



Agilent Instrument Control Framework (ICF)

Release Information

Document Index

Click on the following links to navigate through this document.

**Agilent
Instrument
Control
Framework**

[Introduction to ICF](#)

[ICF Documentation Overview](#)

[ICF Version Overview](#)

[ICF Version History](#)

[ICF Impact Analysis](#)

[ICF Pre-Requisites](#)

[Installation](#)

[Important Support Information](#)

RC.Net

Instrument Driver

[Latest Driver version](#)

[Previous Driver versions](#)

Agilent LC/CE/ELSD/SFC

RC.Net

Instrument Driver

[Latest Driver version](#)

[Previous Driver versions](#)

Agilent GC/HS



Agilent Technologies

Introduction to ICF

The purpose of this document is to provide developers and users of the Agilent ICF packages (“Instrument Control Framework”) guidance to other relevant support documentation that contain further levels of information and detail in the underlying instrument driver packages supported by ICF.

Changes to ICF documentation

As of February 2015, Agilent moved to an independent driver release process allowing greater flexibility in releasing new or updated instrument drivers at any time without necessarily enforcing an update to the ICF layer. Consequently, the reverse scenario is now also possible. As each ICF package is now independent, each contributing instrument driver package offers its own set of documentation which can be found indexed in the following pages. Currently ICF incorporates the ICF layer and a number of different instrument driver packages for our LC and GC products and will continue to expand in the future.

ICF Versioning (As of Feb 2019)

A **major change** to an ICF version will be denoted by a change in revision number from **n.x** to **n+1.x**, e.g. 2.6 to 3.0.

A **minor change** to an ICF version is represented either by **x.n** to **x.n+1** e.g. 2.6 to 2.7, or an additional identifier **Driver Update (DU)**.

When changes to the underlying instrument driver packages have been made, the corresponding ICF package name will be denoted by an incremental **Driver Update x** nomenclature signifying an instrument driver update e.g. ICF 2.6 Driver Update 1, Driver Update 2 and so on... without a change to the ICF layer.

ICF Documentation Overview

A brief explanation is provided below for the documentation included in each ICF Development Kit.

We recommend that you incorporate the following user documentation into your data system documentation when distributing ICF and the corresponding Agilent instrument drivers with your CDS software and updates:

Top Level/Root

- **Readme**
Contains general support information for the complete ICF package plus *any last-minute changes* not mentioned in the existing documentation set. For all other information consult the ICF Release Information.
- **ICF Release Information** (this document)
This document provides an overview of ICF, its versions and which instrument driver packages are supported by ICF. Additional, detailed documentation for each instrument driver can be accessed via this document.
- **Software License Terms**
Description of the Agilent license terms for the use of ICF.

ICF Folder

The following documents are to be found in the **User Documentation** folder of ICF:

- **ICF Software Status Bulletin (SSB)**
This document lists known issues with the current ICF layer components which are still to be addressed along with its unique tracking ID number.
- **ICF Software Release Bulletin (SRB)**
This document lists issues that were fixed with the release of the latest ICF layer components along with its unique tracking ID number.
- **ICF Validation Certificate**
This document provides an assurance that the ICF software product was developed and tested using Agilent's product development and lifecycle processes.

Instrument Driver Folders

Each instrument driver package contains the following documentation located in the User Documentation folder:

A brief explanation of the documentation set is provided below:

- **Instrument Driver Release Notes**
A Release Note document pertaining to the instrument driver functionality. This discusses important information regarding the required operating environment, pre-requisites, functionality that was introduced/changed, impact analysis etc.

- **Driver Software Status Bulletin (SSB)**
This document lists known issues with the current instrument driver components which are still to be addressed along with its unique tracking ID number.
- **Driver Software Release Bulletin (SRB)**
This document lists issues that were fixed with the release of current instrument driver components along with its unique tracking ID number.
- **Validation Certificate**
This document provides an assurance that the instrument driver was developed and tested using Agilent’s product development and lifecycle processes.

Terms and Abbreviations

| Term | Description |
|------|---|
| DU | Driver Update |
| SP | Service Pack |
| HF | Hotfix |
| [xx] | Final Build Numbers of the released product |

ICF Version Overview

| ICF package name | Release Date | What's New/What Changed (Highlights only - For further information, please review the additional instrument driver documentation within the ICF packages) |
|-----------------------------------|-----------------|--|
| <p><u>2.6 Update 3</u></p> | <p>Feb 2020</p> | <p>The ICF layer/adapter: No major changes in ICF 2.6 Update 3.</p> <p>LC instrument driver package: No changes. LC driver A.02.19 SR2 used in this package.</p> <p>Updated GC/HS Instrument Driver package: Includes Agilent GC/HS driver 3.1 SR1 driver package.</p> <ul style="list-style-type: none"> GC driver bugfixing – See Release Notes for the Agilent GC driver 3.1.206 <p>Added modules and features compared to the GC driver package included in earlier ICF revisions are documented in the previous driver release notes. The documents are part of the ICF package.</p> <p>Please see the Software Status Bulletin (SSB) for more information related to “known issues”.</p> |
| <p><u>2.6 Update 2</u></p> | <p>Oct 2019</p> | <p>The ICF layer/adapter: Fixed in ICF 2.6 Update 2: KPR# 401099: Method upload may result in a deadlock identified by “Server Busy” message.</p> <p>LC instrument driver package: No changes. LC driver A.02.19 SR2 used in this package.</p> <p>Updated GC/HS Instrument Driver package: Includes Agilent GC/HS driver 3.1 driver package.</p> <ul style="list-style-type: none"> Support for functionality being added to Intuvo 9000 GC and 88xx GC firmware 2.0 GC driver bugfixing – See Release Notes for the Agilent GC driver 3.1.199 <p>Please see the Software Status Bulletin (SSB) for more information related to “known issues”.</p> <p>Added modules and features compared to the GC driver package included in earlier ICF revisions are documented in the previous driver release notes. The documents are part of the ICF package.</p> |

| ICF package name | Release Date | What's New/What Changed (Highlights only - For further information, please review the additional instrument driver documentation within the ICF packages) |
|----------------------------|--------------|---|
| <u>2.6 Update 1</u> | June 2019 | <p>The ICF layer/adaptor: No changes are made in the ICF interface.</p> <p>Minimal changes to the ICF framework - see section "Impact Analysis (2.6 Update 1)" in this document.</p> <p>Updated LC instrument driver package: Nothing has changed compared to ICF 2.6.</p> <p>Updated GC/HS Instrument Driver package: Includes Agilent GC/HS driver 3.0a SR2 driver package that supports the following new features.</p> <ul style="list-style-type: none"> • New GC modules added: 8890 GC (G3540A) and 8860 GC (G2790A) • Integration of the 68xx Drivers into the Agilent GC Drivers • GC driver bugfixing – See Release Notes for the Agilent GC driver 3.0 SR2 (3.0.652) • HS driver bugfixing – See Release Notes for the Headspace Driver B.01.09 <p>Please see the Software Status Bulletin (SSB) for more information related to "known issues".</p> <p>Added modules and features compared to the GC driver package included in earlier ICF revisions are documented in the previous driver release notes. The documents are part of the ICF package.</p> <p>Note: It is recommended not to use Agilent GC/HS driver 3.0a SR2 because of a potential deadlock.</p> |

| ICF package name | Release Date | What's New/What Changed (Highlights only - For further information, please review the additional instrument driver documentation within the ICF packages) |
|-------------------|--------------|---|
| <u>2.6</u> | Feb 2019 | <p><u>Note:</u> ICF 2.6 is not officially published on Subscribenet.</p> <p>The ICF layer/adapter: There is a new build of the ICF adapter layer included that includes following new functionality:</p> <ul style="list-style-type: none"> • New interface functions on IICMethod and IICPretreatment to extract the configuration for the instrument from the methods or pretreatments • New interface function on IICControl where you can specify which aux traces you want to collect • New functionality to collect system and support information • Support for drivers with multiple "StatusUI". E.g. The Agilent GC 7890 is now also included in the Instrument dashboard <p>Updated LC instrument driver package: Includes A.02.19 SR2 LC drivers that fixes some issues.</p> <ul style="list-style-type: none"> • KPR# 187313: Method download fails when cooler is controlled in method is fixed with driver version A.02.19 SR1 • KPR# 239784: Runs intermittently not finishing due to SFC remaining in Prerun state is fixed with driver version A.02.19 SR2 • KPR# 238417: Unexpected shutdown of Chromatographic Data System when executing a pump purge is fixed with driver version A.02.19 SR2) For more information, please see the Software Status Bulletin (SSB) and Software Release Bulletin (SRB). <p>Added modules, features and fixes included in A.02.19 and A.02.19 SR1 compared to LC driver packages included in earlier ICF revisions are documented in previous driver release notes. This documents are part of the ICF package.</p> <p>Updated GC/HS Instrument Driver package: Includes Agilent GC/HS B.01.05a driver package that supports the following new features:</p> <ul style="list-style-type: none"> • GC driver B.01.05.015: Added integration for the Agilent GC drivers in Thermo Chromeleon Data System. • HS driver B.01.08: Added integration for the Agilent HS drivers in Thermo Scientific Chromeleon Data System. |

