



Waters™

Empower 3.8.0.2

Release Notes

General information

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About these release notes

This document contains information about the features and functions introduced, changed, or removed in this version of the product. It contains a list of major feature changes as well as descriptions of known defects, resolved defects, and observed product behaviors (concessions) that Waters deems of importance to customers. This document does not include:

- An exhaustive list of all changes to this version of the product
- Descriptions of defects that were not known to Waters at the time of the product's release
- Descriptions of defects that cannot be reproduced by Waters
- Information about customer requests for enhancements to the product
- Specific details of changes to proprietary aspects of product components, features, computational algorithms, and software code

The changes listed in this document are relative to the previous version of the product. If you are updating an older version of the product, review the release notes for all the intervening versions to ensure that you understand the cumulative impact of the product changes.

Carefully review the information in this document before the product is installed. If you have questions about how installing this product might affect your environment or if you need more information about this product, contact your Waters representative.

Obtaining Waters software and software updates

To digitally obtain the software application and licenses that you purchased, use the Waters Digital Software Delivery and License Entitlement platform. With an active Waters Software Maintenance Plan, the platform gives you email notifications of and immediate access to newly released software, including updates and hotfixes. This delivery platform allows you to securely search and share software entitlements and instrument drivers, and it provides a secure search document link to waters.com that details all relevant documents for the specific software product and version.

To access the Digital Software Delivery and License Entitlement platform, contact the designated Software Manager for your organization. The Software Manager is typically a system administrator or someone responsible for implementing software and activating licenses, and they are the person responsible for the Waters digital entitlements (software and licenses) within your organization. From within the platform, the Software Manager can securely manage and distribute software entitlements to others within your organization, providing organizational control of your software assets.

If you have not yet arranged for access to this platform, work with your Waters sales representative to begin the secure onboarding process.

Access the software delivery and license entitlement platform through your waters.com user profile at **waters.com > My Account [Hello, *username*] > Profile > Download Software Entitlements**.

Contacting Waters

Contact Waters with technical questions regarding the use, transportation, removal, or disposal of any Waters product. You can reach us through the Internet, telephone, fax, or conventional mail.

Contact method	Information
www.waters.com	The Waters website includes contact information for Waters locations worldwide.
iRequest	iRequest is a secure Web service form that allows you to request support and service for Waters instruments and software or to schedule a planned service activity. These types of support and services may be included as part of your maintenance plan or support plan. You may be charged for the requested service if you do not have appropriate plan coverage for your product. Note: In areas managed by authorized distributors, iRequest may not be available. Contact your local distributor for more information.
Local office contact information	For worldwide locations, telephone, fax, and conventional mail information is available at the Local Offices website.
Corporate contact information	Waters Corporation Global Support Services 34 Maple Street Milford, MA 01757 USA From the USA or Canada, phone 800-252-4752 or fax 508-872-1990.

Customer comments

We seriously consider every customer comment we receive. Help us better understand what you expect from our documentation so that we can continuously improve its accuracy and usability.

To report any errors that you encounter in this document or to suggest ideas for otherwise improving it, reach us at tech_comm@waters.com.

Updated information

Refer to the Waters website (www.waters.com) and click **Support > Support Documents and Downloads** for updates to this document.

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Empower 3.8.0.2

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 change control procedure.

You should assess the impact of the changes described in the release notes on the qualification status and validation for the intended use of your system, including any impact on personnel, methods, laboratory workflows, or connected equipment, and scale your activities accordingly.

Antivirus considerations

Some real-time virus scanners mistake normal data acquisition and instrument control for virus activity, and thus interfere with proper operations. Full-system scans and live updates can be network-intensive, disk-intensive, and CPU-intensive, and they can also interfere with normal data acquisition. Schedule scans and updates for idle times when data acquisition does not occur.

Certain antivirus program features such as "intrusion prevention", "tamper protection", and "heuristic analysis" can also interfere with normal operation. If you observe issues with the software, review and verify the antivirus logs. It may be necessary to white-list any affected components.

Empower software installations

For Empower software installations, exclude the Empower software installation folder (usually `C:\Empower`) and its sub-folders.

