console, after which the user then needs to reconfigure the instrument in the Chromeleon Instrument Configuration Manager in order e.g. to turn off the lamp.
<b>CM6-24191</b>	In extremely rare cases the Acquity PDA server stops working, which then causes the running sequence to be interrupted.
<b>CM7-23730</b>	When using the Waters Acquity Driver Pack4 and trying either to create a new instrument method, or to open the Acquity console from the ePanel a problem sometimes occurs. A message appears informing the user that launching the application had failed, and that the Acquity driver pack may not be installed. If this occurs, the user should contact Thermo Fisher Scientific for further advice.

## 5.7 Limitations with Agilent ICF

For a general overview regarding the Agilent Instrument Control Framework, please refer to the document Chromeleon and Agilent ICF - Quick Start Guide - Chromeleon 7.2 .pdf, found in the \Documents\ folder of the Chromeleon 7.2 CDS DVD.

ID	Description
<b>CM7-19347</b>	Agilent G1312B DAD: When using a G1312B DAD in combination with an old JetDirect card, the user may experience problems collecting data at 80Hz. If the user observes this, they should get in touch with their local Thermo Fisher Scientific representative for advice on possible solutions.
<b>CM7-20047</b>	Agilent VWD G1314B: When using a G1314B VWD, occasionally the chromatogram is half the expected length.
<b>CM7-20991</b>	Agilent ICF: Occasionally when performing injections with ICF controlled instruments the injection volume is incorrectly displayed, although the injection itself was performed correctly.
<b>CM7-21172</b>	Agilent ICF: If the user has the monitor DPI settings on their PC set at greater than 100%, then some parts of the Agilent LC system device ePanel are not visible.
<b>CM7-23096</b>	Agilent ICF: If a Fraction Collector with Thermostat is installed, the channel mapping is not correct. This can be resolved by removing the <Channel name="FC: Delay Sensor"> node from DefaultConfiguration.xml before adding the driver. After this, the user can configure the mapping for the two channels manually on the Signals (2D) tab of the configuration dialog.
<b>CM7-19540</b>	Agilent ICF: The Agilent GC System Configuration dialog includes entries to configure the 7697A Headspace, G1888A Headspace, 7890 GC, 6890 GC, 68550 GC, and 7820 GC. Currently, it is only possible to configure the 7697A Headspace sampler. Attempting to configure any of the other modules will result in a message indicating that the modules are not supported.
<b>CM7-19863</b>	Agilent ICF: The Agilent LC System Configuration dialog includes entries to configure the following devices, which are not supported by the release: All ELS Detectors (Drivers are not included, so they cannot be configured) Multi-sampler and DAD HDR (Although configurable, they have several known issues and are therefore not supported)
<b>CM7-21427, CM7-18984</b>	Agilent ICF with 1100 or 1200 LC DAD: When acquiring data from an Agilent 1100 or 1200 LC DAD, the signal trace may be shifted to the start of the run, and the end time is inconsistent. No data points are lost with a data rate of 10 Hz and slower ( $\geq 0.025$ min 0.5 sec) 20 Hz and a low number of spectra (all other than ALL Spectra) 20 Hz and spectrum range 190- 400 step 2
<b>CM6-23980</b>	Agilent 7697A: When starting a sequence while the 7697A Headspace Sampler is in an 'Error', 'Running', or 'Not Connected' state, the ready check does not give an error message. After the sequence starts, the following happens: If the sampler is in error state, the sequence starts without getting interrupted If the sampler is running, the sequence stops with audit trail message "Sequence stopped by user" If the sampler is not connected, the sequence interrupts with audit trail messages "Lost connection to Agilent 7697A Headspace Sampler", and "The instrument is offline. Check power to all modules, cabling between modules and whether the configuration matches the list of modules."

