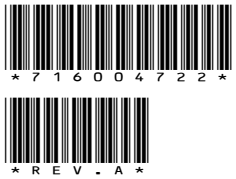

Waters
THE SCIENCE OF WHAT'S POSSIBLE.®

Agilent Instrument Control Framework Support Version 2.2

Release Notes

716004722
Revision A

General information

Copyright notice

The information in this document is subject to change without notice and should not be construed as a commitment by Waters Corporation. Waters Corporation assumes no responsibility for any errors that may appear in this document. This document is believed to be complete and accurate at the time of publication. In no event shall Waters Corporation be liable for incidental or consequential damages in connection with, or arising from, its use. For the most recent revision of this document, consult the Waters Web site (waters.com).

Trademarks

Agilent® is a registered trademark of Agilent Technologies Inc.

Eppendorf® is a registered trademark of Eppendorf-Netheler-Hinz GmbH.

Microsoft® is a registered trademark of Microsoft Corporation in the US and/or other countries.

THE SCIENCE OF WHAT'S POSSIBLE® is a registered trademark of Waters Corporation.

Waters® is a registered trademark of Waters Corporation.

Windows® is a registered trademark of Microsoft Corporation in the US and/or other countries.

Windows 7® is a registered trademark of Microsoft Corporation in the US and/or other countries.

Windows Server® is a registered trademark of Microsoft Corporation in the US and/or other countries.

Windows XP® is a registered trademark of Microsoft Corporation in the US and/or other countries.

Table of contents

Agilent ICF Support v2.2

These release notes explain how to install Waters ICF Support version 2.2 for the Agilent Instrument Control Framework (ICF), for control of all supported Agilent LC modules. This software is intended for use in conjunction with Empower 2 software and Empower 3 software.

Compliance recommendations

Any time you install, change, or uninstall software or system modules in a regulated environment, Waters recommends that you follow your organization's approved standard operating procedures.

A risk-based review may assist you in a regulated environment to evaluate changes detailed in the release notes. Using company SOPs, determine if any documentation updates and requalification of the system modules, chromatographic system, or chromatographic data system (CDS) are required.

Requalification with Waters' Total Assurance Plans

The Waters' Total Assurance Plan (TAP) with System Qualification Option covers upgrades and requalification of the instrument driver, software, firmware, or hardware in these cases:

- During yearly requalification, as provided in the plan.
- If installing this release is required for operation of a new module or system, where qualification of the new module or system is covered by the plan.

Requalification of the CDS software and computers after a driver upgrade may or may not be included in your TAP.

Review your TAP to determine which services are covered and which are not covered. For situations not covered by the plan, Waters can perform the qualification, but additional charges will apply.

New features

This release of the Agilent ICF Support (version 2.2) provides support for the Agilent ICF modules in ICF version A.02.03 DU2 with ICF LC drivers version A.02.13.

This release provides the following new features:

- Improved performance for an Agilent LC system when opening the Run Samples or QuickStart screen and displaying the control panel.
- Improved performance when opening the instrument method editor for an Agilent LC system.

- The preconfiguration utility is now accessible through the Configuration Manager of the Empower software user interface. You can use the utility to specify instrument preconfiguration parameter settings on a remote LAC/E module.
- At the end of a sample set, you can use the **Selective Shutdown** function to shut down an Agilent LC instrument module (such as the detector) while other modules (such as the pump) continue to run.
- Agilent ICF Support v2.2 is designed for interoperability, providing compatibility between ICF Support version 2.2 (when installed on an Empower client or a Citrix server) and ICF Support version 2.1 Hotfix 1 (when installed on a LAC/E module). This feature provides flexibility when planning the upgrade for an Empower Enterprise installation.
- Agilent ICF Support v2.2 distributes Agilent ICF version A.02.03 DU2 with LC drivers version A.02.13.
- The text files in the `AgilentPlatesForImport` folder have been reviewed and updated. See PCS number 54925.

System and software requirements

The following table lists the operating system requirements for this release of the ICS.