For full antivirus exclusion recommendations per installation type, consult the "Virus scanning" section in the *Empower System Administrator's Guide* corresponding to your Empower software version.

Naming convention

Starting with Empower 3.6.0, the naming convention for Empower releases is `Empower XX.YY.ZZ.QQ`, where:

- `XX` = Major Release version
- `YY` = Minor Release number

- ZZ = Maintenance Release number
- QQ = Hotfix Release

For example, Empower 3.6.0.1 is Major Release 3, Minor Release 6, Maintenance Release 0, Hotfix 1.

Note: QQ digits occur only with actual hotfixes. All other release types omit QQ digits.

Supported platforms and operating systems

Empower 3.8.0.2 software supports Windows 10 Professional and Enterprise (Personal, Acquisition Client, and LAC/E devices), Windows Server 2019 Standard or Windows Server 2022 Standard, and Red Hat Enterprise Linux Server 8.0.

For Empower non-acquisition client platforms only, Empower 3.8.0.2 software also supports Windows 11 Professional or Enterprise version 21H2.

Note: Support includes English, Japanese, Simplified Chinese, and Korean distributions of Empower 3.8.0.2 software.

Specifically, Empower 3.8.0.2 supports these platforms and operating systems:

Table 1: Supported platforms and operating systems

Platform	Operating systems and components
Personal	<ul style="list-style-type: none"> • Windows 10 Professional or Enterprise, 64-bit version 21H1 • Windows 10 Enterprise Long Term Servicing Channel (LTSC) 2021 (including IoT) • Windows 10 Enterprise Long Term Servicing Branch (LTSB) Build 1607 • Oracle 19c^a
Empower client	<ul style="list-style-type: none"> • Windows 10 Professional or Enterprise, 64-bit version 21H1 • Windows 10 Enterprise Long Term Servicing Channel (LTSC) 2021 (including IoT) • Windows 10 Enterprise Long Term Servicing Branch (LTSB) Build 1607 • Windows 11 Professional or Enterprise version 21H2 (for non-acquisition platforms only) • Oracle 19c^a
Citrix environment	<ul style="list-style-type: none"> • Windows Server 2019 Standard

Table 1: Supported platforms and operating systems (continued)

Platform	Operating systems and components
	<ul style="list-style-type: none"> • Citrix Virtual Apps and Desktops 7 1912 Long Term Service Release (LTSR) CU6 • Citrix receiver: Windows 10 Professional or Enterprise • Windows Server 2022 Standard • Citrix Virtual Apps and Desktops 2203 Long Term Service Release (LTSR) CU1 • Citrix receiver: Windows 10 Professional or Enterprise
Database server	<ul style="list-style-type: none"> • Windows Server 2019 Standard or Windows Server 2022 Standard • Red Hat Enterprise Linux Server 8.0 • Oracle 19c^a
File server	<ul style="list-style-type: none"> • Windows Server 2019 Standard • Windows Server 2022 Standard
Waters LAC/E device	<ul style="list-style-type: none"> • Windows 10 Professional or Enterprise, 64-bit version 21H1 • Windows 10 Enterprise Long Term Servicing Channel (LTSC) 2021 (including IoT) • Windows 10 Enterprise Long Term Servicing Branch (LTSB) Build 1607 • Oracle 19c^a <p>Notes:</p> <ul style="list-style-type: none"> • Waters LAC/E devices Configuration 15 and Configuration 16 are both supported with Windows 10 Enterprise Long Term Servicing Branch (LTSB) Build 1607. • Waters LAC/E devices Configuration 16 and LAC/E 17 are supported with Windows 10 Enterprise Long Term Servicing Channel (LTSC) 2021. • Waters LAC/E device Configuration 16 comprises both eLAC/E and cLAC/E and the corresponding BC LAC/E option. • The Waters LAC/E 17 device comprises the BC LAC/E option.
Virtualization technology	Empower 3.8.0.2 was tested using VMware vSphere ESXi 7.0.3 build number 21313628.

a. Embedded Oracle versions are 19.14.0.0.0. for the Oracle database and 19.3.0.0.0 for the Oracle client. The Oracle version required for Red Hat is 19.14.0.0.0. The Oracle database is installed on server and Empower Personal installations. Oracle clients are installed on Empower Server, Personal, Empower client, and LAC/E installations.