ID	Description
<b>CM6-23992</b>	Agilent 7697A: The 7697 Headspace Sampler has two versions; 111- and 12-vial capacity configurations. The Chromeleon driver is written and tested with the 111 vial capacity version. Though not tested, the driver is expected to work with the 12-vial capacity module. The user should not use vial positions greater than 12 in this case. The rack view always shows 111 vial positions.
<b>CM6-24004</b>	Agilent 7697A: Using the instrument front panel, the allowed range for Transfer Line Diameter is 200-600 microns. However, when setting this value in the Chromeleon instrument configuration the limit is 250-530 microns.
<b>CM6-24005</b>	Agilent 7697A: When 7697A headspace instrument method parameters are included in a report, the "fill pressure" parameter is rounded to the nearest integer.
<b>CM6-24007</b>	Agilent 7697A: Some parameters logged to the instrument audit trail are rounded to nearest integer. However, all values are downloaded to the instrument with the proper precision.
<b>CM6-24008</b>	Agilent 7697A: When editing an existing 7697A Headspace instrument method, if the values for Purge Flow, Purge Time or Leak Flow are changed, the Save button is not enabled until the user changes tabs.
<b>CM6-24009</b>	Agilent 7697A: When configuring an Agilent 7697A, there is an option in the user interface to "Upload Config from Instrument". This option does not work. Instead, you will need to manually configure the instrument settings.
<b>CM6-23996, CM7-19940, CM7-21324</b>	Agilent 7697A: The 7697 Headspace Autosampler has two options for handling missing vials: Pause and Abort. An issue has been observed when the Abort option has been selected. In either mode, the autosampler overlaps sample preparation, i.e.: sample 2 is prepared while sample 1 is acquiring. If the autosampler finds that the sample 1 vial is missing, it will Abort or Pause the sequence at the point it discovers the vial is missing. However, if the autosampler finds that the sample 2 vial is missing, while sample 1 is already acquiring, and the Abort option has been selected, the entire sequence will be aborted, including the acquiring sample 1.
<b>CM7-19975, CM7-20451</b>	Agilent 7697A: The Soft Config option, available via the ICF for Agilent LCs, is not supported for the Agilent 7697 HS. It should not be added to any custom ePanel as its use can cause issues by allowing configuration changes to be applied to the sampler during acquisition.
<b>CM7-19993</b>	Agilent 7697A: If the 7697A loses its connection to the network, an audit trail message is added indicating this fact. However, the ePanel will still show the unit as 'Ready'.
<b>CM7-20259</b>	Agilent 7697A: Although the vial position may be assigned in the instrument method script, unless this is done in the Instrument Setup Stage, the sequence table will not be updated. This can result in misleading information in reports and should be avoided.
<b>CM7-23242</b>	Agilent 7697A: Running multiple 7697A Headspace autosamplers on a single 247 Instrument Controller can cause Windows "Out Of Memory" errors, requiring a reboot of the 247 to resolve. Thermo Fisher therefore recommends that only one 7697A is connected to any 247 Instrument Controller.

