



Waters ACQUITY Drivers Installation and User's Guide



Agilent Technologies

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Introduction

This installation guide is designed to help users installing the drivers for the Waters ACQUITY and ACQUITY H-Class instruments for use with the Agilent OpenLAB Chromatography Data System (CDS) EZChrom or ChemStation Edition.

Terms and Abbreviations

Term	Description
ChemStation Edition	Open Lab CDS ChemStation Edition
EZChrom Edition	OpenLAB CDS EZChrom Edition
Acquity Driver	OpenLAB CDS Waters Acquity Driver

 Table 1
 Terms and Abbreviations used in this document

Supported ACQUITY instruments

Agilent OpenLAB CDS supports the ACQUITY and ACQUITY H-Class models. Table 2 lists the supported modules and with its minimum firmware.

Table 2	OpenLAB CDS supported	ACQUITY models.	module name,	and firmware	version

Acquity	Acquity H-Class	Module Name	Min. Firmware version
\checkmark		Sample manager	1.60
\checkmark		Binary solvent manager	1.60
\checkmark		Column manager (CM)	1.60.74
	\checkmark	Sample manager FTN	1.60
	\checkmark	Quaternary solvent manager	1.60
	\checkmark	Column manager (CM-A)	1.60
	\checkmark	Column manager AUX	N/A
\checkmark	\checkmark	Sample organizer ⁽¹⁾	1.60
\checkmark	\checkmark	TUV detector	1.60
\checkmark	\checkmark	PDA detector	1.60
\checkmark	\checkmark	PDA eLambda detector	1.60
\checkmark	\checkmark	Fluorescence detector	1.42
✓	\checkmark	ELSD detector 1.30	

(1) to be configured via the Sample Manager

OpenLAB CDS Requirements

Prerequisites installing the OpenLAB CDS ACQUITY Driver within OpenLAB CDS:

The OpenLAB CDS Waters Acquity Driver A.01.02 is supported with Agilent OpenLAB Chromatography Data System (CDS) A.01.04, A.01.05 and A.02.01, which includes the following software:

- OpenLAB CDS EZChrom Editions A.04.04, A.04.05, A.04.06
- OpenLAB CDS ChemStation Editions C.01.04 HF2 and higher, C.01.05, C.01.06.

One of the supported Agilent OpenLAB CDS Editionsmust be present prior the installation of the OpenLAB CDS Acquity Driver.

Supported operating systems for OpenLAB CDS Revision A.01.04, A.01.05

- Windows 7 SP1 (32/64 bit): for Workstations, Clients and OpenLAB CDS EZChrom Ed. AIC's
- Windows 2008 SR2: for Client and OpenLAB CDS ChemStation Ed. AIC's

OpenLAB CDS Revision A.02.01 brings support for additional supported operating systems:

• Windows 8.1 (64 bit): for Workstations, Clients and OpenLAB CDS EZChrom Ed. AIC's

Note: Windows XP, Vista, and Windows 2003 Server are not supported

The OpenLAB CDS Waters Acquity Driver is supported in the following languages: English, Chinese, Japanese

NOTE: Check the corresponding *OpenLAB CDS Hardware and Software Requirements* Guide for the Operating System requirements.



- A physically separate, dedicated LAN card is required on the AIC or Workstation for the ACQUITY driver.
- Correct operation of the Waters Acquity in virtualized installations of OpenLAB CDS typically requires the use of LAN-to-USB adapters.
- OpenLAB CDS supports only one Waters Acquity instrument per AIC or Workstation (both Editions: EZChrom Edition or ChemStation Edition).
- It is not possible to use a mixed instrument stack with Agilent modules and Waters Acquity modules as one instrument.

Installation

Step 1 Remove previous installations

Previous installations must be uninstalled before installing the new version. If there is no previous installation, proceed with **Step 2**.