See also: The *Empower 3.8.0 Installation, Configuration, and Upgrade Guide* (715008196).

Note: Waters performs Oracle and Windows patch testing on the latest two released Empower versions and periodically releases Oracle patch installers and test results.

Driver compatibility

Waters expects no driver compatibility issues with either Waters or third-party instrument drivers with Empower 3.8.0.2 because no significant changes were made to the driver interfaces within Empower software.

Empower 3.8.0.2 supports:

- Waters Driver Pack 2023 Release 1
- Agilent Instrument Control Framework v3.7.01 - 667007132
- Alliance iS 1.1 - 667007145DD

See also: For information on the Waters drivers, refer to the following documents available on the Waters website (www.waters.com > **Support** > **Support Documents and Downloads**):

- *Waters Driver Pack 2023 R1 Release Notes (analytical)* (715008470)
- *Waters Driver Pack 2023 R1 Installation and Configuration Guide* (715006278)
- *Instrument Control Framework Support Layer 3.7.01 Release Notes* (715008916)
- *Instrument Control Framework Support Layer v3.7 Installation Guide* (715008074)
- *Alliance iS HPLC System 1.1 ICS Installation and Configuration Guide* (715009037)

For information on compatibility with chromatography instruments and drivers from other vendors, refer to the release notes for those instruments and drivers.

Note: Customers can obtain the Alliance iS HPLC Instrument Control Software 1.1 from the Waters Digital Software Delivery and License Entitlement platform.

NuGenesis SDMS LMS compatibility

In addition to supporting the same compatibility matrix as the Empower 3.8.0 release, Empower 3.8.0.2 is also compatible with and can be applied to NuGenesis 9.2.0 HF1 (EMP LMS 1.0.0.1).

See: *Empower 3.8.0 Release Notes* (715008193) for details.

Waters Data Converter compatibility

Empower 3.8.0.2 supports the same Waters Data Converter compatibility matrix as the Empower 3.8.0 release.

See: *Empower 3.8.0 Release Notes* (715008193) for details.

Instrument support

Changes in instrument support

Starting with version 3.7.0, Empower software uses an instrument catalog to identify which third-party instruments in your configured systems require instrument control licenses. For details about the introduction of the instrument catalog, see the *Empower 3.7.0 Release Notes* (715007561), and for information about upload and usage of the instrument catalog, see the *Empower 3.8.0 Installation, Configuration, and Upgrade Guide* (715008196).

Ethernet and serial instruments

To further align its products, after the release of Empower 3 Feature Release 5 Service Release 4, Waters no longer offers Empower software defect corrections or enhancements related to IEEE control in any release of Empower software. Use of IEEE instrument control beyond Empower 3 Feature Release 5 Service Release 4 was not tested, will not be tested, and is not supported.

In addition to IEEE control support, Waters discontinued the following instruments.

Table 2: Instruments that Empower software no longer supports

Instrument	As of this release
410 RI detector	Empower 3
486 TUV detector	Empower 3
996 PDA detector	Empower 3
474 fluorescence detector	Empower 3
Agilent 5890 gas chromatograph	Empower 3 FR3
Agilent 7673 automatic liquid sampler ^a	Empower 3 FR3
Waters ZQ 2000 mass detector	Empower 3 FR3
Waters ZQ 4000 mass detector	Empower 3 FR3
Waters EMD1000 mass detector	Empower 3 FR3
Waters SQ mass detector	Empower 3 FR5
Waters TQ mass detector	Empower 3 FR5
Waters 3100 mass detector	Empower 3 FR5

a. Agilent 7673B and 7673C automatic liquid samplers are supported via ICF Support Layer drivers.