## 5.8 Limitations with Other Third Party Instruments

ID	Description
<b>CM7-17948</b>	Shimadzu LC: Unlike most drivers, some Shimadzu UV detectors require that you select the Advanced filter in the Command (F8) window in order to access the Lamp On/Off command.
<b>CM7-24042</b>	Instrument Configuration Manager: The .NET 4.7 framework is installed by Windows Update. For Windows 7 it is a recommended update, but for Windows 10 it is a mandatory update. This release of Chromeleon has been validated against .NET 4.7. However, under rare circumstances, the installation of .NET 4.7 could lead to malfunctioning or crashes of the instrument configuration manager or configuration plug-ins. If this occurs, please contact your Chromeleon support desk for assistance in correcting the problem.
<b>CM6-23947</b>	Shimadzu LC-10A, LC-2010: If the user cancels the keylock state of the front panel of the instrument and then, for example, stops a manual acquisition, this is likely to lead to unexpected effects during the next operation such as sudden abort of the sample run.
<b>CM7-15400, CM7-15556, CM7-15734, CM7-15736</b>	Perkin Elmer LC200 Autosampler: When upgrading from earlier versions of Chromeleon 7 CDS to Chromeleon 7.2 CDS SR3, it is necessary to reload the Perkin Elmer LC200 Autosampler driver and configure the loop size within the configuration. The user should then check all instrument methods using this autosampler to ensure that they continue to function correctly.
<b>CM7-15716</b>	PerkinElmer Clarus 400 GC: Some users must select Autosystem XL in configuration in order to communicate with the PerkinElmer Clarus™ 400.
<b>CM7-20464</b>	Varian 3800 GC: It is not possible to start a manual data acquisition if the GC is not ready (i.e. all temperatures, pressures and so on are at their set points). Trying to do so will generate a Ready Check message detailing what is not ready.
<b>CM7-12366</b>	<p>Agilent 5890 DICE Card: Please note the following when using the 19257 DICE card with the Agilent 5890 GC:</p> <p>Control and acquisition using the DICE card is only supported via the serial interface. The GPIB interface is not supported.</p> <p>Digital data acquisition via the serial interface of the DICE card is only supported for a single channel; dual channel digital acquisition is not supported.</p> <p>Currently, it is possible to select certain illegal combinations in the Configuration Dialog such as:</p> <p>Digital acquisition with the 19254 card. This is not supported.</p> <p>Digital acquisition on one detector and analog acquisition on the other. Acquisition needs to be exclusively digital or exclusively analog.</p> <p>When using the DICE card to acquire data digitally, the 5890 INET mode must be set to "GLOBAL" not "LOCAL". Failure to do so will result in a "No response from GC" message following the AcqOn command in the audit trail.</p> <p>Note that when performing analog acquisition, the 5890 INET mode should still be set to "LOCAL" (as described in the online help).</p>
<b>CM7-9675</b>	Agilent 7890 GC: There is a backward compatibility issue that affects the Agilent 7890 GC Sampler Positions. When using a 7890 GC in combination with a 7693 sampler, certain positions in the sampler could give a misspelled value to a move command. This has now been corrected and could in rare cases lead to Instrument Method files needing to be updated to avoid errors.
<b>CM7-15293, CM7-18463</b>	Agilent 1100 Obsolete Driver: Occasionally, when using a combination of older and newer modules, the raw data was not correctly acquired.

## 5.9 Other Limitations

ID	Description
<b>SWFR-2543</b>	Sampling Devices That Do Not Use $\mu\text{L}$ As Units for Volume: Although most liquid injection devices expect volumes to be entered in $\mu\text{L}$ , there are a few devices (e.g. Thermo AS-HV and Perkin-Elmer GC Autosampler) which do not use $\mu\text{L}$ as their default volume unit. If one of these devices is configured in the same instrument that also includes an injection device that uses $\mu\text{L}$ , problems may be observed with volume validation in the sequence table as well as units associated with volumes in reports.
<b>CM7-21780</b>	NIST MS Search and Demo Library No Longer Automatically Installed: Incompatibilities of the NIST 2008 MS Demo Library installer with Window 7 and 10 could cause the main Chromeleon installer to hang or crash. To address this, the NIST Demo library, and the associated AMDIS and MS Search software are no longer automatically installed when you install Chromeleon. If desired, this package may be installed manually using the setup program found in the /Tools/ folder of the Chromeleon DVD. Alternatively, one may install AMDIS and MS Search using the full (licensed) NIST library installer.  Note that MS library searching within the Chromatography Studio is not affected by this issue.
<b>CM7-21783</b>	Performance When Importing Fixed Calibration Standards for MS Sequences: When working with sequences of MS data, importing injections for use in a fixed calibration can take 1-2 minutes to complete, depending on the data.
<b>CM7-18252</b>	Export MS Raw Data: When acquiring MS data, Chromeleon acquires MS data and all other signal data, such as UV, FLD, and pump pressure signals, in separate formats. As a result, when MS data is exported, non-MS data is not exported with the MS raw data file.
<b>CM7-20335</b>	Comparison of Old Report Versions Shows Change in CmbxExportParameters: If a report which was created in Chromeleon 7.2 SR2 or earlier, and modified in SR3, has its history compared in SR4, the history will appear to show that the "Cmbx Export Parameters" value has changed from True to False. This is due to a change in the default value of this field, and does not represent any user-modification of the report.
<b>CM7-17203</b>	Report Designer: With some date/time formatting settings in the report, the order of month and day changes for some formats automatically. The settings in the Report Template can change based on the windows regional settings. For example it is not possible to set m.d.yy as format with German regional settings. The Report Template replaces this with d.m.yyyy. The substitution occurs for report variables and non-report variable entries.
<b>CM7-17841</b>	Report Designer: If using a non-Chinese format as the regional setting in Windows, and Chinese as the setting for Non-Unicode programs, then the header on a Chromeleon report is not correctly displayed for variables. If the format is changed to Chinese, then everything is correctly displayed.
<b>CM7-21331</b>	Report Variable chm.massSpectrum("...").resolution always shows "0,5000": The mass spectrum resolution report variable returns an internally used processing value instead of the resolution setting defined in the MS instrument method. It is recommended to discontinue use of this report variable until further notice.