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| | | <ul style="list-style-type: none">• GC driver bugfixing - See Release Notes for the Agilent GC driver B.01.05 (01.05.015)• HS driver bugfixing – See Release Notes for the Agilent HS driver B.01.08 <p>Please see the Software Status Bulletin (SSB) for more information related to “known issues”.</p> <p>Added modules and features compared to the GC driver package included in earlier ICF revisions are documented in the previous driver release notes. The documents are part of the ICF package.</p> |
|--|--|--|

| ICF package name | Release Date | What's New/What Changed (Highlights only - For further information, please review the additional instrument driver documentation within the ICF packages) |
|-----------------------|--------------|---|
| <u>A.02.05</u> | March 2018 | <p>The ICF layer/adaptor: There is a new build of the ICF adapter layer included that provides following functionality:</p> <ul style="list-style-type: none"> • .NET CLR 4 Support • Expected Signals • Data File Signals • Module Descriptions • Sending abort to the devices • InstrumentControlException <p>Updated LC instrument driver package: Includes A.02.18 LC drivers that supports the following new 1260 Infinity II modules and features:</p> <ul style="list-style-type: none"> • G7161B: 1290 Infinity II Preparative Binary Pump • G7167-60101: InfinityLab Sample Thermostat • 5067-4266: 5pos/10port Valve head 1300 bar (G4243A) • LAN option for the G4260B • Graphical Sample Entry support for Fraction Collectors • ISET 4.2 • Retrieval & Storage of Full Instrument Method Parameters • New driver features are introduced (Details in the "Release Note for Agilent LC and CE Driver Revision A.02.18") <p>Updated GC/HS Instrument Driver package: Includes B.01.03a GC/HS driver package that supports the following new features:</p> <ul style="list-style-type: none"> • The Agilent GC Drivers are updated to accommodate multiple GC control in a single process. This will support use of the Intuvo 9000 GC with the Waters Empower Data System • Update the Agilent GC Drivers for the 7890 GC x GC valve UI • GC: Bug fixing (Details in the "Agilent GC Drivers B.01.03.096 – Release Notes") |

| | | |
|--|------------|--|
| | | <ul style="list-style-type: none"> • HS: Bug fixing (Details in the “Agilent Headspace Driver B.01.07.3 – Release Note”) |
| <u>A.02.04 Driver Update 1 Hotfix 1</u> | July 2017 | <p>Resolves one defect in the ICF layer/adaptor in combination with the LC instrument driver A.02.15. ICF layer/package updated from A.02.04 [124] to A.02.04 Hotfix 1 [125].</p> <p>Resolves one defect in the GC installer package. GC package updated from B.01.01 [9] to B.01.01 [12].</p> |
| <u>A.02.04 Driver Update 1</u> | March 2017 | <p>The ICF layer/adaptor: No changes are made in this ICF layer/adaptor package.</p> <p>Updated LC instrument driver package: Includes A.02.15 LC drivers that supports the following new 1260 Infinity II modules:</p> <ul style="list-style-type: none"> • G7159B: 1290 Infinity II Open-Bed Fraction Collector • G7166A: 1260 Infinity II Preparative Valve-Based Collector • G4734A: 6-Pos./14-Port 6Column Selection Valve for Prep • New driver features are introduced, (Details in the “Release Note for Agilent LC and CE Drivers Revision A.02.15”) <p>Updated GC/HS Instrument Driver package: Includes B.01.01 GC/HS driver package that supports the following new features:</p> <ul style="list-style-type: none"> • 7820 EPR • Enhance the user experience with user interface updates • General bugfixing <p>Headspace driver:</p> <ul style="list-style-type: none"> • No major changes • General bugfixing |

| ICF package name | Release Date | What's New/What Changed (Highlights only - For further information, please review the additional instrument driver documentation within the ICF packages) |
|-----------------------|--------------|---|
| <u>A.02.04</u> | June 2016 | <p>Updated ICF layer/adapter: There is a new build of the ICF adapter layer included that provides:</p> <ul style="list-style-type: none"> • New interfaces for “Sample Container Devices/Sample Container” and “Recoverable Errors” • The Monitor polling has bene halved from 1000ms to 500ms • Pre-compiled .NET DLL’s increase the general performance incl. improved loading times • In case of using the ICF Log File Collector tool, a message box is coming up before collecting and zipping of the log files starts • New icons for Add/Remove Programs now implemented • Availability and support of analytical results information (e.g. RFID tag information, dual needle information, pressure values, etc.) • Windows 10 is now supported for ICF <p>IMPORTANT: Presenting the analytical results requires specific integration by the third party CDS vendors</p> <p>Updated LC instrument driver package: Includes A.02.14 LC drivers that supports the following new 1260 Infinity II modules: Pumps: G7110B (Isocratic); G7111A/B (Quaternary), G7112B (Binary), G5654A (Bio-inert) Samplers: G7167A (Multisampler), G7129A (Vialsampler), G5668A (Bio-inert Multisampler) Column Compartment: G7116A (MultiCcolumn Thermostat) Detectors: G7117C (HS DAD); G7115A (WR DAD); G7165A (MWD); G7114A (VWD); G7121A (FLD); G7121B (FLD Spectra).</p> <p>Updated GC Instrument Driver package: The GC/HS driver package Rev. A.03.02 is included and contains the Headspace driver B.01.07.</p> |

| ICF package name | Release Date | What's New/What Changed (Highlights only - For further information, please review the additional instrument driver documentation within the ICF packages) |
|--|--------------|---|
| <u>A.02.03 Driver Update 2</u> | Nov 2015 | <p>Updated ICF layer/ adapter: A new build of the ICF adapter layer is present in this package to address an ICF schema modification in order to use custom wellplates together with the LC instrument driver A.02.13 without errors. See Impact Analysis for additional information.</p> <p>Updated LC instrument driver package: Adds support for the following new LC modules: G7129A/B Infinity II Vial/Autosampler (600bar & 1300bar) and Integrated Column Heater G7130A, 1260 Infinity RID G7162A and 1290 Infinity II RID G7162B detectors.</p> <p>Additional product functionality added: The G4227A Infinity Flexible Cube Pressure Sensor option, dual needle mode of G7167A/B Infinity II Multisampler and Valve Thermostat Clusters (VTC), Injector program updates, enhanced column ID tags for column ovens modules. Acquire option for all detector signals now available.</p> <p>Other important changes: The instrument status display now reflects the new "look and feel" of the "Lucid" user interface. Additional information can be found in the LC Drivers A.02.13 User Documentation. ELSD and SFC instrument drivers have been incorporated into the main LC driver package. In addition, SFC-USB driver installers for 32-bit and 64-bit operating systems are also included. LC instrument driver package A.02.12 was not released in any ICF package, but it's functionality is now covered in this release of ICF with LC driver A.02.13.</p> |
| <u>A.02.03 Driver Update 1 Hotfix 2</u> | Oct 2015 | Resolves 1 LC instrument driver defect regarding interoperability of different ICF/instrument driver versions. LC driver updated from A.02.11 SP1 HF1 [71] to A.02.11 SP1 HF2 [72]. |
| <u>A.02.03 Driver Update 1 Hotfix 1</u> | July 2015 | Resolves 3 GC defects and 1 LC defect in the respective instrument driver packages. ICF layer unchanged. |
| <u>A.02.03 Driver Update 1</u> | Feb 2015 | <p>Updated LC instrument driver package: Support for additional 1290 Infinity II LC modules added</p> |

| ICF package name | Release Date | What's New/What Changed (Highlights only - For further information, please review the additional instrument driver documentation within the ICF packages) |
|--------------------------------------|--------------|--|
| <u>A.02.03</u> | Dec 2014 | Updated LC instrument driver package: Added LC support for the 1290 Infinity II and 1260 Infinity Multisampler LC systems. |
| <u>A.02.02 Hotfix1</u> | July 2014 | Fix implemented |
| <u>A.02.02</u> | Apr 2014 | Update LC instrument driver package: No major changes. Updated GC instrument driver package: Added GC support for: 7890, 6850, 6890, G1888HS, 7697A HS and 7693/7683 autosamplers. Various fixes implemented. |
| <u>A.02.01</u> | March 2014 | Updated LC instrument driver package: Added LC support for: 1260 Infinity Preparative LC, 1260 Infinity SFC and CE systems. Various fixes implemented. |
| <u>A.01.05 Service Pack 1</u> | March 2013 | Various fixes implemented. |
| <u>A.01.05</u> | Oct 2012 | Updated LC instrument driver package: Added LC support for: 1290 Infinity Flexcube, 1260 Infinity UIB module, 1290 Infinity Quaternary pump & 1220 Infinity LC system (G4294B). Various fixes implemented. |
| <u>A.01.04</u> | Feb 2012 | Updated LC instrument driver package: Added LC support for: 1260 Infinity nano-HPLC and 1260 Infinity Capillary LC systems. ISET V support. Various fixes implemented. |

For older versions of ICF not listed in the table above, please refer to the respective ICF package documentation.