Application Software	Empower Feature Release/ Service Pack	Operating system
Empower 2 software: English, Japanese, and Chinese (Simplified)	Feature Release 5 and higher	• Windows XP SP3 (32-bit) • Windows Server 2003
Empower 3 software: English, Japanese, and Chinese (Simplified)	prior to Feature Release 3	• Windows XP SP3 (32-bit) • Windows 7 SP1 (64-bit) • Windows Server 2008 R2 SP1 Enterprise (64-bit)
Empower 3 software: English, Japanese, and Chinese (Simplified)	Feature Release 3 and higher	• Windows 7 SP1 (64-bit) • Windows 8.1 • Windows Server 2008 R2 SP1 Enterprise (64-bit) • Windows Server 2012

The computer configurations, operating systems, and hotfixes supported by this software are identical to those for Empower 2 software FR5 and Empower 3 software. If your Empower system is an earlier version or feature release, you cannot install this software. Refer to the *Empower 2 Installation and Configuration Guide*, the *Empower 3 Installation, Configuration, and Upgrade*

Guide, and the appropriate release notes for details. For incremental information on operating system and hotfix support, visit the Waters Web site (www.waters.com).

Supported firmware and modules

This software release supports Agilent ICF version A.02.03 DU2 with ICF LC drivers version A.02.13. If you adhere to Agilent guidelines for firmware versions that Waters previously tested, Waters expects no incompatibility issues to occur. Consult Agilent or refer to its web site for additional firmware compatibility guidelines.

The ICS supports the Agilent LC modules listed in the following tables.

Table 1–1: Agilent LC – Pumps

Product number	Module name	Minimum required firmware revision
G1310A	1100 Series Isocratic Pump	A.06.10
G1310B	1260 Infinity Isocratic Pump	A.06.32
G1311A	1100 Series Quaternary Pump*	A.06.10
G1311B	1260 Infinity Quaternary Pump*	A.06.32
G1311C	1260 Infinity Quaternary Pump VL*	A.06.32
G1312A	1260 Infinity Binary Pump*	A.06.10
G1312B	1260 Infinity Binary Pump SL*	A.06.10
G1312C	1260 Infinity Binary Pump VL*	A.06.32
G1361A	1260 Infinity Preparative Pump Cluster with up to 4	A.06.50
G1376A	1260 Infinity Capillary Pump	A.06.10
G2226A	1260 Infinity Nanoflow Pump	A.06.10
G4204A	1290 Quaternary Pump*	B.06.50
G4220A	1290 Infinity Binary Pump*	B.06.23
G4220B	1290 Infinity Binary Pump VL*	B.06.43
G5611A	1260 Infinity Bio-inert Quaternary Pump*	A.06.32
G7104A	1290 Infinity II Flexible Pump*	B.06.71
G7120A	1290 Infinity II High Speed Pump*	B.06.71
*Pump valve clusters are possible for marked pumps with up to 2 valves of type G1160A and/or G1170A		

Table 1–2: Agilent LC - Sampling Systems

Product number	Module name	Minimum required firmware revision
G1313A	1100 Series Standard Autosampler	A.06.10
G1329A	1100 Series Standard Autosampler	A.06.10
G1329B	1260 Infinity Standard Autosampler	A.06.10
G1367A	1100 Series Well-plate Sampler	A.06.31
G1367B	1200 Series High Performance Autosampler	A.06.31
G1367C	1200 Series High Performance Autosampler SL	A.06.31
G1367D	1200 Series High Performance Autosampler SL+	A.06.31
G1367E	1260 Infinity High Performance Autosampler	A.06.32
G1377A	1260 Infinity High Performance Micro Autosampler	A.06.12
G1389A	1100 Series Micro Thermostatted Autosampler	A.06.10
G2258A	1260 Infinity Dual-Loop Autosampler	A.06.50
G2260A	1260 Infinity Preparative Autosampler (High flow)	A.06.50
G4226A	1290 Infinity Autosampler	A.06.31
G4303A	1260 Infinity SFC standard autosampler	A.06.54
G5667A	1260 Infinity Bio-inert Autosampler	A.06.32
G7167A	1260 Infinity Multisampler	D.06.60
G7167B	1290 Infinity II Multisampler	D.06.60
G7129A	1260 Infinity Autosampler	D.06.76
G7129B	1290 Infinity II Vial Sampler	D.06.76