Support for Agilent 6850, 6890, and 7890 GC modules and Agilent 7697A and G1888 Headspace modules

Prior to Windows 10, the Agilent 6850, 6890, and 7890 GC modules and the Agilent 7697A and G1888 Headspace modules were controlled either by an instrument driver built directly into Empower software or by a legacy Instrument Control Software (ICS) driver. Additionally,

the 6850 and 6890 used either RS-232 serial control or RS-232 serial/edgeport USB driver control. To control these modules in an Empower Windows 10 environment, Waters recommends installing the Agilent drivers available with its Instrument Control Framework (ICF) Support Layer version 3.0 (minimum), which uses Ethernet communication. To enable Ethernet communication with the 6850 or 6890 modules, install the Ethernet conversion kits available from Agilent. For more information on ICF Support Layer drivers, see www.waters.com > **Support** > **Support Documents and Downloads**, search for "ICF", and filter the search results by Content Type = Downloads.

Deployment notes

Before you install the application

Before you install Empower 3.8.0.2, back up all Empower software projects, library information, and databases, and restart the computer.

You must upgrade to Empower 3.8.0.2 from Empower 3.8.0.1. The upgrade path is Empower 3.8.0 > Empower 3.8.0.1 > Empower 3.8.0.2. If you currently use a version of Empower software other than Empower 3.8.0, you must upgrade according to the upgrade path.

Review the *Empower 3.8.0 Installation, Configuration, and Upgrade Guide* (715008196) for complete installation instructions and the *Waters Ethernet Instrument Getting Started Guide* (71500074403).

Version information

You can view specific version information for Empower 3.8.0.2 in the following locations:

Table 3: Empower component version information

Component	Version	Location
Empower software	3.8.0.2	<ul style="list-style-type: none"> • Help > About • Information icon on the Empower login screen
Empower product	7.0.3471.920.2	<ul style="list-style-type: none"> • Installation Log • Control Panel > Add/Remove Programs > Empower • Settings > Apps & Features > Empower
Database	7.80.01.00	<ul style="list-style-type: none"> • Help > About • Verify Files • Information icon on the Empower login screen

Default projects

A default project containing example data for training and troubleshooting purposes is included with the software media when you purchase Empower software. Additional projects are also available on the Waters Marketplace (<https://marketplace.waters.com>).

Installing Empower 3.8.0.2

You must apply the Empower 3.8.0.2 update to all nodes in your Empower environment that run Empower 3.8.0.1. This includes Empower Personal Workstations, Empower Servers in an Enterprise environment, Empower clients and LAC/E devices in both Windows and RedHat Linux Empower environments, and Citrix servers.

You can install Empower 3.8.0.2 by downloading it from the Waters digital delivery platform as described in the section [Obtaining Waters software and software updates \(Page iii\)](#).

Restriction: You cannot roll back or remove only Empower 3.8.0.2. If you want to uninstall Empower 3.8.0.2, it requires a full Empower software uninstall.

Note: After installation of Empower 3.8.0.2, at first login, if no login has occurred from any node on Empower 3.8.0.1, the Empower database will be updated to version 7.80.01.00. Any subsequent Empower 3.8.0 nodes that have not received Empower 3.8.0.2 will be denied connection to the Empower database until after installing Empower 3.8.0.2. If a first login has occurred from any node to Empower 3.8.0.1, the database will have already been updated and Empower 3.8.0.2 will not perform any additional database update. In a RedHat Linux Empower environment, Empower 3.8.0.2 is installed on clients and LAC/E modules only, and it is not required to apply Empower 3.8.0.2 directly to the database. The database will be updated via the first Empower 3.8.0.1 or Empower 3.8.0.2 node connection.

Requirements:

- You must upgrade to Empower 3.8.0.2 from Empower 3.8.0.1. The complete upgrade path is Empower 3.8.0 > Empower 3.8.0.1 > Empower 3.8.0.2.
- If you are currently using a version of Empower software other than Empower 3.8.0, you must upgrade according to the upgrade path described in the previous point.
- You must have local administrator privileges to install Empower 3.8.0.2.

You can install Empower 3.8.0.2 in the following ways, depending on your system configuration:

Computer configuration	Installation process
Single computer running a supported Windows operating system	<ul style="list-style-type: none">• Installation wizard• Silent installation (command line interface)
Multiple computers: Clients, LAC/E devices, or Citrix servers	<ul style="list-style-type: none">• Installation wizard• Silent installation (command line interface)• Push installation (PsExec utility)

Performing a silent installation

You can install Empower 3.8.0.2 by using command line options.