ID	Description
<b>CM7-20449</b>	User Management: Login "Role" dropdown box becomes empty after upgrading to Chromeleon 7.2 SR4. This is due to the fix for CM7-18178 "Roles were offered in the Logon dialogue, even if they were not specified as Logon roles". To work around this issue, enable the "Logon Role" property in the user database for all logon roles that users need to be able to select.
<b>CM6-23886</b>	Exception Error When Removing USB->COM Port Adapter: If a USB-to-RS232 adapter is used to provide COM communication between an Instrument PC or 247 Instrument Controller and an instrument, and the USB connection is unplugged, Chromeleon reports a Fatal Error in the Instrument Audit trail. The USB-to-RS232 adapter should not be disconnected from the Instrument PC or 247 Instrument Controller while it is powered-on.
<b>CM7-19336</b>	Chromeleon 6 Import: Due to changes in Auditing between Chromeleon 6 and Chromeleon 7, when a Chromeleon 6 Sequence is imported into Chromeleon 7, some of the text displayed in the Instrument Audit trail will not appear exactly as it did in Chromeleon 6. Refer to the topic "Viewing Chromeleon 6 Data" in the online help for further information.
<b>CM7-21399</b>	Injection Variables 'Auto Dilution Ratio' and 'Retention Time Standard': Auto Dilution Ratio and Retention Time Standard columns are not available in the custom filter conditions for injection records (e.g., in the IRC editor or summary report).
<b>CM7-22111</b>	<p>Mixed Installations with Chromeleon 7.2 SR5 Domain Controller: If you have an existing installation of Chromeleon &lt; 7.2 SR1, the following limitations apply during an upgrade: Stations that have Chromeleon 7.2 or below installed will not see any data vaults or instruments that have been created with Chromeleon 7.2 SR5, until after those stations are upgraded to 7.2 SR5.</p> <p>It is not possible for a Chromeleon 7.2 (and below) station to join a Chromeleon 7.2 SR5 domain.</p> <p>Stations that have Chromeleon 7.2 or below will not receive any updates from the Discovery Service after the Chromeleon domain controller has been upgraded to 7.2 SR5, and will only see resources that were already in existence and cached.</p> <p>Please refer to the Enterprise Documentation for guidance on upgrading an older installation of Chromeleon 7 to Chromeleon 7.2 SR5.</p>
<b>CM7-22145</b>	Discrepancy in "Last Modified" Time: Owing to differing rounding methods used, it is possible that the value of the "last modified" time for an object in a sequence has a difference of 1 second between the client display and the value shown in a report. For more details, please see the on-line help.
<b>CM7-24058</b>	Console: The new eWorkflow option "Preserve Layout", introduced in Chromeleon 7.2.6 is not backwards compatible with older versions of Chromeleon. If a client with an earlier version attempts to open an eWorkflow for which this option is enabled, the error message "Cannot load, as the data was created with a newer Chromeleon version." Is displayed.
<b>CM7-20637</b>	Logon with Current Windows Account after Disconnecting Network Fails with Misleading Error Message: In the event of a loss of network connection on a system using LDAP logon, attempting to logon to Chromeleon again with the same account details results in a misleading error message "The user name or password are incorrect."