Table 1–3: Agilent LC - Column Compartments

Product number	Module name	Minimum required firmware revision
G1316A	1260 Infinity Thermostatted Column Compartment	A.06.10
G1316B	1200 Series Column Compartment SL	A.06.10
G1316C	1200 Series Thermostatted Column Compartment SL*	A.06.14
G7116B	1290 Infinity II Multicolumn Thermostat (host with firmware B.06.75/D.06.75 is required)	C.06.75

Table 1–3: Agilent LC - Column Compartments (continued)

Product number	Module name	Minimum required firmware revision
G7130A	Integrated Column Compartment ICC	D.06.76
* Cluster with up to three G1316C with integrated 8pos/9port valves (products G4230A/B). Minimum two G1316C TCCs, the third TCC can be a G1316A, B or C.		

Table 1–4: Agilent LC - Detectors

Product number	Module name	Minimum required firmware revision
G1314A	1100 Series Variable Wavelength Detector	A.06.10
G1314B	1200 Series Variable Wavelength Detector	A.06.10
G1314C	1200 Series Variable Wavelength Detector	A.06.10
G1314D	1200 Series Variable Wavelength Detector	B.06.32
G1314E	1290 Infinity Variable wavelength Detector	B.06.32
G1314F	1260 Infinity Variable wavelength Detector	B.06.32
G1315A	1100 Series Diode Array Detector	A.06.10
G1315B	1200 Series Diode Array Detector	A.06.10
G1315C	1200 Series Diode Array Detector VL+	B.06.30
G1315D	1200 Series Diode Array Detector VL	B.06.30
G1365A	1100 Series Multiple Wavelength Detector	A.06.10
G1365B	1100 Series Multiple Wavelength Detector	A.06.10
G1365C	1260 Infinity Multiple Wavelength Detector	B.06.30
G1365D	1260 Infinity Multiple Wavelength Detector VL	B.06.30
G1321A	1100 Series Fluorescence Detector (FLD)	A.06.10
G1321B	1260 Infinity Fluorescence Detector	A.06.32
G1321C	1260 Infinity Fluorescence Detector	A.06.54
G1362A	1260 Infinity Refractive Index Detector	A.06.10
G4212A	1290 Infinity Diode Array Detector	B.06.30
G4212B	G4212B 1260 Infinity Diode Array Detector	B.06.30
G4212A/B HDR-DAD Cluster	2x G4212A or 2x G4212B or a combination of 1x G4212A and 1x G4212B	B.06.57
G7117A/B HDR-DAD Cluster	2x G7117A or 2x G7117B or a combination of 1x G7117A and 1x G7117B	D.06.70
G7114B	1290 Infinity II Variable Wavelength Detector	D.06.70

Table 1–4: Agilent LC - Detectors (continued)

Product number	Module name	Minimum required firmware revision
G7117A	1290 Infinity II Diode Array Detector	D.06.70
G7117B	1290 Infinity II Diode Array Detector FS	D.06.70
G7162A	1260 Infinity II Refractive Index Detector	D.06.76
G7162B	1290 Infinity II Refractive Index Detector	D.06.76

Table 1–5: Agilent LC - Valves, Valve Drives, and Clusters

Product number	Module name	Minimum required firmware revision
G1156A	1200 Series 6 Position / 7 Port Valve (400 bar)	A.06.02
G1157A	1200 Series 2 Position / 10 Port Valve	A.06.02
G1158A	1200 Series 2 Position / 6 Port Valve	A.06.02
G1158B	1200 Series 2 Position / 6 Port Valve (600bar)	A.06.02
G1159A	1200 Series 6 Position Selection Valve	A.06.02
G1160A	1100 Series Multiple Purpose Switching Valve (12 Position / 13 Port)	A.06.02
G1162A	1200 Series 2 Position/ 6 Port Micro Valve	A.06.02
G1163A	1200 Series 2 Position/ 10 Port Micro Valve	A.06.02
G1170A	1290 Infinity Valve Drive (host with firmware B. 06.40/D.06.60 is required)	C.06.40