Links to Instrument Driver Documentation

For more information on Agilent's Instrument driver packages, minimum firmware etc., see the documentation delivered with the ICF package:

| ICF package name | ICF version | Instrument Driver | Driver Version | Additional instrument driver documentation within the ICF packages | Release Date |
|---------------------------|--------------|-------------------|----------------|--|--------------|
| Latest ICF version | | | | | |
| 2.6 Update 3 | 2.6 Update 3 | LC/CE | A.02.19 SR2 | <u>Release Notes for Agilent LC/CE drivers Revision A.02.19 SR2*</u> | Feb 2020 |
| | | ELSD | A.01.07 DU1 | <u>Release Notes for Agilent ELSD drivers Revision A.01.07 and A.01.07 DU1*</u> | |
| | | USB-SFC | 1.0.001 | See above A.02.19 SR2 Release Notes | |
| | | GC/HS | 3.1 SR1 | <u>Release Notes for Agilent GC drivers Revision 3.1 SR1 (3.1.206)*</u> HS driver B.01.09 (Included in GC driver package 3.1 SR1) <u>Release Notes for Agilent Headspace drivers Revision B.01.09*</u> | |

* The driver release notes are part of the ICF package.

| ICF package name | ICF version | Instrument Driver | Driver Version | Additional instrument driver documentation within the ICF packages | Release Date |
|------------------------------|--------------|-------------------|----------------|---|--------------|
| Previous ICF versions | | | | | |
| 2.6 Update 2 | 2.6 Update 2 | LC/CE | A.02.19 SR2 | <u>Release Notes for Agilent LC/CE drivers Revision A.02.19 SR2*</u> | Oct 2019 |
| | | ELSD | A.01.07 DU1 | <u>Release Notes for Agilent ELSD drivers Revision A.01.07 and A.01.07 DU1*</u> | |
| | | USB-SFC | 1.0.001 | See above A.02.19 SR2 Release Notes | |
| | | GC/HS | 3.1 | <u>Release Notes for Agilent GC drivers Revision 3.1 (3.1.199)*</u> HS driver B.01.09 (Included in GC driver package 3.1) <u>Release Notes for Agilent Headspace drivers Revision B.01.09*</u> | |
| 2.6 Update 1 | 2.6 Update 1 | LC/CE | A.02.19 SR2 | <u>Release Notes for Agilent LC/CE drivers Revision A.02.19 SR2*</u> | June 2019 |
| | | ELSD | A.01.07 DU1 | <u>Release Notes for Agilent ELSD drivers Revision A.01.07 and A.01.07 DU1*</u> | |
| | | USB-SFC | 1.0.001 | See above A.02.19 SR2 Release Notes | |
| | | GC/HS | 3.0a SR2 | <u>Release Notes for Agilent GC drivers Revision 3.0 SR2 (3.0.652)*</u> HS driver B.01.09 (Included in GC driver package 3.0a SR2) <u>Release Notes for Agilent Headspace drivers Revision B.01.09*</u> | |

* The driver release notes are part of the ICF package.

| ICF package name | ICF version | Instrument Driver | Driver Version | Additional instrument driver documentation within the ICF packages | Release Date |
|------------------------------|-------------|-----------------------------------|---|---|--------------|
| Previous ICF versions | | | | | |
| 2.6 | 2.6 | LC/CE ELSD USB-SFC GC/HS | A.02.19 SR2 A.01.07 DU1 1.0.001 B.01.05a | <u>Release Notes for Agilent LC/CE drivers Revision A.02.19 DR2*</u> <u>Release Notes for Agilent ELSD drivers Revision A.01.07 and A.01.07 DU1*</u> See above A.02.19 SR2 Release Notes <u>Release Notes for Agilent GC drivers Revision B.01.05.015*</u> HS driver B.01.08 (Included in GC driver package B.01.05a) <u>Release Notes for Agilent Headspace drivers Revision B.01.08*</u> | Feb 2019 |
| A.02.05 | A.02.05 | LC/CE ELSD USB-SFC GC/HS | A.02.18 1.7 1.0.001 B.01.03a | <u>Release Notes for Agilent LC/CE drivers Revision A.02.18*</u> <u>Release Notes for Agilent ELSD drivers Revision A.01.07*</u> See above A.02.18 Release Notes <u>Release Notes for Agilent GC drivers Revision B.01.03.096*</u> HS driver B.01.07.3 (Included in GC driver package B.01.03a) <u>Release Notes for Agilent Headspace drivers Revision B.01.07.3*</u> | March 2018 |

* The driver release notes are part of the ICF package.

| ICF package name | ICF version | Instrument Driver | Driver Version | Additional instrument driver documentation within the ICF packages | Release Date |
|---|------------------|-----------------------------------|--------------------------------------|--|--------------|
| Previous ICF versions | | | | | |
| A.02.04 Driver Update 1 Hotfix 1 | A.02.04 Hotfix 1 | LC/CE ELSD USB-SFC GC/HS | A.02.15 1.6 1.0.001 B.01.01 | For the driver release notes, please see A.02.04 Driver Update 1 below. | July 2017 |
| A.02.04 Driver Update 1 | A.02.04 | LC/CE ELSD USB-SFC GC/HS | A.02.15 1.6 1.0.001 B.01.01 | <u>Release Notes for Agilent LC/CE drivers Revision A.02.15*</u> <u>Release Notes for Agilent ELSD drivers Revision A.01.06*</u> See above A.02.15 Release Notes GC B.01.01.069 <u>Release Notes for Agilent GC drivers Revision B.01.01*</u> HS driver B.01.07.2 (Included in B.01.01) <u>Release Notes for Agilent Headspace drivers Revision B.01.07.2*</u> | March 2017 |
| A.02.04 | A.02.04 | LC/CE ELSD USB-SFC GC/HS | A.02.14 1.5 1.0.001 A.03.02 | <u>Release Notes for Agilent LC/CE drivers Revision A.02.14*</u> See above A.02.14 Release Notes See above A.02.14 Release Notes GC A.03.02.019: (included in A.03.02) <u>Release Notes for Agilent GC drivers Revision A.03.02*</u> HS driver B.01.07: (Included in A.03.02) <u>Release Notes for Agilent Headspace drivers Revision B.01.07*</u> | June 2016 |

* The driver release notes are part of the ICF package.

| ICF package name | ICF version | Instrument Driver | Driver Version | Additional instrument driver documentation | Release Date |
|---|-------------|-----------------------------------|--|---|--------------|
| Previous ICF versions | | | | | |
| A.02.03 Driver Update 2 | A.02.03 SP1 | LC/CE USB-SFC GC/HS | A.02.13 1.0.001 A.02.02 | <u>Release Notes for Agilent LC/CE drivers Revision A.02.13*</u> (includes A.02.12 functionality) See above A.02.13 Release Notes GC driver A.02.05: <u>Release Notes for Agilent GC drivers Revision A.02.05*</u> HS B.01.05: (included in A.02.02) <u>Release Notes for Agilent Headspace drivers Revision B.01.05*</u> | Nov 2015 |
| A.02.03 Driver Update 1 Hotfix 2 | A.02.03 | LC/CE ELSD USB-SFC GC/HS | A.02.11 SP1 1.3 1.0.001 A.02.02 | <u>Release Notes for Agilent LC/CE drivers Revision A.02.11 SP1*</u> See above A.02.11 SP1 Release Notes See above A.02.11 SP1 Release Notes <u>Release Notes for Agilent GC drivers Revision A.02.05*</u> | Oct 2015 |
| A.02.03 Driver Update 1 Hotfix 1 | A.02.03 | LC/CE ELSD USB-SFC GC/HS | A.02.11 SP1 1.3 1.0.001 A.02.02 | Release Notes for Agilent LC/CE drivers Revision A.02.11 SP1* See above A.02.11 SP1 Release Notes See above A.02.11 SP1 Release Notes Release Notes for Agilent GC drivers Revision A.02.05* | Jul 2015 |
| A.02.03 Driver Update 1 | A.02.03 | LC/CE ELSD USB-SFC GC/HS | A.02.11 SP1 1.3 1.0.001 A.02.02 | <u>Release Notes for Agilent LC/CE drivers A.02.11 SP1*</u> See above A.02.11 SP1 Release Notes See above A.02.11 SP1 Release Notes <u>Release Notes for Agilent GC drivers A.02.05*</u> | Feb 2015 |

* The driver release notes are part of the ICF package.

| ICF package name | ICF version | Instrument Driver | Driver Version | Additional instrument driver documentation | Release Date |
|--------------------------------|-------------|-------------------|----------------|--|--------------|
| Previous ICF versions | | | | | |
| A.02.03 Driver Update 1 | A.02.03 | LC/CE | A.02.11 SP1 | Release Notes for Agilent LC/CE drivers A.02.11 SP1* | Feb 2015 |
| | | ELSD | 1.3 | See above A.02.11 SP1 Release Notes | |
| | | USB-SFC | 1.0.001 | See above A.02.11 SP1 Release Notes | |
| | | GC/HS | A.02.02 | Release Notes for Agilent GC drivers A.02.05* | |
| A.02.03 | A.02.03 | LC/CE | A.02.03 | Release Notes for LC and GC drivers Revision A.01.xx to A.02.03* | Dec 2014 |
| | | GC/HS | A.02.02 | Release Notes for Agilent GC drivers A.02.05* | |
| A.02.02 Hotfix 1 | A.02.02 | LC/CE | A.02.02 | See above Release Notes link for A.02.03 | Jul 2014 |
| | | GC/HS | A.02.02 | | |
| A.02.02 | A.02.02 | LC/CE | A.02.02 | See above Release Notes link for A.02.03 | Apr 2014 |
| | | GC/HS | A.02.02 | | |
| A.02.01 | A.02.01 | LC/CE | A.02.01 | See above Release Notes link for A.02.03 | March 2014 |
| | | GC/HS | A.02.01 | | |
| A.01.05 Service Pack 1 | A.01.05 | LC | A.01.05 SP1 | See above Release Notes link for A.02.03 | March 2013 |
| A.01.05 | A.01.05 | LC | A.01.05 | See above Release Notes link for A.02.03 | Oct 2012 |
| A.01.04 | A.01.04 | LC | A.01.04 | See above Release Notes link for A.02.03 | Feb 2012 |

* The driver release notes are part of the ICF package.