To perform a silent installation from a command line:

1. In a Command Prompt window, if required, change to the directory that contains the file *Empower3802Setup.exe*.
2. At the command prompt, specify the following command, along with the required line options and any other options you want to use, as listed in the following table:

```
Empower3802Setup.exe /s /v" /qn"
```

Full command line: `Empower3802Setup.exe /s /v"WAT_RESTART=NO
WAT_LOG_FILE_NETWORK_LOCATION="<SHARE>\e3_Logs" /qn"`

Command line with language

selection: `Empower3802Setup.exe /s /L1033 /v"WAT_RESTART=NO
WAT_LOG_FILE_NETWORK_LOCATION="<SHARE>\e3_Logs" /qn"`

Table 4: Command line options

Option	Description	Required	Default value
/s	Silent mode	Yes	
/L	Installer language: <ul style="list-style-type: none">• L1033 is English• L1041 is Japanese• L1042 is Korean• L2052 is Simplified Chinese	Yes	
/v	Installer arguments. Passes one or more command line options to notification <i>services.msi</i> . When including multiple command line options, enclose them in quotation marks. Rule: Do not include a space between the /v and the command line option.	Yes	
/qn	Installs the software without displaying the user interface.	Yes	
WAT_LOG_FILE_NETWORK_LOCATION	Destination share for the installation log. This share must be writable by everyone.	No	None

Table 4: Command line options (continued)

Option	Description	Required	Default value
<i>WAT_RESTART</i>	Restart system.	No	Do not restart

The *WAT_LOG_FILE_NETWORK_LOCATION* option copies the installation log to the network share. If the installation is successful, the name of the log file is *computername_datetime_empower3.log* (for example, *AS-27_2023-5-31_12-55-17-235_Empower3.log*). If the share is not accessible, the installation log file is created in the local Windows directory. If you do not supply the *WAT_LOG_FILE_NETWORK_LOCATION* option, the log is created locally.

3. After the installation finishes, restart the computer.
4. Log on to the computer, and then log in to Empower software.

Performing a push installation

When installing Empower 3.8.0.2 on multiple computers (push installation), use the PsExec utility. You can download the latest version from <http://technet.microsoft.com>.

Requirements:

- Install the PsExec utility on the system from which you execute the push installation. To install this utility, copy it to any file path.
- You must have administrator privileges for each client.
- You must use a domain user account that is part of the local administrator group.

To perform a push installation of Empower 3.8.0.2:

1. Create a text file and, within it, specify the name or IP address of each client computer or LAC/E device on a separate line, and then save the file.
2. Run the following commands from a Command prompt, or create a batch file containing the Empower 3.8.0.2 upgrade push install options.

Using the administrator account: PsExec @<PATH_A>\File.txt -u DOMAIN\USER -p PASSWORD -d <PATH_B>\Empower3802Setup.exe /s /v" WAT_RESTART=NO WAT_LOG_FILE_NETWORK_LOCATION="<PATH_C>" /qn

Selecting a language: PsExec @<PATH_A>\File.txt -u DOMAIN\USER -p PASSWORD -d <PATH_B>\Empower3802Setup.exe /s /L1033 /v" WAT_RESTART=NO WAT_LOG_FILE_NETWORK_LOCATION="<PATH_C>" /qn

PsExec command line options	Definition	Required
<i>PATH_A</i>	Path to the text file that contains the names or IP addresses of the clients or LAC/E devices	Yes
<i>File</i>	Name of the text file that contains the names or specified IP addresses	Yes
<i>PATH_B</i>	Path to the Empower 3.8.0.2 media located on a network share	Yes
<i>PATH_C</i>	Path located on a network share on which to copy the installation log	Yes
<i>-p</i>	Password	Yes
<i>-u</i>	Username	Yes
<i>-d</i>	Do not wait for the process to terminate (non-interactive). This command launches installation on multiple machines simultaneously.	Yes

3. After the installation finishes, restart the computer.
4. Log on to the computer, and then log in to Empower software.

Push installation on multiple Empower Citrix servers

When installing Empower 3.8.0.2 on multiple Empower Citrix servers, use the PsExec utility and the Waters command line interface and options. You can type the commands in a command window or in a batch file.