Table 1–6: Agilent LC - Other Module types

Product number	Module name	Minimum required firmware revision
G1390A	1100 Series Universal Interface Box (UIB)	A.06.02
G1390B	1200 Infinity Series Universal Interface Box II (host with firmware B.06.53/D.06.60 is required)	C.06.53
G4227A	1290 Infinity Flexible Cube (host with firmware B.06.52/D.06.60 is required)	C.06.52
G1364A	1100 Series Automatic Fraction Collector Cluster of up to 3*	A.06.53
G1364B	1260 Infinity Fraction Collector (preparative-scale) Cluster of up to 3 *	A.06.53

Table 1–6: Agilent LC - Other Module types (continued)

Product number	Module name	Minimum required firmware revision
G1364C	1260 Infinity Fraction Collector (analytical-scale) Cluster of up to 3*	A.06.53
G1364D	1100 Series Micro Fraction Collector	A.06.53
G5664A	1260 Infinity Bio-inert fraction collector AS	A.06.53
G4240A	Chip Cube	A.06.36
G4301A	1260 Infinity Analytical SFC System	A.03.07
*Any combination of G1364A/B/C or G5664A plus a fourth G1364A/B/C or G5664A for recovery can be clustered. Multiple single Fraction Collectors are not supported.		

Table 1–7: Agilent LC Systems

Product number	Module name	Minimum required firmware revision
G4286A	1120 Compact LC, Isocratic	B.06.50
G4286B	1220 Infinity LC System Isocratic, Man. Inj., VWD, 600 bar	B.06.50
G4287A	1120 Compact LC, Isocratic with Oven and ALS	B.06.50
G4287B	1220 Infinity LC Isocratic, ALS, TCC, VWD, 600 bar	B.06.50
G4288A	1120 Compact LC, Gradient	B.06.50
G4288B	1220 Infinity LC Gradient, Man. Inj., VWD, 600 bar	B.06.50
G4289A	1120 Compact LC, Gradient with Oven	B.06.50
G4289B	1220 Infinity LC Gradient, ALS, TCC, VWD, 600 bar	B.06.50
G4290A	1120 Compact LC, Gradient with oven and ALS	B.06.50
G4290B	1220 Infinity LC Gradient, ALS, Man. Inj., TCC, VWD, 600 bar	B.06.50
G4291B	1220 Infinity LC Isocratic, Man. Inj., TCC, VWD, 600 bar	B.06.50
G4292B	1220 Infinity LC Isocratic, ALS, VWD, 600 bar	B.06.50
G4293B	1220 Infinity LC Gradient, ALS, VWD, 600 bar	B.06.50
G4294B	1220 Infinity LC Gradient, ALS, TCC, DAD, 600 bar	B.06.50
G4286C	1220 Infinity LC System VL, Isocratic, Man. Inj., VWD, 400 bar	B.06.50
G4287C	S1220 Infinity LC System VL, Isocratic, ALS, TCC, VWD, 400 bar	B.06.50

Table 1–7: Agilent LC Systems (continued)

Product number	Module name	Minimum required firmware revision
G4288C	1220 Infinity LC System VL, Gradient, Man. Inj. VWD, 400 bar	B.06.50
G4289C	1220 Infinity LC System VL, Gradient, Man. Inj. VWD, 400 bar	B.06.50
G4290C	1220 Infinity LC System VL, Gradient, ALS, TCC, VWD, 400 bar	B.06.50
G4291C	1220 Infinity LC System VL, Isocratic, Man. Inj. TCC, VWD, 400 bar	B.06.50
G4292C	1220 Infinity LC System VL, Isocratic, ALS, VWD, 400 bar	B.06.50
G4293C	1220 Infinity LC System VL, Gradient, ALS, VWD, 400 bar	B.06.50

Valve thermostat cluster (VTC)

The valve thermostat cluster (VTC) is a combination of G7116B, G1170A, and G1316C as valve or column hosts and G1316A/B and G7130A as column hosts.