- Ensure that your Waters Acquity Instrument modules are turned off.
- **1** Uninstall the Agilent OpenLAB CDS [ChemStation | EZChrom] Waters Acquity Drivers.
 - a. If you are using EZChrom Edition A.04.04 or ChemStation Edition C.01.04 HF2 and higher:
 - 1 From the Windows **Start** menu, open the Control Panel Select Add or Remove Programs: A list of installed programs is displayed
 - 2 Navigate through the list to the Agilent OpenLAB CDS [ChemStation | EZChrom] Waters Acquity Drivers item.
 - **3** Select the item and click **Remove**. Click **Yes** when requested to confirm the removal.

or -

- b. If you are using **EZChrom Edition A.04.05 or higher**, or **ChemStation Edition C.01.05 or higher**, deploy the OpenLAB CDS master installer:
 - 1 Insert the OpenLAB CDS Disk 1 and execute Setup.bat
 - 2 Select Installation from the OpenLAB CDS Master Installer.
 - **3** Select **OpenLAB Additional Software and Drivers** to open the OpenLAB Additional Software and Drivers Deployment Wizard, Installed Features.
 - 4 From the Installed Features click **Next** to proceed to **Planning**.
 - 5 Select Uninstall and click Next.
 - 6 In Planning select Agilent OpenLAB CDS [ChemStation | EZChrom] Waters Acquity Drivers
 - 7 Click Next to proceed to Summary.
 - 8 Click Start to begin uninstallation process and click **Finish** to conclude.
- 2 Uninstall Waters Acquity Core Driver using the start menu entry:
 - 1 Navigate to Waters Instruments select Remove Waters Instrument Components

- 2 From the **Maintenance** Mode window, select **Typical**, a list of all Waters Software is shown, ensure that the list is correct and proceed by clicking **Next**.
- **3** Wait until the uninstallation has completed.
- 4 Click **Finish** and restart the computer. Do not proceed before restarting the computer.
- Navigate to \Program Files (32 bit operating system), or \Program Files (x86) (64 bit operating system) and delete the Waters Instruments directory.

Step 2 Connect the instrument modules

Ensure that your Waters Acquity Instrument modules are turned off.

To connect the Waters Acquity modules to workstation or AIC:

- 1 Connect LAN cable from each Instrument module to the switch
- **2** Connect LAN cable from the dedicated LAN card on AIC or Workstation to the switch

Step 3 Configure the driver IP address

The ACQUITY instrument modules use LAN communications to connect the Workstation or AIC. A separate dedicated LAN card is phyiscally required for each AIC or Workstation to connect to the appropriate instrument modules. The IP address must be configured for each AIC or Workstation in your system.

To configure the IP address:

- 1 Select Start > Control panel > Network and Sharing Center > Change adapter settings. Right-Click your Network adapter, which is connected to the instrument modules.
- **2** Select Properties to open the Local Area Connection Properties window.
- **3** From the **connections** list, select the TCP/IPv4 for your driver LAN card and then select **Properties**.
- **4** From the General tab select Use the following IP address.
 - **a** Enter the IP address: 192.168.0.1.
 - **b** Enter the Subnet mask: 255.255.255.0.
- 5 Select OK

Step 4 Install the Waters Core Driver

The Waters Core Driver must be installed on each Client, AIC or Workstation of your ACQUITY system.



1 IMPORTANT:

Turn **on** or **power cycle** all modules connected to the dedicated LAN card.

- **2** Navigate to the **Waters Core Driver** folder located on the Waters ACQUITY DVD.
- **3** Double-click **Setup.exe** to open the Waters ICS Deployment window.
- 4 Click Next.
- **5** Click Install/Upgrade.
- 6 Review the Installation Recommendations.
- 7 Select I have read the product release notes and click Next.
- 8 Review the End User License Agreement.
- 9 Select I agree to the License terms and conditions and click Next.
- **10** Click Typical (Recommended)
- **11** Optional: Deselect **Install Connections INSIGHT** (collects data for Waters, if left checked) and click **OK**
- 12 Click Next.
- **13** Click **Finish** when the Status indicates that the installation has completed successfully.
- **14** If the previous steps were executed correctly, the **Autoloader** window will find and show every module in the **Waters ACQUITY** instrument.

Make sure, that the firmware revision of all listed modules is up-todate. If necessary double-click the red-highlighted modules in the autoloader window and start the updating process. Follow the onscreen instructions. Wait until this is finished and then close the window.

- **15** Back in the Waters Deployment Manager window:
 - ${\bf c}$ $\,$ Ensure that all modules connected to the Ethernet Card / Switch are turned ${\it off}$
 - **d** Click **Yes** in the Waters Deployment Manager to restart the computer and complete the installation.
 - e Turn on all modules connected to the Ethernet Card / Switch
- **16** For Installation Qualification select Windows Start > All Programs > Waters Instruments > Verify Instrument Driver Files
- **17** If you are installing this **Waters Core Driver** on an **EZChrom AIC** see table 3a for additional required DCOM settings and permissions as well as table 3b for additional firewall settings.