Requirements:

- Confirm that the default *admin\$* share is enabled on all Empower Citrix servers on which you plan to install Empower 3.8.0.2.
- To perform a push installation, you must have a domain user with administrator privileges on each Empower Citrix server.

To perform a push installation of Empower 3.8.0.2 on multiple Empower Citrix servers:

1. From the following website, download the currently available version of the PsExec utility into any folder on a host machine: <http://technet.microsoft.com>.

2. Using a text editor, create a text file (such as *filename.txt*), specify within it the name or IP address of each Empower Citrix server on a separate line, and then save the file.
3. To set the mode to install, use a text editor to create a batch file (such as *PushCitrix.bat*). Within this file, specify the following commands:

```
change user /install

<path_to_Empower_media>\Empower3802Setup.exe /s /
v"WAT_RESTART=Yes
WAT_LOG_FILE_NETWORK_LOCATION="<path_to_log_file>" /qn"
```

- For *path_to_Empower_media*, specify a valid path to the Empower 3.8.0.2 software media. This path must be accessible to the Empower Citrix server.
- For *path_to_log_file*, specify a valid path to the location where the installation log files will be stored. This location must be on a share that is write-accessible to the domain users who will perform the push install and who have write access to the share.

Tip: The batch file described here is an example. The Restart command and the log file location are optional. If Restart is not included in the command line, users are prompted to restart the computer after installation. If the file location is not specified, the log file is created locally wherever Empower software is installed. A message informs users that the file was created.

4. On the host computer, run the batch file using the following command line syntax:

```
PsExec @<path_to_filename.txt>\file -u domain\username -p password
-h -d CMD /C <path_to_batch_file>\PushCitrix.bat
```

- For *path_to_filename.txt*, specify a valid path to the text file on the host machine that contains the Empower Citrix server names.
- For *path_to_batch_file*, specify a valid path to the location of the share that contains the batch file.

5. Log on to each Empower Citrix server.
6. Log in to Empower software.

Configuring an Empower file server

An Empower file server allows you to store and retrieve Empower raw data on a computer other than the Empower database server. The Waters Service allows computers on which it is installed to act as a file server.

Tip: If you install an Empower client on the file server, the DCOM and firewall settings are automatically installed by Empower software. You can verify these settings after installing the client.

See also: For details about configuring an Empower file server and DCOM settings, see the *Empower 3.8.0 Installation, Configuration, and Upgrade Guide* (715008196).

Verifying the installation

You can verify that Empower 3.8.0.2 was installed successfully by running a utility called Verify Files. Running Verify Files creates a *checksum.txt* file that maintains a record of all Empower options and service packs installed on an Empower computer. The *checksum.txt* file also verifies the integrity of disk files by comparing their current CRC and sizes with original values recorded during installation of the base software and any installed option or service pack.

To verify your Empower installation:

Click **Start > All Programs or All Apps > Empower > Verify Files**.

Tip: The *checksum.txt* file is created during the installation of Empower 3.8.0.2. When you run the Verify Files utility after the installation of Empower 3.8.0.2, the *checksum.txt* file includes a time stamp in the file name.

To view the *checksum.txt* file for the Empower 3.8.0.2 installation:

From Windows Explorer, navigate to the `\Empower\Script` directory on the Empower installation drive, and then double-click the *checksum.txt* file. Locate the file with the time stamp that contains the Empower 3.8.0.2 installation time in the file name.

To confirm that Empower 3.8.0.2 is installed on the computer:

Click **Start > All Programs > Empower > Empower Installation Log** and search for lines similar to these:

```
=== Logging Started: 2-12-2024 15:03:34 - Empower 3.8.0.2 ===
***** Product: Empower 3.8.0.2
***** Build Number: 2024-02-09_11-06_3.8.0.2_BN7_RC1
[15:03:35]: Empower 3.8.0.2 Installer Setup was initialized.
[15:06:40]: The setup has successfully completed installing Empower
3.8.0.2 on this computer.
[15:06:40]: Empower 3.8.0.2 Installer has completed.
=== Logging Stopped: 2-12-2024 15:06:40 ===
```

What's new?

No new features were added to this release.

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.