Table 1–8: Supported Valve Thermostat Cluster (VTC) firmware

Module	Minimum module firmware	Minimum host module firmware
G7116B	C.06.75	B.06.75/D.06.75
G1170A	C.06.75	B.06.75/D.06.75
G7130A (within G7129A/B)	D.06.76	N/A
G1316C	A.06.55	N/A
G1316A/B	A.06.10	N/A

Supported plates and trays

The ICS supports the plates and trays listed in the following table.

Plate or tray type	Size/Volume	Text File Name
96 well plate	500 uL	`ANSI96Well500ul.txt`

Plate or tray type	Size/Volume	Text File Name
54 vial plate	1500 uL	ANSIAgilent54VialPlate1500ul.txt
96 deep well plate	1.0ml (Agilent3)	96DeepAgilent3.txt
96 deep well plate	1.0ml (Agilent4)	96DeepAgilent4.txt
96 deep well plate	1.0ml (Ritter41)	96DeepRitter41.txt
384 well plate (Agilent)	N/A	384Agilent.txt
384 well plate (Corning)	N/A	384Corning.txt
384 well plate (Greiner)	N/A	384Greiner.txt
384 well plate (Nunc)	N/A	384Nunc.txt
Tray, holding 27 Eppendorf Safe-Lock tubes	0.5 mL	Agilent27Eppendorf500uL.txt
Tray, holding 27 Eppendorf Safe-Lock tubes	1.5 mL	Agilent27Eppendorf1500uL.txt
Tray, holding 27 Eppendorf Safe-Lock tubes	2.0 mL	Agilent27Eppendorf2000uL.txt
High Recovery Vial plate	5 ml	15HRV5mlVialPlate.txt
High Recovery Vial plate	6 ml	15HRV6mlVialPlate.txt
Vial plate	N/A	15VialPlate.txt
Support for 100 micro vial tray (Agilent part G4226-60021)	N/A	Not Applicable
Support for 100 x 2ml vial tray (Agilent part G1329-90010)	N/A	Not Applicable
10-vial bar for well plate autosamplers	N/A	Vialbar.txt

Importing plate type definitions

Beginning with Empower 2 FR5, you can import or select plate type definitions using the Configuration Manager utility.

To import plate type definitions:

1. Select **Configuration Manager** > **Plate Types**.
2. Inside a row in the Plate Type Name field, right-click, and select **Import from Text**.

   Alternative: Right-click in the field, and select **New**, to specify a new plate type name, and then click **OK**.

3. Type the path and name of the plate type file, or browse to the location of the file.
4. Type a name for the new plate type definition, and then click **OK**.

Installation process

To use this software on an Empower Enterprise (client/server) system, you must install it on every computer, LAC/E^{32} module, client, and Citrix application server that interacts with the Agilent LC instrument, its methods, or results. For consistency, install the ICS on all clients, LAC/E^{32} modules, and Citrix application servers. You need not install the ICS software on the database server unless the server hosts client software and interacts with the Agilent LC instrument, its methods, or results.

Requirement: You must remove any version 1.0 drivers before you can install version 2.2. Using the **Add/Remove Programs** utility, remove the following components before installing the Agilent ICF support v2.2 software:

- Agilent LC (version 1.0.0.0)
- Agilent ICF (version 1.02.24)
- Agilent ICF - LC Drivers (version 1.02.017)

Recommendation: Back up all Empower software projects, library information, and databases before beginning the installation process.

Installing Agilent ICF Support v2.2 using media

Note: These instructions are not applicable for installing the ICF Support v2.2 on an Empower Citrix application server. See Installing Agilent ICF Support v2.2 on an Empower Citrix Server.

To install the Agilent ICF Support v2.2 using media:

1. Power-off the Agilent LC, and reboot the computer.
2. Log in to the computer using an account with local administrator privileges.
3. Insert the Agilent ICF support media in the media drive.
4. Browse to the root directory of the media, and double-click the `Agilent_ICF_Support_v22.exe` file to extract the installation files to a temporary location.
5. Browse to the temporary location and double-click the `Setup.exe` file.
6. Follow all prompts, to complete the installation.
7. Reboot the computer, to correctly establish communication with the instruments.