ICF Version History

| ICF package name | Release Date | What's New / What Changed in ICF (For additional information, consult the SSB and SRB documents for ICF) |
|--|--------------|---|
| <u>2.6 Update 3</u> | Feb 2020 | No major changes to ICF infrastructure. New GC driver package added. |
| <u>2.6 Update 2</u> | Oct 2019 | No major changes to ICF infrastructure. New GC driver package added. |
| <u>2.6 Update 1</u> | June 2019 | No major changes to ICF infrastructure. Bugfixing in ICF and new GC driver package. |
| <u>2.6</u> | Feb 2019 | The versioning of ICF release numbers changed. Modification for ICF layer incorporated. Refer to Impact Analysis below and ICF Software Release Bulletin. |
| <u>A.02.05</u> | March 2018 | Modification for ICF layer incorporated. Refer to Impact Analysis below and ICF Software Release Bulletin. |
| <u>A.02.04 Driver Update 1 Hotfix 1</u> | July 2017 | No major changes to ICF infrastructure |
| <u>A.02.04 Driver Update 1</u> | March 2017 | No major changes to ICF infrastructure |
| <u>A.02.04</u> | June 2016 | New functions for ICF added. Refer to Impact Analysis below and ICF Software Release Bulletin. |
| <u>A.02.03 Driver Update 2</u> | Nov 2015 | Modification for ICF layer incorporated. Refer to Impact Analysis below and ICF Software Release Bulletin. |
| <u>A.02.03 Driver Update 1 Hotfix 2</u> | Oct 2015 | No major changes to ICF infrastructure |
| <u>A.02.03 Driver Update 1 Hotfix 1</u> | July 2015 | No major changes to ICF infrastructure |
| <u>A.02.03 Driver Update 1</u> | Feb 2015 | No major changes to ICF infrastructure |
| <u>A.02.03</u> | Dec 2014 | No major changes to ICF infrastructure |
| <u>A.02.02 Hotfix1</u> | July 2014 | No major changes to ICF infrastructure |
| <u>A.02.02</u> | Apr 2014 | No major changes to ICF infrastructure |
| <u>A.02.01</u> | March 2014 | Changes to ICF layer to incorporate support for GC instruments. |
| <u>A.01.05 Service Pack 1</u> | March 2013 | No major changes to ICF infrastructure |
| <u>A.01.05</u> | Oct 2012 | No major changes to ICF infrastructure |

| ICF package name | Release Date | What's New / What Changed in ICF |
|-----------------------|--------------|--|
| <u>A.01.04</u> | Feb 2012 | No major changes to ICF infrastructure |

For older versions of ICF not listed in the table above, please refer to the respective ICF package documentation.

Impact Analysis (2.6 Update 3)

| Defects Resolved: | | | | | |
|------------------------------|----------------|---|--|--------------|--|
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| ICF-439 | 389396 | Second run does not start when AUX traces are disabled | When data collection for AUX traces are disabled, the first run will complete normally but all following runs will not start. An exception or message "Run still ongoing" may appear. This problem does not happen if all AUX traces are enabled. This only affects applications that use the latest ICF interface for enabling/disabling AUX traces. | Fixed | Acquisition: Only the data for the first injection are collected and available. All following runs will not start and no data will be acquired. Workaround: Make sure that all AUX traces are enabled. |
| Defects Not Resolved: | | | | | |
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| ICF-397 | 348886 | Method upload may get wrong settings for 7697 Headspace | The 7697 Headspace can contain wrong method settings during a method upload when both the following conditions are true: 1. Run time of the GC is less than the Headspace processing time. Processing time is the time from picking up the sample vial until it is returned. 2. The Headspace method for the current sample is different compared to the method for the previous sample. | Not fixed | Instrument Control/Method: No impact on the working method and collected data. Workaround: Do not use different Headspace methods in a sequence. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|----------|---------|--|---|-----------|--|
| ICF-335 | 309736 | Signal data is only acquired when detector and inlet are on the same channel | Currently, only signal data is acquired for detectors that are on the same channel as the inlet. This means that: - all signals related to the back injector are not acquired when injecting from the front inlet - all signals related to the front injector are not acquired when injecting from the back inlet Monitor signals / Online Plot is not affected by this issue and all selected signals are displayed. | Not fixed | Acquisition: Signals assigned to a different channel than the inlet that is used, are not acquired. |
| ICF-308 | 294753 | Error collecting support info on 32 bit systems | Collecting support information with one of the "Installed Programs" checkboxes active will fail on 32 bit systems. | Not fixed | System/Administration: There is no other impact. Temporary solution: Collect support information without "Installed Programs" checked. This will not result in an error. |
| ICF-306 | 294842 | Collect Support Info fails when executed 2nd time | If you collect the support information a second time with less checkboxes checked than the first time, an error will prevent support information being collected. | Not fixed | System/Administration: There is no other impact. Temporary solution: Close and reopen the dialog or application hosting the support information collection tool. |
| ICF-184 | 245236 | The tab to collect support information does not provide online help | There is no help button to provide online help for the info tab to collect support information. Pressing F1 also does not open a help file. | Not fixed | User Interface: There is no impact other than the no help is available. |
| ICF-169 | 232388 | It might be possible the monitor signal data are missing or wrong when the configuration changes | On rare occasions, during a very small time period after a configuration change, monitor signal data can contain wrong data or no data at all. All other acquired data that is stored in data files is not affected | Not fixed | Acquisition: There is no impact to acquired and/or stored data channels. The monitor signals in the online plot may be missing or wrong for a small time window. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|-----------------------------------|------------------------------|--|--|--|--|
| New: ICF-129 Old: 278675 | New: 215586 Old: 48 | IQT does not generate any reports | If the computer name is longer than 15 characters, iqt.exe does not work properly, gives no feedback and no reports are being generated. | Not fixed | Installation: There is no other impact. Temporary solution: Using a computer name with less than 15 character. |
| New: ICF-127 Old: 276623 | New: 215583 Old: 47 | Exception when GC 7890 takes a long time to get ready | An exception in IsReadyForInjection() can occur if the GC 7890 does not reach the Ready State fast enough and runs into a timeout in ICF. This can happen when for example the oven requires a long time to reach the initial temperature set in the method. | Not fixed | Acquisition: The sequence will not complete if ICF runs into a timeout when waiting for the ready state. |
| New: ICF-126 Old: 273979 | New: 215581 Old: 46 | No solvent consumption calculation possible for Flexcube | There is no solvent consumption calculation possible for Flexcubes. | Not fixed | Method: Solvent consumption calculation not possible. No other impact. |
| New: ICF-121 Old: 261190 | New: 215573 Old: 34 | "Agilent.DriverLogFileCollector.exe" does not collect log files when "Show hidden folders" is disabled in Windows. | Agilent.DriverLogFileCollector.exe does not collect log files when "Show hidden folders" is disabled in Windows. The Agilent.DriverLogFileCollector.exe tool cannot collect the ICF log files from C:\ProgramData when "Show hidden folders" is disabled in Windows and produces an empty .zip file. | Not Fixed Temporary Fix: Enable "Show hidden files, folders" and drives" in the "Folder Options" in Windows. | Test Application: The Logfile Collector cannot find the log files and creates an empty zip file. |
| New: ICF-119 Old: 260445 | New: 215569 Old: 35 | A sequence with overlapped injection for a GC/HS instrument causes the GC to lose connection. | Executing a sequence with overlapped injection and recoverable error for "GC Stop Button" to continue is configured leads to an issue after the GC stop button is pressed when the first sample is running and the 2nd vial has finished preparing. The sequence aborts and the application hangs. The GC loses connection but this is not reflected in the status window. | Not fixed Temporary Fix: Overlapped injection for GC combined with a HS is not supported. | Automation: Using overlapped injection for a GC/HS instrument with recoverable errors causes the sequence to abort because it gets out of sync. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|-----------------------------------|------------------------------|---|--|------------|---|
| New: ICF-118 Old: 257408 | New: 215568 Old: 37 | The Status progress bar stops at 90% when using Multiple Headspace Extractions. | A sequence using a MHE method with 3 injections to vial 1 followed by 2 injections to vial 2 results in the status progress bar to show 90% 'Completing' as the final step after injecting. | Not fixed. | Status UI: There is no impact other than the graphical issue. |
| New: ICF-114 Old: 230779 | New: 215562 Old: 30 | Online help for the instrument dashboard is not available. | Nothing happens if you press "F1" when viewing the instrument dashboard. There is no help information displayed. Similarly there is no help information for the EMF status shown on the dashboard. | Not fixed | Instrument UI: There is no help available for EMF on the status dashboard. |

Impact Analysis (2.6 Update 2)

| Defects Resolved: | | | | | |
|------------------------------|----------------|--|---|--------------|--|
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| ICF-501 | 401099 | Method upload may result in a deadlock identified by "Server Busy" message. | In Empower 3 using ICF the following sporadic issue has been reported: During a method down- or upload within a sequence (sample set) the system enters into a deadlock showing a Windows message box with the title "Server Busy". The "Switch To ..." and "Retry" button are accessible but do not correct the problem. The system becomes unusable after this error and a reboot of the controller is required or a restart of the instrument control services. | Fixed | Acquisition: Processing of the sequence is halted, Empower is stuck and the PC system has to be rebooted. Acquisition on all other instruments controlled by the same PC may have stopped as well. |
| Defects Not Resolved: | | | | | |
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| ICF-397 | 348886 | Method upload may get wrong settings for 7697 Headspace | The 7697 Headspace can contain wrong method settings during a method upload when both the following conditions are true: 1. Run time of the GC is less than the Headspace processing time. Processing time is the time from picking up the sample vial until it is returned. 2. The Headspace method for the current sample is different compared to the method for the previous sample. | Not fixed | Instrument Control/Method: No impact on the working method and collected data. Workaround: Do not use different Headspace methods in a sequence. |
| ICF-335 | 309736 | Signal data is only acquired when detector and inlet are on the same channel | Currently, only signal data is acquired for detectors that are on the same channel as the inlet. This means that: - all signals related to the back injector are not acquired when injecting from the front inlet | Not fixed | Acquisition: Signals assigned to a different channel than the inlet that is used, are not acquired. |

| | | | | | |
|--|--|--|---|--|--|
| | | | <p>- all signals related to the front injector are not acquired when injecting from the back inlet</p> <p>Monitor signals / Online Plot is not affected by this issue and all selected signals are displayed.</p> | | |
|--|--|--|---|--|--|