ID	Description
<b>CM7-23033</b>	<p>Legacy Upload: With replication framework disabled, when trying to modify a sequence while the automatic upload is already in progress the upload may fail in very rare cases and it is not possible to remove the sequence from the instrument queue by retry of the upload. To recover the sequence a copy of the sequence has to be stored manually. Chromeleon 7.2 SR5 adds an audit trail entry to the manually uploaded sequence that refers to the original sequence so that traceability is ensured.</p> <p>Thermo Fisher Scientific recommends to enable the replication framework with Chromeleon 7.2 SR5 to avoid the problem.</p>
<b>CM7-23481</b>	<p>Fatal Error in Chromeleon 7 Real Time Kernel Service: When leaving the Instrument Configuration Manager open over extended periods of time the Chromeleon Real Time Kernel Service might stop unexpectedly with a fatal error in the Windows Event Log.</p>

## 5.10 Obsolete Drivers

Chromeleon includes a number of obsolete drivers in order to provide backward compatibility of existing installations:

- Agilent/HP 1200 HPLC System
- AI 1310/3000 GC Sampler - 10ul
- AI 1310/3000 GC Sampler - 5ul
- AI 1310/3000 GC Sampler - 5ul - 155 Vials
- AI 1310/3000 GC Sampler - 5ul - 105 Vials
- AI 1310/3000 GC Sampler - 10ul - 155 Vials
- AI 1310/3000 GC Sampler - 10ul - 105 Vials
- PAL Sampler for GC
- PAL Sampler for LC
- TRACE 1300 Series GC (First generation driver that has been superseded by TRACE 1300 Series GC II driver)

Please note that issues reported for any of these drivers will no longer be addressed. If you are using one of these drivers Thermo Fisher Scientific recommends migrating to a supported driver as soon as possible.

## 5.11 Defects Under Investigation

The following defects have only occurred very rarely, and data necessary for investigation, such as log files and backups, are insufficient to reproduce the problem. Despite significant testing efforts in various configurations we could not reproduce this behavior in systems that are set up and configured as recommended by Thermo Fisher. Thermo Fisher is therefore unable to identify the root cause of the problem and provide technical modifications of the software that would allow us to confidently state that we prevent future incidents of such behavior. We are continuing investigation



of these issues but would like to share symptoms of this behavior with our customer base and give recommendations to remediate from the behavior if it occurs.

**Note:** If you are affected by any of these defects, please collect a System Status Report immediately and contact your local Thermo Fisher representative for further assistance.

### 5.11.1 Empty Inject Time and GUID Fields in the Injection Record [CM7-22738]

Empty Inject Time and GUID fields have been seen in a few single injections. Raw data have been successfully acquired and stored on the local Instrument PC. The Injection Audit Trail on the Instrument PC contains complete information, including the missing details. Too few instances have been reported to identify the root cause of this problem.

**Note:** If you are affected by this problem, please contact your local Thermo Fisher representative for assistance with recovery of the missing injection details.

### 5.11.2 Instrument Audit Trails Are not Properly Saved/Written on the local Data Vault [CM7-23051]

In one installation, a few Sequences aborted with the following error messages in the audit trail:

“The audit trail was unavailable for some time. Several audit trail messages are lost. They have been logged to the file "Dionex\Chromeleon\Log\AuditTrailMessages.log" in the (common) application data folder.”

During investigation of the log files of affected Instrument Controller PCs errors of slow file operations on the local hard drive have been found:

“SQL Server has encountered 1 occurrence(s) of I/O requests taking longer than 15 seconds to complete on file [C:\ProgramData\Dionex\Chromeleon\DataVaults\XVault\XVault\_log.LDF] in database [XVault] (6)“

It has been confirmed that the failure was caused by poor disk drive performance and only occurred over a limited period of time. Chromeleon 7.2 SR5 introduces additional error handling and reporting so that similar errors can be identified more easily.