Requirement: Use Configuration Manager to verify that the DHCP Server Service is running before you power-on the Agilent LC.

8. Power-on the Agilent LC.

Installing Agilent ICF Support v2.2 using a downloaded executable file

To install Agilent ICF Support v2.2 using a downloaded executable file:

1. Power-off the Agilent LC, and reboot the computer.
2. Log in to the computer using an account with local administrator privileges.
3. Browse to the location of the downloaded `Agilent_ICF_Support_v22.exe` file, and double-click it to extract the installation files to a temporary location.
4. Browse to the temporary location, and double-click the `Setup.exe` file.
5. Follow all prompts, to complete the installation.
6. Reboot the computer, to correctly establish communication with the instruments.

   Requirement: Use the Configuration Manager to verify that the DHCP Server Service is running before you power-on the Agilent LC.
7. Power-on the Agilent LC.

Installing Agilent ICF Support v2.2 on an Empower Citrix server

To install the Agilent ICF Support v2.2 on an Empower Citrix server:

1. Insert the Agilent ICF Support v2.2 media in the media drive.
2. Browse to the `Agilent_ICF_Support_v22.exe` file, and double-click it to extract the installation files to a temporary location.
3. Open the Control Panel, and double-click **Add/Remove Programs**.
4. Click **Add New Programs**.
5. In the Run Installation Program dialog box, click **Browse**.
6. Browse to the temporary location.
7. Select the `Setup.exe` file, and then click **Open**.

   Tip: To see the file, you sometimes must select **All Files** from the **Files of type** list.
8. Follow all prompts, to complete the installation.

Installing Agilent ICF Support v2.2 on a single computer using the command line interface (silent installation)

Silent installation, which does not require user interaction, is executed without the need for an interactive user interface. You specify user or installation information through command-line arguments or in a response file.

To install Agilent ICF Support v2.2 on a single computer using the command line interface:

1. From the media, double-click the file `Agilent_ICF_Support_v22.exe`, to extract the installation files to a temporary location.
2. Open a command prompt window, and change to the directory that contains the `setup.exe` file, if necessary.
3. At the command prompt, type the following command along with the required command-line options, and any other arguments that you want to use, as listed in Installer command line options:
   `Setup.exe /s /v "/qn"`
4. After the installation completes, restart the computer.
5. Log on to the computer.

Installer command line options

Argument	Description
/s	Enables the silent installation mode.
/L	Specifies the installer language. • L1033 for English • L1041 for Japanese • L2052 for Chinese Example command line to install the Japanese version: `Setup.exe /L1041`
/qn	Hides the installation user interface.

Argument	Description
/v	Passes installer arguments. **Note:** Do not include a space between /v and installer arguments. To specify multiple arguments, enclose the arguments in quotation marks.
WAT_LOG_FILE_NETWORK_LOCATION=<share_name>	The name of the network share to which the installation log file will be copied. All users should have write access to this share. **Note:** This argument is not required. You must specify a valid share location when using this argument.
WAT_RESTART	Indicates that the installer should restart the system after installation. Specify `= YES` to restart the system. **Note:** This argument is not required. By default, the installer does not restart the system after installation.

Example full command line:

```
Setup.exe /s /v"WAT_RESTART=NO WAT_LOG_FILE_NETWORK_LOCATION="\\Share
\prod_Logs "/qn"
```

Example command line with language selection:

```
Setup.exe /s /L1041 /v"WAT_RESTART=NO WAT_LOG_FILE_NETWORK_LOCATION="\
\Share\prod_Logs "/qn"
```

Installing Agilent ICF Support v2.2 on multiple client computers using the PsExec utility

Requirement: You must have administrator privileges for each client computer on which you are performing the installation.