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|-----------------------------------|------------------------------|--|--|-----------|--|
| ICF-308 | 294753 | Error collecting support info on 32 bit systems | Collecting support information with one of the "Installed Programs" checkboxes active will fail on 32 bit systems. | Not fixed | System/Administration: There is no other impact. Temporary solution: Collect support information without "Installed Programs" checked. This will not result in an error. |
| ICF-306 | 294842 | Collect Support Info fails when executed 2nd time | If you collect the support information a second time with less checkboxes checked than the first time, an error will prevent support information being collected. | Not fixed | System/Administration: There is no other impact. Temporary solution: Close and reopen the dialog or application hosting the support information collection tool. |
| ICF-184 | 245236 | The tab to collect support information does not provide online help | There is no help button to provide online help for the info tab to collect support information. Pressing F1 also does not open a help file. | Not fixed | User Interface: There is no impact other than the no help is available. |
| ICF-169 | 232388 | It might be possible the monitor signal data are missing or wrong when the configuration changes | On rare occasions, during a very small time period after a configuration change, monitor signal data can contain wrong data or no data at all. All other acquired data that is stored in data files is not affected | Not fixed | Acquisition: There is no impact to acquired and/or stored data channels. The monitor signals in the online plot may be missing or wrong for a small time window. |
| New: ICF-129 Old: 278675 | New: 215586 Old: 48 | IQT does not generate any reports | If the computer name is longer than 15 characters, iqt.exe does not work properly, gives no feedback and no reports are being generated. | Not fixed | Installation: There is no other impact. Temporary solution: Using a computer name with less than 15 character. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|-----------------------------------|------------------------------|--|--|--|--|
| New: ICF-127 Old: 276623 | New: 215583 Old: 47 | Exception when GC 7890 takes a long time to get ready | An exception in IsReadyForInjection() can occur if the GC 7890 does not reach the Ready State fast enough and runs into a timeout in ICF. This can happen when for example the oven requires a long time to reach the initial temperature set in the method. | Not fixed | Acquisition: The sequence will not complete if ICF runs into a timeout when waiting for the ready state. |
| New: ICF-126 Old: 273979 | New: 215581 Old: 46 | No solvent consumption calculation possible for Flexcube | There is no solvent consumption calculation possible for Flexcubes. | Not fixed | Method: Solvent consumption calculation not possible. No other impact. |
| New: ICF-121 Old: 261190 | New: 215573 Old: 34 | "Agilent.DriverLogFileCollector.exe" does not collect log files when "Show hidden folders" is disabled in Windows. | Agilent.DriverLogFileCollector.exe does not collect log files when "Show hidden folders" is disabled in Windows. The Agilent.DriverLogFileCollector.exe tool cannot collect the ICF log files from C:\ProgramData when "Show hidden folders" is disabled in Windows and produces an empty .zip file. | Not Fixed Temporary Fix: Enable "Show hidden files, folders" and drives" in the "Folder Options" in Windows. | Test Application: The Logfile Collector cannot find the log files and creates an empty zip file. |
| New: ICF-119 Old: 260445 | New: 215569 Old: 35 | A sequence with overlapped injection for a GC/HS instrument causes the GC to lose connection. | Executing a sequence with overlapped injection and recoverable error for "GC Stop Button" to continue is configured leads to an issue after the GC stop button is pressed when the first sample is running and the 2nd vial has finished preparing. The sequence aborts and the application hangs. The GC loses connection but this is not reflected in the status window. | Not fixed Temporary Fix: Overlapped injection for GC combined with a HS is not supported. | Automation: Using overlapped injection for a GC/HS instrument with recoverable errors causes the sequence to abort because it gets out of sync. |
| New: ICF-118 Old: 257408 | New: 215568 Old: 37 | The Status progress bar stops at 90% when using Multiple Headspace Extractions. | A sequence using a MHE method with 3 injections to vial 1 followed by 2 injections to vial 2 results in the status progress bar to show 90% 'Completing' as the final step after injecting. | Not fixed. | Status UI: There is no impact other than the graphical issue. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|-----------------------------------|------------------------------|--|--|-----------|---|
| New: ICF-114 Old: 230779 | New: 215562 Old: 30 | Online help for the instrument dashboard is not available. | Nothing happens if you press "F1" when viewing the instrument dashboard. There is no help information displayed. Similarly there is no help information for the EMF status shown on the dashboard. | Not fixed | Instrument UI: There is no help available for EMF on the status dashboard. |

Impact Analysis (2.6 Update 1)

| Defects Resolved: | | | | | |
|---------------------------------------|----------------|--|---|--------------|--|
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| No defects fixed in ICF 2.6 Update 1. | | | | | |
| Defects Not Resolved: | | | | | |
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| ICF-335 | 309736 | Signal data is only acquired when detector and inlet are on the same channel | Currently, only signal data is acquired for detectors that are on the same channel as the inlet. This means that: - all signals related to the back injector are not acquired when injecting from the front inlet - all signals related to the front injector are not acquired when injecting from the back inlet Monitor signals / Online Plot is not affected by this issue and all selected signals are displayed. | Not fixed | Acquisition: Signals assigned to a different channel than the inlet that is used, are not acquired. |
| ICF-308 | 294753 | Error collecting support info on 32 bit systems | Collecting support information with one of the "Installed Programs" checkboxes active will fail on 32 bit systems. | Not fixed | System/Administration: There is no other impact. Temporary solution: Collect support information without "Installed Programs" checked. This will not result in an error. |
| ICF-306 | 294842 | Collect Support Info fails when executed 2nd time | If you collect the support information a second time with less checkboxes checked than the first time, an error will prevent support information being collected. | Not fixed | System/Administration: There is no other impact. Temporary solution: Close and reopen the dialog or application hosting the support information collection tool. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|-----------------------------------|------------------------------|--|--|--|--|
| ICF-184 | 245236 | The tab to collect support information does not provide online help | There is no help button to provide online help for the info tab to collect support information. Pressing F1 also does not open a help file. | Not fixed | User Interface: There is no impact other than the no help is available. |
| ICF-169 | 232388 | It might be possible the monitor signal data are missing or wrong when the configuration changes | On rare occasions, during a very small time period after a configuration change, monitor signal data can contain wrong data or no data at all. All other acquired data that is stored in data files is not affected | Not fixed | Acquisition: There is no impact to acquired and/or stored data channels. The monitor signals in the online plot may be missing or wrong for a small time window. |
| New: ICF-129 Old: 278675 | New: 215586 Old: 48 | IQT does not generate any reports | If the computer name is longer than 15 characters, iqt.exe does not work properly, gives no feedback and no reports are being generated. | Not fixed | Installation: There is no other impact. Temporary solution: Using a computer name with less than 15 character. |
| New: ICF-127 Old: 276623 | New: 215583 Old: 47 | Exception when GC 7890 takes a long time to get ready | An exception in IsReadyForInjection() can occur if the GC 7890 does not reach the Ready State fast enough and runs into a timeout in ICF. This can happen when for example the oven requires a long time to reach the initial temperature set in the method. | Not fixed | Acquisition: The sequence will not complete if ICF runs into a timeout when waiting for the ready state. |
| New: ICF-126 Old: 273979 | New: 215581 Old: 46 | No solvent consumption calculation possible for Flexcube | There is no solvent consumption calculation possible for Flexcubes. | Not fixed | Method: Solvent consumption calculation not possible. No other impact. |
| New: ICF-121 Old: 261190 | New: 215573 Old: 34 | "Agilent.DriverLogFileCollector.exe" does not collect log files when "Show hidden folders" is disabled in Windows. | Agilent.DriverLogFileCollector.exe does not collect log files when "Show hidden folders" is disabled in Windows. The Agilent.DriverLogFileCollector.exe tool cannot collect the ICF log files from C:\ProgramData when "Show hidden folders" is disabled in Windows and produces an empty .zip file. | Not Fixed Temporary Fix: Enable "Show hidden files, folders" and drives" in the "Folder Options" in Windows. | Test Application: The Logfile Collector cannot find the log files and creates an empty zip file. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|-----------------------------------|------------------------------|---|--|---|--|
| New: ICF-119 Old: 260445 | New: 215569 Old: 35 | A sequence with overlapped injection for a GC/HS instrument causes the GC to lose connection. | Executing a sequence with overlapped injection and recoverable error for "GC Stop Button" to continue is configured leads to an issue after the GC stop button is pressed when the first sample is running and the 2nd vial has finished preparing. The sequence aborts and the application hangs. The GC loses connection but this is not reflected in the status window. | Not fixed Temporary Fix: Overlapped injection for GC combined with a HS is not supported. | Automation: Using overlapped injection for a GC/HS instrument with recoverable errors causes the sequence to abort because it gets out of sync. |
| New: ICF-118 Old: 257408 | New: 215568 Old: 37 | The Status progress bar stops at 90% when using Multiple Headspace Extractions. | A sequence using a MHE method with 3 injections to vial 1 followed by 2 injections to vial 2 results in the status progress bar to show 90% 'Completing' as the final step after injecting. | Not fixed. | Status UI: There is no impact other than the graphical issue. |
| New: ICF-114 Old: 230779 | New: 215562 Old: 30 | Online help for the instrument dashboard is not available. | Nothing happens if you press "F1" when viewing the instrument dashboard. There is no help information displayed. Similarly there is no help information for the EMF status shown on the dashboard. | Not fixed | Instrument UI: There is no help available for EMF on the status dashboard. |