Path	Allow
Local Security Policy > Local Policies > Security Options > DCOM: Machine Access Restrictions	Local Access and Remote Access permissions for:
	Everyone
	Domain Users
	Performance Log Users
	Distributed COM Users
Local Security Policy > Local Policies > Security Options >	Local Access and Remote Access for:
DCOM: Machine Launch Restrictions	Everyone (Remote Launch not required; Remote Activation required)
	Domain Users
	Administrators
	Performance Log Users
Local Security Policy > Local Policies > Security Options > Network Access: Let Everyone permissions apply to anonymous users	Enable
Component Services > Computers > Properties of My Computer	Local and Remote for:
> COM Security > Access Permission	SELF
	System
	Domain Users
	Administrators
Component Services > Computers > Properties of My Computer	Local and Remote for:
> COM Security > Launch and Activation Permission	Everyone (select only Local Launch and Local Activation)
	System
	Domain Users
	Administrators

 Table 3a
 DCOM Settings and permissions on EZChrom AIC

Process	Ports
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityBSMServer.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityCMMServer.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityConsole.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityServer.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityELSDServer.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityFLRServer.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityFTNServer.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityLCCConfig.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityLCCServer.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityPDAServer.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityQSMServer.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquitySMServer.exe	Any
%ProgramFiles(x86)%\Waters Instruments\Bin\AcquityTUVServer.exe	Any
Any	TCP/UDP 135

Table 3b Firewall inbound rules on EZChrom AIC

Step 5 Install the OpenLAB CDS ACQUITY Driver

- 1 From each computer where the Waters Core Driver is installed, insert the **OpenLAB CDS Disk 1** and execute **Setup.bat**
- 2 If you are using the EZChrom Edition A.04.04 or ChemStation Edition C.01.04 HF2 and higher, select Maintenance from the OpenLAB CDS Master Installer.

or -

If you are using the **EZChrom Edition A.04.05** or higher, or **ChemStation Edition C.01.05 or higher**, select **Installation** from the OpenLAB CDS Master Installer.

- **3** Select **OpenLAB Additional Software and Drivers** to open the OpenLAB Additional Software and Drivers Deployment Wizard, Installed Features.
- **4** If you are using the EZChrom Edition A.04.04 or ChemStation Edition C.01.04HF2 and higher, click Next to proceed to Add-on Selection.

Or -

If you are using the **EZChrom Edition A.01.05** or higher, or **ChemStation Edition C.01.05** or higher :

- a Click Next to proceed to Planning.
- **b** Enable **Install**.
- c Click **Next** to proceed to Add-on Selection.
- **5** To add the Agilent OpenLAB CDS (EZChrom or ChemStation) Waters Acquity Driver to the Component list: Insert the ACQUITY Driver DVD.
- 6 Select Browse.
- **7** Navigate to the For OpenLAB CDS Chemstation/EZChrom Edition folder located on the ACQUITY Driver DVD.
- 8 Select the

WatersAcquity_Addon_EZChrom.xml or -Agilent_OpenLAB_CDS_ChemStation_Waters_Acquity_Drivers.xml.

The OpenLAB CDS (EZChrom or ChemStation) Waters Acquity Driver is displayed in the Component list

- 9 Click Next.
- **10** Review the End User License Agreement.
- **11** Select I accept the license agreement and click Next.
- 12 At the Summary screen, click Start.
- 13 When the Status reads Successfully installed, click Finish.
- 14 Restart the computer to complete the installation
- **15** Run the OpenLAB CDS Installation Qualification.

Check that IQ or SVT Report passes and the Waters Acquity is listed.

Step 6 Register the driver

To use the ACQUITY instrument with OpenLAB CDS, you must register the driver with your EZChrom or ChemStation Edition. If you have one or several Workstations you need to register the driver for each workstation. In an EZChrom Client/Server environment it is sufficient to register the driver only once per OpenLAB Shared Services Server.

To register the driver with your EZChrom Edition:

- 1 Open the AIC and Driver Install tool on an AIC or workstation machine. Select Start > All Programs > Agilent Technologies > OpenLAB CDS EZChrom Edition > AIC and Driver Install Tool to open the Agilent OpenLAB CDS EZChrom Edition - Registration window.
- 2 Enter your OpenLAB Shared Services Username, Password, and Domain.
- **3** Select the **AIC** tab. The AIC name, Hostname or IP, Port, and Description are entered by default.
- 4 Enable Register Drivers and Add Windows Firewall Exceptions.
- 5 Click **Register AIC**.