INFEMP-35418 (CRI-6331)

Previously, with the following system configurations, Empower 3.8.0 and Empower 3.8.0.1 software versions reported an instrument failure that prevented acquisition:

- Waters 2414 Refractive Index (RI) detector connected to an Alliance 2695 system running in W410 emulate mode

Notes:

- This issue did not impact systems when the 2414 detector ran in native 2414 mode.
- The Alliance 2414 SQT (System Qualification Tool) projects were configured to use the 2414 detector in emulate W410 mode and, as a result, the SQT version could not be used with Empower 3.8.0 and Empower 3.8.0.1.
- An Agilent 6890 GC system running without an Instrument Control Framework (ICF) Support Layer
- Waters systems with an Alliance 2695 installed (and no other instruments installed in the system)

Note: Systems that contain a module that uses an external instrument control software (ICS) driver were not impacted, except for an Alliance HPLC Instrument, which uses a combination of ICS and embedded drivers.

Upgrading to Empower 3.8.0.2 or Empower 3.8.1 software corrects the issue.

INFEMP-35569

Previously, when you acquired data in Run Samples using Interactive System Suitability, the Reinject on Fault mode did not work as expected for systems configured with more than one module. For example, the number of reinjections that you set in Reinject on Fault mode were not applied. Instead, Empower software performed a reinjection for each module installed in your system.

Upgrading to Empower 3.8.0.2 or Empower 3.8.1 software corrects the issue.

Now, reinjections are performed based on the reinjection setting that you set in Reinject on Fault mode and do not take into account the number of modules installed. Also, the injection value now appears correctly in the reinject counter for each Reinject on Fault performed.

Known issues in this release

At the time of this product's release, there were no related known issues requiring documentation.

Program files modified in this release

Program files

The following program files in the *Empower\Bin* directory were modified for Empower 3.8.0.2:

File name	Description	File version	Product version
InstrumentServer.exe	Instrument Server	7.0.3471.920	7,0,3471,920.2

Test configurations

This application update was tested on the following system configurations.

Empower Server

Windows Server 2019 Standard Server

Microsoft Windows versions and hotfixes

Microsoft OS version	Microsoft hotfixes
10.0.17763 N/A Build 17763	KB5027131,KB4486153,KB4535680,KB5022511,KB5022840,KB4549947,KB4558997,KB4566424,KB4570332,KB4577586,KB4587735,KB4589208,KB4598480,KB4601393,KB5003243,KB5005112,KB5012170,KB5027222,KB5015896,KB5020374,KB5023789,KB5005701

Windows Server 2022 Standard Server

Microsoft Windows versions and hotfixes

Microsoft OS version	Microsoft hotfixes
10.0.20348 N/A Build 20348 (21H2)	KB5034466,KB5016592,KB5003791,KB5034203,KB5007273,KB5011352,KB5011651,KB5014032,KB5014035,KB5014671,KB5015895,KB5016705,KB5020372,KB5022924,KB5023794,KB5026879,KB5028318,KB5031539,KB5031540,KB5017265,KB5017381,KB5017399,KB5032392,KB5032907,KB5034224,KB5005699,KB5033914,KB5012170,KB5034129,KB5034286,KB5014856,KB5014858,KB5014831

Empower client

Windows 10 Professional

Microsoft Windows versions and hotfixes

Microsoft OS version	Microsoft hotfixes
10.0.19045 N/A Build 19045	KB5034466,KB5016592,KB5003791,KB5012170,KB5034203,KB5007273,KB5011352,KB5011651,KB5014032,KB5014035,KB5014671,KB5015895,KB5016705,KB5020372,KB5022924,KB5023794,KB5026879,KB5028318,KB5031539,KB5031540,KB5032392,KB5032907,KB5034224,KB5005699,KB5031988,KB4562830,KB4577586,KB4580325,KB5000736,KB5011048,KB5015684,KB5032189,KB5005260,KB5028853,KB5007401,KB5011062,KB5029716,KB5029714,KB5029331,KB5006753,KB5025315,KB5028380,KB5029709,KB5011063,KB5011050

LAC/E device

Windows 10 Professional

Testing was performed using the Waters Empower LAC/E device.