To install Agilent ICF Support v2.2 on multiple client computers using PsExec:

1. From the media, double-click the file `Agilent_ICF_Support_v22.exe`, to extract the installation files to a temporary location.
2. From the following Web site, download the currently available version of the PsExec utility to any folder on the system from which you plan to install Agilent ICF Support v2.2 onto other computers:
   http://technet.microsoft.com
3. In a text editor, create a text file (`Node.txt`), and within it, add the name or IP address of each client computer on a separate line.
4. Save the `.txt` file.
5. To set the mode to install, in any text editor, create a batch file, for example, `install.bat`, and within it, add the following options:

   ```
   <PATH_A>\Setup.exe /s /v"WAT_RESTART=YES
   WAT_LOG_FILE_NETWORK_LOCATION="\\<PATH_D> "/qn"
   ```

   Use the following option to specify an install language:

   ```
   <PATH_A >\Setup.exe /s /<language> /v"WAT_RESTART=YES
   WAT_LOG_FILE_NETWORK_LOCATION="\\<PATH_D> "/qn"
   ```

6. In a command window, type the following command:
   ```
   PsExec @<PATH_B>\FILE -u DOMAIN\USERNAME -p PASSWORD -h -d CMD /C
   <PATH_C>\install.bat
   ```
7. After the installation completes, restart the computer.
8. Log on to the computer.

Verifying the installation

To verify the installation:

1. Click **Start** > **All Programs** > **Empower** > **Empower Installation Log**.
2. Search for a line similar to this:

   ```
   ************************************************************
   The ICS configuration completed successfully on 5-24-2016
   11:17:24.
   ************************************************************
   ```

3. Click **Start** > **All Programs** > **Empower** > **Verify Files**, to run the Verify Files utility and generate a `checksum.txt` file.

Tip: The `checksum.txt` file documents the installation of options or service packs and verifies the integrity of disk files by comparing their current CRCs and sizes with the original values recorded during installation of the base software and any installed option or service pack.

Note: Files installed for the Agilent ICF support are not included in the `checksum.txt` file generated by the Verify Files utility. To verify the installation for the Agilent ICF components, execute the following batch file: `\Empower\Instruments\AgilentLC\IQTWizard\ICFIQT.bat`.

Uninstalling Agilent ICF Support v2.2

To ensure that file verification is successful following the removal of the software, you must reboot the computer before you uninstall the Agilent ICF Support.

To uninstall Agilent ICF Support v2.2:

1. Reboot the computer.
2. Select **Start** > **All Programs** > **Empower** > **Remove Waters Instrument Component Software**.
3. Click **Remove**.
4. Select the product you want to remove, and then click **Next**.
5. Follow the prompts to remove the instrument component software from your system.

   Result: The registry and new CRC checksums are updated for the Empower software installation. No Oracle software or system files are affected.

   Note: Removing Waters Agilent ICF Support v2.2 does not remove the Agilent ICF software itself. You can remove the Agilent ICF software through the Microsoft Windows **Add/Remove Programs** utility.

System validation

After you install or uninstall the software on a qualified system, determine whether the system requires requalifying according to your laboratory's standard operating procedures.

Requirement: If this is the initial installation in a GxP-regulated environment, perform a full qualification of the Empower software.

Recommendation: Run the Verify Files utility or the ConnectionsAQT for Empower IQ, and then review the resulting file for an entry that states `No installation changes were detected`.

Tip: The date displayed when running Verify Files (or Empower IQ) reflects only the most recent installation. See the `Install.log` file for the complete history.

Issues resolved in this release

This section lists the problems resolved in this release. The numbers identify issues that Waters personnel monitor within a system change request tracking tool.

43561

There is now support for extra A1200 G1367 vial positions. You can create a plate type by importing the `Vialbar.txt` file, and then specify the plate as plate 0 (zero).

49105

Previously, the **Monitor** or **Equilibrate** functions in Run Samples used gradient values. This issue was corrected.

53124

At the end of a sample set using the **Enable overlapped injection** function, the next sample set method now executes properly.

53125

3D data collection from the Agilent Fluorescence (FLR) detector is now disabled. When using the Agilent FLR detector in 2D mode, empty 3D channels are no longer acquired.

53820

At the end of a sample set using the **Prefetch** function, the next sample set method now executes properly.