Impact Analysis (2.6)

| Defects Resolved: | | | | | |
|---------------------------------------|----------------------------------|--|---|--------------|--|
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| New: ICF-130 Old: 281306 | New: 215588 Old: 51 | Repeated auto configuration fails | When the "Clear" button was pressed in the ICF Configuration UI after successful AutoConfiguration, then all subsequent AutoConfiguration attempts for the same Host/IP will fail and the list of configured modules will remain empty. | Fixed | Configuration: There is no impact other than the Configuration. |
| ICF-100 | 201519 | Applying the configuration to the SoftConfigurationUI a 2nd time did not have any effect | Applying the configuration to the SoftConfigurationUI a 2nd time did not have any effect. The UI was not reset to the initial values. | Fixed | Configuration: There is no impact other than the Configuration UI. |
| Defects Not Resolved: | | | | | |
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| ICF-184 | 245236 | The tab to collect support information does not provide online help | There is no help button to provide online help for the info tab to collect support information. Pressing F1 also does not open a help file. | Not fixed | User Interface: There is no impact other than the no help is available. |
| ICF-169 | 232388 | It might be possible the monitor signal data are missing or wrong when the configuration changes | On rare occasions, during a very small time period after a configuration change, monitor signal data can contain wrong data or no data at all. All other acquired data that is stored in data files is not affected | Not fixed | Acquisition: There is no impact to acquired and/or stored data channels. The monitor signals in the online plot may be missing or wrong for a small time window. |
| New: ICF-129 Old: 278675 | New: 215586 Old: 48 | IQT does not generate any reports | If the computer name is longer than 15 characters, iqt.exe does not work properly, gives no feedback and no reports are being generated. | Not fixed | Installation: There is no other impact. Temporary solution: Using a computer name with less than 15 character. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|-----------------------------------|------------------------------|---|--|---|--|
| New: ICF-127 Old: 276623 | New: 215583 Old: 47 | Exception when GC 7890 takes a long time to get ready | An exception in IsReadyForInjection() can occur if the GC 7890 does not reach the Ready State fast enough and runs into a timeout in ICF. This can happen when for example the oven requires a long time to reach the initial temperature set in the method. | Not fixed | Acquisition: The sequence will not complete if ICF runs into a timeout when waiting for the ready state. |
| New: ICF-126 Old: 273979 | New: 215581 Old: 46 | No solvent consumption calculation possible for Flexcube | There is no solvent consumption calculation possible for Flexcubes. | Not fixed | Method: Solvent consumption calculation not possible. No other impact. |
| New: ICF-118 Old: 257408 | New: 215568 Old: 37 | The Status progress bar stops at 90% when using Multiple Headspace Extractions. | A sequence using a MHE method with 3 injections to vial 1 followed by 2 injections to vial 2 results in the status progress bar to show 90% 'Completing' as the final step after injecting. | Not fixed. | Status UI: There is no impact other than the graphical issue. |
| 257362 | 36 | Extend Run is ignored by G1888 HS Driver. | Extend Run is ignored by G1888 HS Driver. Extending runs is not supported by this module. | Not fixed. This functionality is not supported by this module | Acquisition: There is no impact on other parts of ICF. |
| New: ICF-119 Old: 260445 | New: 215569 Old: 35 | A sequence with overlapped injection for a GC/HS instrument causes the GC to lose connection. | Executing a sequence with overlapped injection and recoverable error for "GC Stop Button" to continue is configured leads to an issue after the GC stop button is pressed when the first sample is running and the 2nd vial has finished preparing. The sequence aborts and the application hangs. The GC loses connection but this is not reflected in the status window. | Not fixed Temporary Fix: Overlapped injection for GC combined with a HS is not supported. | Automation: Using overlapped injection for a GC/HS instrument with recoverable errors causes the sequence to abort because it gets out of sync. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|-----------------------------------|------------------------------|--|---|--|--|
| New: ICF-121 Old: 261190 | New: 215573 Old: 34 | "Agilent.DriverLogFileCollector.exe" does not collect log files when "Show hidden folders" is disabled in Windows. | Agilent.DriverLogFileCollector.exe does not collect log files when "Show hidden folders" is disabled in Windows. The Agilent.DriverLogFileCollector.exe tool cannot collect the ICF log files from C:\ProgramData when "Show hidden folders" is disabled in Windows and produces an empty .zip file. | Not Fixed Temporary Fix: Enable "Show hidden files, folders" and drives" in the "Folder Options" in Windows. | Test Application: The Logfile Collector cannot find the log files and creates an empty zip file. |
| New: ICF-114 Old: 230779 | New: 215562 Old: 30 | Online help for the instrument dashboard is not available. | Nothing happens if you press "F1" when viewing the instrument dashboard. There is no help information displayed. Similarly there is no help information for the EMF status shown on the dashboard. | Not fixed | Instrument UI: There is no help available for EMF on the status dashboard. |
| 223729 | 28 | Modification and printing of the RF Tag information is not possible. | Currently it is only possible to display the RF Tag information in the instrument dashboard window, but it is not possible to edit or report this information. | Not fixed | Instrument UI: Information in the RF Tags cannot be edited. |
| 255167 | 25 | The instrument Pre-configuration tool is only available in English language. | Japanese, Chinese and Portuguese languages for the instrument Pre-configuration tool are missing. | Not fixed | Pre-Configuration Tool: The Pre-configuration tool is available only in the English language. |
| 155431 | 15 | Inconsistent formatting info for resource items: method parameter - timetable parameter are possible. | Inconsistent formatting of method and timetable parameter in reports are possible. The LC drivers offer component to the hosting analytic systems to handle method and timetable parameters. One component has inconsistent formatting information for the decimal places of method and timetable parameters. Depending on the hosting analytic system. Certain reports may show inconsistent formatting of these parameters when they are reported. e.g. Two digits instead of three. | Not fixed | Reporting: Some method parameters, used in time tables, have a different formatting: e.g. different number of decimal places. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|----------|---------|---|--|-----------|---|
| 222087 | 14 | Possibility of identical modules in configuration screen after auto configuration | The Instrument Control Framework A.02.01 offers the possibility to configure instruments of different families. Executing the auto configuration cumulative adds the detected instruments. Up till A.02.01 the already configured modules were cleared, now the new modules are added without clearing the current configuration. In case an identical module is detected again and it shows up twice in the configuration. | Not fixed | Configuration: A temporary solution exists. The doubled, identical modules need to be removed manually. |
| 207538 | 13 | G1330A/B Thermostat Temperature Settings are not applied like configured | The Agilent G1330A/B Thermostat allows the operator to configure, if the temperature setting for this module is handled a method parameter or as simple control parameter. This kind of configuration handling differs to configuration handling of some hosting data systems and it might be possible that this configuration step is not executed in some CDS environments | Not fixed | Configuration: A temporary solution exists. The Instrument Control Framework revision A.02.01 offers a pre-configuration tool offering a possibility to perform the G1330A/B Thermostat configuration. The pre-configuration tool is part of the installation package. Please locate the file Agilent.InstrumentControl.InstrumentPreConfigurator.exe using your explorer and execute the file to perform the configuration. |
| 182772 | 12 | Manual injector systems are not working in some "Third Party Environment". | The Agilent manual injector triggers the run automatically on the instrument. This behavior differs to other vendors implementation, whereas the manual injector requires a start run by the data system. Due to this different handling some 3rd party data systems are not yet prepared to implement the Agilent control of manual injectors. Therefore manual injections cannot be executed in that particular Third Party environment. | Not fixed | Acquisition: Agilent's manual injectors do not work in Chromeleon and Empower, due to their handling manual injection differently. |

Impact Analysis (A.02.05)

| Defects Resolved: | | | | | |
|--------------------------|----------------|--|---|--------------|--|
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| 279641 | 50 | ICF cannot start another run after a run has been aborted | When a run is being aborted after more than 30 seconds and there was one or more modules for which no signals were acquired, then sometimes no further runs can be started in ICF. Some Modules (e.g. Valves) do not have signals, and therefore can cause this behavior. | Fixed | Acquisition: The Status dashboard is showing the correct instrument state (idle), but ICF cannot start another run. |
| 279619 | 49 | ICF gets stuck in run state | At the end of a run, some LC Modules may trigger another run and cause ICF to get stuck in the run state. The Status UI shows idle, but no further runs are possible until ICF is restarted. | Fixed | Acquisition: The Status dashboard is showing the correct instrument state (idle), but ICF cannot start another run. |
| 270927 | 45 | For some instrument configurations it may happen that an "Status poll thread caught an exception" error is reported and the device goes offline. | An error is shown and the device is shown as offline in the status dashboard. | Fixed | User Interface: The device must be reconnected by taking the instrument offline and online again. |
| 269661 | 44 | Calling "Abort" between sequence runs does not abort the sequence. | The sequence is not aborted, and the next run is started. | Fixed | Acquisition: Sequences can only be aborted when the instrument is processing a run. |
| 269660 | 43 | In rare occasions, it can happen that the actual state of instrument can be incorrect. | The instrument state displayed in ICF is inconsistent with the actual state of the instrument. | Fixed | Instrument Control: The state shown is incorrect. In a few occasions a run cannot be started due to the instrument having the wrong state (e.g. not ready). |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|----------|---------|--|--|-------|--|
| 267381 | 41 | When collecting the log files using the DriverLogFileCollector an error message "Could not open <zipfile>" is displayed. | An error is displayed when the DriverLogFileCollector tool is used. The log files, however, are successfully collected anyway. | Fixed | Test-Application: No impact other than the error. |
| 269193 | 38 | In rare occasions, the "Auto Configure" in the Instrument Configuration is interrupted | The Datasystem crashes during AutoConfiguration. | Fixed | Instrument Configuration: AutoConfiguration is not possible. The user must try again "AutoConfigure" or use manual configuration. |

Defects Not Resolved:

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|----------|---------|---|---|---|--|
| 281306 | 51 | Repeated auto configuration fails | When the "Clear" button was pressed in the ICF Configuration UI after successful AutoConfiguration, then all subsequent AutoConfiguration attempts for the same Host/IP will fail and the list of configured modules will remain empty. | Not fixed Temporary Fix: Exit and restart the ICF Configuration UI. | Configuration: There is no impact other than the Configuration. |
| 278675 | 48 | IQT does not generate any reports | If the computer name is longer than 15 characters, iqt.exe does not work properly, gives no feedback and no reports are being generated. | Not fixed | Installation: There is no other impact. Temporary solution: Using a computer name with less than 15 character. |
| 276623 | 47 | Exception when GC 7890 takes a long time to get ready | An exception in IsReadyForInjection() can occur if the GC 7890 does not reach the Ready State fast enough and runs into a timeout in ICF. This can happen when for example the oven requires a long time to reach the initial temperature set in the method. | Not fixed | Acquisition: The sequence will not complete if ICF runs into a timeout when waiting for the ready state. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|----------|---------|--|--|--|--|
| 273979 | 46 | No solvent consumption calculation possible for Flexcube | There is no solvent consumption calculation possible for Flexcubes. | Not fixed | Method: Solvent consumption calculation not possible. No other impact. |
| 257408 | 37 | The Status progress bar stops at 90% when using Multiple Headspace Extractions. | A sequence using a MHE method with 3 injections to vial 1 followed by 2 injections to vial 2 results in the status progress bar to show 90% 'Completing' as the final step after injecting. | Not fixed. | Status UI: There is no impact other than the graphical issue. |
| 257362 | 36 | Extend Run is ignored by G1888 HS Driver. | Extend Run is ignored by G1888 HS Driver. Extending runs is not supported by this module. | Not fixed. This functionality is not supported by this module | Acquisition: There is no impact on other parts of ICF. |
| 260445 | 35 | A sequence with overlapped injection for a GC/HS instrument causes the GC to lose connection. | Executing a sequence with overlapped injection and recoverable error for "GC Stop Button" to continue is configured leads to an issue after the GC stop button is pressed when the first sample is running and the 2nd vial has finished preparing. The sequence aborts and the application hangs. The GC loses connection but this is not reflected in the status window. | Not fixed Temporary Fix: Overlapped injection for GC combined with a HS is not supported. | Automation: Using overlapped injection for a GC/HS instrument with recoverable errors causes the sequence to abort because it gets out of sync. |
| 261190 | 34 | "Agilent.DriverLogFileCollector.exe" does not collect log files when "Show hidden folders" is disabled in Windows. | Agilent.DriverLogFileCollector.exe does not collect log files when "Show hidden folders" is disabled in Windows. The Agilent.DriverLogFileCollector.exe tool cannot collect the ICF log files from C:\ProgramData when "Show hidden folders" is disabled in Windows and produces an empty .zip file. | Not Fixed Temporary Fix: Enable "Show hidden files, folders" and drives" in the "Folder Options" in Windows. | Test Application: The Logfile Collector cannot find the log files and creates an empty zip file. |
| 230779 | 30 | Online help for the instrument dashboard is not available. | Nothing happens if you press "F1" when viewing the instrument dashboard. There is no help information displayed. Similarly there is no help information for the EMF status shown on the dashboard. | Not fixed | Instrument UI: There is no help available for EMF on the status dashboard. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|----------|---------|---|---|-----------|--|
| 223729 | 28 | Modification and printing of the RF Tag information is not possible. | Currently it is only possible to display the RF Tag information in the instrument dashboard window, but it is not possible to edit or report this information. | Not fixed | Instrument UI: Information in the RF Tags cannot be edited. |
| 255167 | 25 | The instrument Pre-configuration tool is only available in English language. | Japanese, Chinese and Portuguese languages for the instrument Pre-configuration tool are missing. | Not fixed | Pre-Configuration Tool: The Pre-configuration tool is available only in the English language. |
| 155431 | 15 | Inconsistent formatting info for resource items: method parameter - timetable parameter are possible. | Inconsistent formatting of method and timetable parameter in reports are possible. The LC drivers offer component to the hosting analytic systems to handle method and timetable parameters. One component has inconsistent formatting information for the decimal places of method and timetable parameters. Depending on the hosting analytic system. Certain reports may show inconsistent formatting of these parameters when they are reported. e.g. Two digits instead of three. | Not fixed | Reporting: Some method parameters, used in time tables, have a different formatting: e.g. different number of decimal places. |
| 222087 | 14 | Possibility of identical modules in configuration screen after auto configuration | The Instrument Control Framework A.02.01 offers the possibility to configure instruments of different families. Executing the auto configuration cumulative adds the detected instruments. Up till A.02.01 the already configured modules were cleared, now the new modules are added without clearing the current configuration. In case an identical module is detected again and it shows up twice in the configuration. | Not fixed | Configuration: A temporary solution exists. The doubled, identical modules need to be removed manually. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|----------|---------|--|--|-----------|--|
| 207538 | 13 | G1330A/B Thermostat Temperature Settings are not applied like configured | The Agilent G1330A/B Thermostat allows the operator to configure, if the temperature setting for this module is handled a method parameter or as simple control parameter. This kind of configuration handling differs to configuration handling of some hosting data systems and it might be possible that this configuration step is not executed in some CDS environments | Not fixed | Configuration: A temporary solution exists. The Instrument Control Framework revision A.02.01 offers a pre-configuration tool offering a possibility to perform the G1330A/B Thermostat configuration. The pre-configuration tool is part of the installation package. Please locate the file Agilent.InstrumentControl.InstrumentPreConfigurator.exe using your explorer and execute the file to perform the configuration. |
| 182772 | 12 | Manual injector systems are not working in some "Third Party Environment". | The Agilent manual injector triggers the run automatically on the instrument. This behavior differs to other vendors implementation, whereas the manual injector requires a start run by the data system. Due to this different handling some 3rd party data systems are not yet prepared to implement the Agilent control of manual injectors. Therefore manual injections cannot be executed in that particular Third Party environment. | Not fixed | Acquisition: Agilent's manual injectors do not work in Chromeleon and Empower, due to their handling manual injection differently. |

Impact Analysis (A.02.04 Driver Update 1 Hotfix 1)

| Defects Resolved: | | | | | |
|------------------------------|----------------|--|---|--------------|--|
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| 259213 | 42 | The "Auto Configuration" button does not work for Headspace devices. | Nothing happens when clicking the autoconfigure button for HeadSpace devices. | Fixed | Instrument Configuration: AutoConfiguration has been disabled for all GC/HS devices. These devices must be configured manually. |
| Defects Not Resolved: | | | | | |
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| 273979 | 46 | No solvent consumption calculation possible for Flexcube | There is no solvent consumption calculation possible for Flexcubes. | Not fixed | Method: Solvent consumption calculation not possible. No other impact. |

Impact Analysis (A.02.04 Driver Update 1)

| Defects Resolved: | | | | | |
|---|----------------|--|--|--------------|--|
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| ICF was not changed for ICF A.02.04 DU1. Therefore no defects are fixed. Please refer to the table for ICF A.02.04. | | | | | |
| Defects Not Resolved: | | | | | |
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| 269661 | 44 | Calling "Abort" between sequence runs does not abort the sequence. | The sequence is not aborted, and the next run is started. | Not fixed | Acquisition: Sequences can only be aborted when the instrument is processing a run. |
| 269660 | 43 | In rare occasions, it can happen that the actual state of instrument can be incorrect. | The instrument state displayed in ICF is inconsistent with the actual state of the instrument. | Not fixed | Instrument Control: The state shown is incorrect. In a few occasions a run cannot be started due to the instrument having the wrong state (e.g. not ready). |
| 269193 | 38 | In rare occasions, the "Auto Configure" in the Instrument Configuration is interrupted | The Datasystem crashes during AutoConfiguration. | Not fixed | Instrument Configuration: AutoConfiguration is not possible. The user must try again "AutoConfigure" or use manual configuration. |
| 259213 | 42 | The "Auto Configuration" button does not work for Headspace devices. | Nothing happens when clicking the autoconfigure button for HeadSpace devices. | Not fixed | Instrument Configuration: AutoConfiguration is not possible. The user must manually configure HeadSpace devices. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|----------|---------|--|--|-----------|--|
| 267381 | 41 | When collecting the log files using the DriverLogFileCollector an error message "Could not open <zipfile>" is displayed. | An error is displayed when the DriverLogFileCollector tool is used. The log files, however, are successfully collected anyway. | Not fixed | Test-Application: No impact other than the error. |
| 270927 | 45 | For some instrument configurations it may happen that an "Status poll thread caught an exception" error is reported and the device goes offline. | An error is shown and the device is shown as offline in the status dashboard. | Not fixed | User Interface: The device must be reconnected by taking the instrument offline and online again. |