Microsoft Windows versions and hotfixes

Microsoft OS version	Microsoft hotfixes
10.0.19045 N/A Build 19045	KB5034466,KB5034468,KB5000736,KB5011048,KB5012170,KB5015684,KB5029006,KB5034203,KB5020372,KB5031539,KB5032907,KB5034224,KB5005260,KB5019275,KB5016592,KB5003791,KB5007273,KB5011352,KB5011651,KB5014032,KB5014035,KB5014671,KB5015895,KB5016705,KB5022924,KB5023794,KB5026879,KB5028318,KB5028380,KB5029709,KB5031540,KB5032392,KB5005699,KB5028853,KB4562830,KB5007401,KB5011062,KB5025315,KB5011063,KB5011050

Windows 10 Enterprise 2016 LTSC

Testing was performed using the Waters Empower LAC/E device.

Microsoft Windows versions and hotfixes

Microsoft OS version	Microsoft hotfixes
10.0.14393 N/A Build 14393 (version 1607)	KB5013625,KB3186568,KB4033631,KB4049065,KB4049411,KB4054507,KB4486129,KB4520724,KB4524244,KB4535680,

Microsoft OS version	Microsoft hotfixes
	KB4577586,KB4589210,KB5005698,KB5012170,KB5016058,KB5017095,KB5016622

Standalone/Personal Workstation

Windows 10 Enterprise LTSC

Microsoft Windows versions and hotfixes

Microsoft OS version	Microsoft hotfixes
10.0.19044 N/A Build 19044 (version 21H2)	KB5034468,KB5003791,KB5011048,KB5012170,KB5034763,KB5011651,KB5020372,KB5034224,KB5005699

Windows 10 Enterprise 2016 LTSC

Microsoft Windows versions and hotfixes

Microsoft OS version	Microsoft hotfixes
10.0.14393 N/A Build 14393	KB3186568,KB4033631,KB4049065,KB4049411,KB4054507,KB4093137,KB4485447,KB4486129,KB4520724,KB4577586,KB4589210,KB5023788,KB5030504,KB5032391,KB5032197

Windows 10 Professional

Testing was performed using the Waters Empower Workstation.

Microsoft Windows versions and hotfixes

Microsoft OS version	Microsoft hotfixes
10.0.19045 N/A Build 19045	KB5034466,KB5016592,KB5003791,KB5012170,KB5034203,KB5007273,KB5011352,KB5011651,KB5014032,KB5014035,KB5014671,KB5015895,KB5016705,KB5020372,KB5022924,KB5023794,KB5026879,KB5028318,KB5031539,KB5031540,KB5032392,KB5032907,KB5034224,KB5005699,KB5029716,KB5029714,KB5000736,KB5011048,KB5015684,KB5029331,KB5006753,KB5029709,KB5028380,KB5028853,KB4562830,KB5007401,KB5011062,KB5025315,KB5011063,KB5011050

Citrix Server

Citrix App Server

Windows Server 2022 Standard (Citrix Virtual Apps and Desktops 7 2203 LTSR CU1)

Microsoft Windows versions and hotfixes

Microsoft OS version	Microsoft hotfixes
10.0.20348 N/A Build 20348	KB5022507,KB5012170,KB5023705,KB5023793

Citrix Presentation Server

Windows Server 2022 Standard (Citrix Virtual Apps and Desktops 7 2203 LTSR CU1)

Microsoft Windows versions and hotfixes

Microsoft OS version	Microsoft hotfixes
10.0.20348 N/A Build 20348	KB5029928,KB5012170,KB5031364,KB5031590

Citrix Client

Windows 10 Professional

Testing was performed using the Waters Citrix client.

Microsoft Windows versions and hotfixes

Microsoft OS version	Microsoft hotfixes
10.0.19045 N/A Build 19045	KB5034466,KB5017022,KB5003791,KB5011048,KB5012170,KB5015684,KB5019180,KB5023319,KB5034203,KB5011352,KB5014032,KB5016705,KB5018506,KB5020372,KB5022924,KB5023794,KB5025315,KB5026879,KB5028318,KB5028380,KB5029709,KB5031539,KB5032392,KB5032907,KB5034224