53967

On the **General** tab of the instrument method editor, **Selective Shutdown** options are available when **Shutdown after Run** is selected. Selecting any module in the list overrides all **Shutdown after Run** behaviors with the **Selective Shutdown** behavior specified in the method.

54337

All plate locations for the Agilent G7167 Multisampler are now supported.

54423 and 51747

Previously, the Empower run time was not sent correctly to the ICF when using European decimal format settings. This issue was corrected.

54472

The preconfiguration utility was incorporated into the Configuration Manager and it is now capable of connecting to a remote LAC/E module.

54533

It is now possible to collect pooled fractions.

54925

Previously, in the text file for the 384-well plates, the `Top Left Well Y Location: 4.5` value was incorrect. All text files in the `AgilentPlatesForImport` folder have been reviewed and updated.

54852

A code review found that manual injections would not start, regardless of the amount of external triggering. This issue was corrected.

Known issues in this release

This section lists the known issues and work-arounds for this release. The numbers identify issues that Waters personnel monitor within a system change request tracking tool.

General issues or behaviors

- The system runtime, as defined in the Empower sample queue, is used for sample queue execution. Most Agilent modules contain a method-based **Stoptime**, which the Empower

software run time overrides. The instrument method value for **Stoptime** is ignored unless the method is designated **Shutdown after Run**.

- The system control panel simultaneously displays as many as four instrument modules. If you configure five or more modules, then you must manage access to the control panels by temporarily minimizing some modules in order to access others.
- Agilent VWD spectra support is not available.
- The Evaporative Light Scattering Detector (ELSD) was not tested and is not supported in this release.
- The Capillary Electrophoresis (CE) system was not tested and is not supported in this release.
- The Agilent ICF installation files are not included as part of the Empower Verify Files utility. See Verifying the installation.
- Uninstalling the Waters ICF Support software does not remove the Agilent ICF files. You must manually uninstall and remove these files using the Microsoft Windows **Add/Remove Programs** utility.

54727

For the Agilent Multisamplers (G7167A for Infinity 1260; G7167B for Infinity 1290), there is a different process for programming the instrument to allow for temperature control via the instrument method. You can enable temperature control via the Empower instrument method starting with ICF version A.02.03 Driver Update 2 (DU2) with ICF LC drivers version A.02.13.

To enable temperature control via an Empower instrument method:

1. From the Sampler menu, select **Modify** > **Temperature Mode**.
2. Select the temperature setting mode **Variable temperature mode (method parameter)**, and then click **OK**.
3. Restart the computer.

54745

If you select the Equilibrate function in a sample set method, an abort error message can appear in the message center after the sample set starts and the Equilibrate run time completes. The abort state is transitory and does not stop a sample set from running. The message can be ignored.

54790

When an error occurs during an acquisition, a tool tip appears in the control panel for the error. Subsequent error information is appended to the tool tip, resulting in a long list that continues and does not wrap to the next line. The text then runs off the screen and is not visible.

54791

When running manual injections, runs do not complete when expected unless a **Stoptime** is used for the pump module.

In the Instrument Method Editor, each module has a default **Stoptime** setting. The pump's default **Stoptime** setting of **As Injector/No Limit** imposes no limit on the run time when there is no injector in the system.

To prevent the **As Injector/No Limit** setting from taking effect, you must configure the pump module's **Stoptime** setting in the Instrument Method Editor when running manual injections. A **Stoptime** setting value that is equal to the Empower software **Run Time** setting is sufficient.

54800

On the **Instrument Method Editor** > **Instrument Configuration** tab, the text on some of the control buttons is not localized.

54804

In the Run Samples window, the tool tip for the **Pump** > **Stop flow** button is not localized.

54831

Following the installation of ICF Support v2.2 on Empower 3 SR1, the **Tools** menu item will be missing from the Configuration Manager.

54924

When using push (silent) installation for the Agilent Instrument Control Framework (ICF), `Error code 3010` appears in the installation log. This error is a request for restart, which is ignored until all components are installed. Despite this log entry, the Agilent ICF installs correctly. This error can safely be ignored.