## 5.12 Functional Differences between Chromeleon 7.2 and Chromeleon 6.8

Chromeleon 7.2 SR5 MUa implements the vast majority of Chromeleon 6.8 features, and in general, has a richer feature set than Chromeleon 6.8. However, a few Chromeleon 6.8 features remain to be implemented on the Chromeleon 7 platform and a few will never be implemented, since they are now obsolete or no longer relevant. If a particular missing feature is important to you, please contact your local Thermo Fisher Scientific representative to find out if that feature is in the product development plans.

## 6 Backward/Forward Compatibility Issues

### 6.1 Thermo Scientific Vanquish Charged Aerosol Detector [CM6-23499]

Any Instrument Methods created for the Vanquish Charged Aerosol detector with Chromeleon 7.2 SR2 MUa and earlier may need to be updated due to changes in the driver introduced in Chromeleon 7.2 SR2 MUb.

### 6.2 Thermo Scientific Vanquish Autosampler [CM6-23405]

Any Instrument Methods created for the Vanquish Autosampler containing the WashSpeed property will need to be updated. The WashSpeed value needs to be divided by 0.06 in order for the Instrument Method to work correctly.

### 6.3 Thermo Scientific TriPlus RSH

The current driver for this instrument is incompatible with firmware older than version 2.4.

### 6.4 Thermo Scientific TriPlus 300 HS

The current driver for this instrument is incompatible with firmware older than 2001.9.0.

### 6.5 Thermo Scientific TriPlus LS-100

The current driver for this instrument is incompatible with firmware older than version 2.4.

### 6.6 Thermo Scientific TSQ Quantiva

The driver version 1.1 QF1 for this instrument, included in this Service Release, may not be compatible with existing TSQ Quantiva mass spectrometers running driver version 1.0 without a hardware update. Please contact your local MS service engineer before attempting to upgrade the unit.

**Note:** New TSQ Quantiva modules from the factory are not affected by this issue.

### 6.7 Thermo Scientific TSQ Quantiva and Endura

The driver version 1.1 SP1 for these instruments may not be compatible with existing TSQ Quantiva and Endura mass spectrometers running driver version 1.0 without a hardware update. Please contact your local MS field service engineer before attempting to upgrade the unit.

**Note:** New TSQ Quantiva and Endura modules from the factory are not affected by this issue.

### 6.8 TSQ Quantiva and Endura Instrument Method [CM7-18759]

Instrument methods created with older versions of the TSQ Quantiva and Endura instrument method editor cannot be opened with newer versions of the method editor. If a large number of instrument methods have already been created for regular use, upgrade of the TSQ Quantiva and Endura driver is not recommended. Contact your local Thermo Fisher Scientific representative for additional details.

## **6.9 Signed Sequences [CM7-16374]**

Sequences that have been signed within Chromeleon 7.2 SR1 will fail verification after copying within later versions of Chromeleon 7.2 CDS.

## 7 Appendix

This chapter contains general Information about Service Releases, Release Notes, Online Help, and Contributed Content.

### 7.1 Release Notes

The Release Notes list the new features and improvements of the current release. Included in these Release Notes are all of the functionality and bug fixes from Chromeleon 7.2 SR5 MUa and Chromeleon 7.2 SR5 MUb. For details about Chromeleon 7.2 SR5 and other previous releases, refer to the relevant release notes which can be found on the Chromeleon 7.2.6 DVD.

### 7.2 Online Help

In general, new features, updates and drivers that are introduced with this release are described in an updated Online Help that is distributed with the release.

### 7.3 Contributed Content

The Chromeleon 7 disk contains a folder titled Contributed Content. This folder contains:

- Demonstration Material
- Localized Documents
- Localized ePanels
- Localized Report Templates
- eWorkflow Templates
- User Management Example
- Charlie Mouse Pointer

**Note:** The files in the Contributed Content folder have not been tested and validated according to Thermo Fisher Scientific Software Development Cycle guidelines modeled after ISO 9001:2008 standards. Thermo Fisher Scientific assumes no responsibility for any errors that may appear in the content provided in the Contributed Content folder.

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**Thermo Fisher Scientific Inc.**  
168 Third Avenue  
Waltham, MA 02451  
USA

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