ICF Impact Analysis (A.02.04)

| Defects Resolved: | | | | | |
|--------------------------|----------------|---|---|--------------|--|
| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
| 238831 | 23 | The instrument configuration dialog is not fully localized in all languages. | In Japanese, Chinese and Portuguese languages some text in the dialog appears in English. | Fixed | Instrument Configuration: No impact other than having the UI localized. |
| 246504 | 24 | Detection of changes within the instrument auto configuration are not propagated to the CDS. User is not aware of all changes made. | The event is only raised after manually adding, removing, clearing and modifying the configuration of the hardware. After auto configuration, the "IICConfigUI.DirtyEvent" is not raised. | Fixed | Instrument Configuration: No impact other than the fix itself: auto configuration will trigger the event. |
| 248382 | 22 | The "Close" button on the post-auto configuration dialog disappears when the dialog window is resized. | This problem refers to the additional instrument configuration windows that appear if additional configuration options are available. | Fixed | Instrument Configuration: No impact other than the button behaving correct when resizing the window. |
| 249477 | 27 | Opening a pretreatment method for a G1329A standard LC Autosampler and loading it for a G5667A Bio-inert Well-Plate Sampler results in an application error - thread exception. | However a method resolution for these modules does not appear. | Fixed | Method: Methods from modules which have different categories can no longer be resolved. (e.g. G1329A and G5667A which have categories "Sampler" and "HiP Sampler" respectively. |
| 257149 | 26 | Uninstalling ICF before uninstalling GC drivers leads to an error and a rollback of the GC Drivers Uninstall procedure. | Uninstalling ICF before uninstalling GC Drivers leads to an error. The GC driver package fails and rolls back. No details will be provided to the user. | Fixed | Installation/Uninstallation: No impact other than the fix itself. |
| 249561 | 40 | Dual Simultaneous injection sequence runs incorrectly when overlap method is used. | The instrument was picking up the wrong vials when simultaneous injection together with an overlap method was used. | Fixed | Method: No impact other than the fix itself. |

Defects Not Resolved:

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|----------|---------|---|---|-----------|---|
| 155431 | 15 | Inconsistent formatting info for resource items: method parameter - timetable parameter are possible. | Inconsistent formatting of method and timetable parameter in reports are possible. The LC drivers offer component to the hosting analytic systems to handle method and timetable parameters. One component has inconsistent formatting information for the decimal places of method and timetable parameters. Depending on the hosting analytic system. Certain reports may show inconsistent formatting of these parameters when they are reported. e.g. Two digits instead of three. | Not fixed | Reporting: Some method parameters, used in time tables, have a different formatting: e.g. different number of decimal places. |
| 182772 | 12 | Manual injector systems are not working in some "Third Party Environment". | The Agilent manual injector triggers the run automatically on the instrument. This behavior differs to other vendors implementation, whereas the manual injector requires a start run by the data system. Due to this different handling some 3rd party data systems are not yet prepared to implement the Agilent control of manual injectors. Therefore manual injections cannot be executed in that particular Third Party environment. | Not fixed | Acquisition: Agilent's manual injectors do not work in Chromeleon and Empower, due to their handling manual injection differently. |
| 223729 | 28 | Modification and printing of the RF Tag information is not possible. | Currently it is only possible to display the RF Tag information in the instrument dashboard window, but it is not possible to edit or report this information. | Not fixed | Instrument UI: Information in the RF Tags cannot be edited. |
| 230779 | 30 | Online help for the instrument dashboard is not available. | Nothing happens if you press "F1" when viewing the instrument dashboard. There is no help information displayed. Similarly there is no help information for the EMF status shown on the dashboard. | Not fixed | Instrument UI: There is no help available for EMF on the status dashboard. |

| Issue Id | KPR No. | Observation | Current Behavior | State | Impact Area |
|----------|---------|--|--|--|--|
| 255167 | 25 | The instrument Pre-configuration tool is only available in English language. | Japanese, Chinese and Portuguese languages for the instrument Pre-configuration tool are missing. | Not fixed | Pre-Configuration Tool: The Pre-configuration tool is available only in the English language. |
| 257362 | 36 | Extend Run is ignored by G1888 HS Driver. | Extend Run is ignored by G1888 HS Driver. Extending runs is not supported by this module. | Not fixed. This functionality is not supported by this module | Acquisition: There is no impact on other parts of ICF. |
| 257408 | 37 | The Status progress bar stops at 90% when using Multiple Headspace Extractions. | A sequence using a MHE method with 3 injections to vial 1 followed by 2 injections to vial 2 results in the status progress bar to show 90% 'Completing' as the final step after injecting. | Not fixed. | Status UI: There is no impact other than the graphical issue. |
| 260445 | 35 | A sequence with overlapped injection for a GC/HS instrument causes the GC to lose connection. | Executing a sequence with overlapped injection and recoverable error for "GC Stop Button" to continue is configured leads to an issue after the GC stop button is pressed when the first sample is running and the 2nd vial has finished preparing. The sequence aborts and the application hangs. The GC loses connection but this is not reflected in the status window. | Not fixed Temporary Fix: Overlapped injection for GC combined with a HS is not supported. | Automation: Using overlapped injection for a GC/HS instrument with recoverable errors causes the sequence to abort because it gets out of sync. |
| 261190 | 34 | Agilent.DriverLogFileCollector.exe does not collect log files when "Show hidden folders" is disabled in Windows. | Agilent.DriverLogFileCollector.exe does not collect log files when "Show hidden folders" is disabled in Windows. The Agilent.DriverLogFileCollector.exe tool cannot collect the ICF log files from C:\ProgramData when "Show hidden folders" is disabled in Windows and produces an empty .zip file. | Not Fixed Temporary Fix: Enable "Show hidden files, folders" and drives" in the "Folder Options" in Windows. | Test Application: The Logfile Collector cannot find the log files and creates an empty zip file. |

ICF Pre-Requisites

| ICF version | Windows XP SP3 32bit | Windows Vista 32bit | Windows Vista 64bit | Windows 7 SP1 32bit/64bit | Windows 8.1 32bit/64bit | Windows 10 | Windows Server 2003 SP3 | Windows Server 2008 R2 | Windows Server 2012 R2 |
|-----------------------------|----------------------|---------------------|---------------------|---------------------------|-------------------------|------------|-------------------------|------------------------|------------------------|
| 2.6 Update 3 | - | - | - | X | X | X | - | X | X |
| 2.6 Update 2 | - | - | - | X | X | X | - | X | X |
| 2.6 Update 1 | - | - | - | X | X | X | - | X | X |
| 2.6 | - | - | - | X | X | X | - | X | X |
| A.02.05 | - | - | - | X | X | X | - | X | X |
| A.02.04 DU1 Hotfix 1 | - | - | - | X | X | X | - | X | X |
| A.02.04 DU1 | - | - | - | X | X | X | - | - | - |
| A.02.04 | - | - | - | X | X | X | - | - | - |
| A.02.03 / SP1 | - | - | - | X | X | - | - | - | - |
| A.02.01 | X | X | - | X | - | - | X | - | - |
| A.01.05 | X | X | X | X | - | - | X | - | - |
| A.01.04 | X | X | X | X | - | - | X | - | - |

For older versions of ICF not listed in the table above, please refer to the respective ICF package documentation.

| ICF version | Microsoft .NET framework required |
|--|-----------------------------------|
| Instrument Control Framework A.01.04 or higher | Microsoft.NET 3.5 |

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Installation (current process)

Important: The installation process described below is generic.

Should you wish to install ICF and instrument drivers manually, consult your CDS vendor first for specific instructions in how to install ICF or its equivalent CDS-specific components, as a customized ICF package may have been created for your CDS.

Installing the Agilent Instrument Control Framework:

The installation file for the Instrument Control Framework can be found in the subdirectory \Instrument Control Framework 2.6 Update 3\Installation.

To install the Instrument Control Framework interactively start the ICFInstallPackage.msi.

Installing the Agilent LC Drivers Package:

After the installation of the Instrument Control Framework has been finished, the Agilent LC drivers can be installed.

The installation file for the LC drivers can be found in the subdirectory \LC Drivers A.02.19 SR2\Installation.

To install the Agilent LC drivers interactively start the LCDriverInstallPackage.msi.

Installing the Agilent ELSD Drivers Package:

No additional ELSD driver installation necessary. The ELSD driver are included in the LC driver package.

Installing the Agilent SFC-USB Drivers:

After the installation of the ICF Framework has finished, the USB drivers for the Agilent SFC drivers can be installed:

The installation files for the SFC-USB drivers are delivered with the SFC hardware. Additionally the installation files can be found in this ICF package in subdirectory \LC Drivers A.02.19 SR2\Installation.

For OS 32 bit: start the Agilent.SFC.USBDeviceDriver_x86.msi

For OS 64 bit: start the Agilent.SFC.USBDeviceDriver_x64.msi.

Installing the Agilent GC/HS Drivers Package:

After the installation of the Instrument Control Framework has been finished, the Agilent GC/HS drivers can be installed.

The installation file of the Agilent GC/HS drivers can be found in the subdirectory

\GC Drivers 3.1 SR1\Installation.

To install the Agilent GC/HS drivers interactively start the GCDriverInstallPackage.msi.

Installing the Agilent Headspace Drivers Package:

No additional Headspace driver installation necessary. The Headspace driver are included in the GC driver package.

Installation issues:

We found an issue during the installation of ICF 2.6 Update 3. On some systems with Windows 8.1 (32-bit) the installation may fail. This issue can be solved by updating your Windows operating system with the latest available patches and updates.

Please make sure that on Windows 10 systems the Microsoft .NET Framework 3.5 is installed.

Un-Installing Agilent ICF and Driver Packages:

To uninstall the installed packages, use the Add/Remove procedure available in the Windows Control Panel. Uninstall first the installed instrument driver packages and finally the ICF package.

Important Support Information

While each Agilent instrument driver provides a defined feature set and functionality, it is not 100% guaranteed that the exact same functionality will be available in the host data system.

Where known exceptions do occur, these will be documented in the 3rd party CDS Release Note or equivalent documentation.

ICF also provides functionality which may require specific features (e.g. FLD Spectra require 3D Data Evaluation) for data evaluation and reporting.

The 3rd party CDS software supplier is responsible for evaluation and compatibility testing with their respective CDS revision.

The 3rd party CDS software supplier defines the minimum instrument firmware revision(s) required for CDS compatibility in their Release Notes or equivalent.

Please ensure these requirements are met.

Different terminology for the firmware requirements such as "tested firmware", "supported firmware", "firmware requirements", "minimum tested firmware", etc. may be used across different documentations sets from different vendors. It is important this information is reviewed carefully.

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