To register the driver with your ChemStation Edition:

- **1** Insert the ACQUITY driver DVD.
- 2 Navigate to the For OpenLAB CDS ChemStation Edition > RegisterACQUITY folder.
- **3** Click RegisterCSData.exe to open the Driver Registration Utility For ChemStation Edition.
- 4 Enter your OpenLAB CDS Login and Password.
- **5** Click **OK**. The system searches for and displays any new instruments and registration files.
- 6 To register the instrument and driver displayed, click **Import**. An **Information** message will appear, indicating the status of the registration.
- 7 Click **OK**, to close the message.
- 8 Click **Cancel** twice to close the program.

Step 7 Use the ACQUITY instrument with your OpenLAB CDS system

Launch the Agilent OpenLAB CDS and create an instrument to use the ACQUITY instrument. You can use one ACQUITY instrument with each AIC or Workstation. See the CDS Control Panel Help to learn how to create and configure the instrument.

Configure instrument for your EZChrom Edition

After registering the Waters ACQUITY driver an instrument type named **Waters ACQUITY** will be available in Shared Services.

CP.	Agiler	nt OpenLAB Control Panel		×
Management				?
Edit Delete Refresh Instruments and Locations	dit ations erties	te Copy to Clipboard Selected Row		
Navigation «	Create Instrument			~
S Instruments	Name:	WatersAcquitySystem		
	Description:			
	Application:	EZChrom	-	
	Instrument controller:	WIN-DDCLDUM663E	-	
	Instrument type:	Walers Acquity	-	Links
	Contact:			
Instruments	Default project:	 always use default project with this instrument 		
Projects		OK Cancel		
X Administration				
		Welcome	SYST	EWrig

- **1** Create and save an instrument with **Waters ACQUITY** selected as the instrument type. See the Control Panel help for more information.
- 2 In the navigation pane, select the instrument.
- 3 In the Actions toolbar, select **Configure Instrument**.

CP.	Agilent OpenLAB Contr	o Pane	x
Management			•••
🛛 🖉 😣 💽	🗖 🕒 🔁 🔿 🌔	🗴 🗶 😣 🛛 💼 👘	
Edit Delete Refrest	n Edit Select Lock Create on Notifications Printer Shortcuts Inst	nfigure Configure from Close Copy to Clipboard Clipboard	
Instruments and Wate	rs Acquity		
Navigation Avai	ilable modules: C	Configured modules:	*
Construments	Waters Acquity	iiIU/Waters Acquity	
		ch Offline	
	(
			50
			Link
	Options	OK Cancel Help	
Instruments			
Projects			
X Administration			
		Webser 0	(OTEM 1)
		weicome S1	SIEM

4 Move the Waters ACQUITY module from Available modules to Configured modules and double-click to open the module.

The EZChrom Edition configuration screen appears after you open the module.

EZCH	nrom C	onfigu	ration	٢,	24.3	đ	ł	-	×
	Commu Server Systen Pressu Configur	nication /IP Addr n Name: re Units red Mod	ress: WIN-D Waters s: psi	DDC sAc	LDUM663E quitySystem Must match th	e units s	elected in th	ne Waters A	cquity Console.
		#	Module Type		Serial Number				Scan
	•	1	ACQ-BSM	•	C08UPB561M			-	Scall
		2	ACQ-CM	•	E07UPM389M				(
		3	ACQ-FLR	•	C08UPF295M				Add
		4	ACQ-PDA	•	A06UPD868M			-	
		5	ACQ-SM	-	A05UPS526N				Delete
	*	6		-					
							ОК	Cancel	Help

- **5** In the Server/IP Address field, add a name.
 - a For Workstation, use localhost.
 - **b** For a distributed system, make sure you use the computer name for the AIC.
- 6 In the **System Name** field enter a unique system name. For a distributed system this system name has to be the same for client and server.
- 7 In the **Pressure Units** list, make sure you select psi as the pressure unit. See also Chapter "Known Issues"
- 8 Click Scan, all available modules should be displayed under Configured Modules.
- 9 Click OK.

IMPORTANT NOTEIf you do not require 3D scanning, open the Configuration Options
dialog at this point in time to deselect the 3D option.
This avoids that the system is asking for a 3D-Addon license, which is
not required when there will be no 3D scanning.

<u>e</u>	Agilent OpenLAB Control Panel	
Management		0 -
Edit Delete Refresh Edit Select Instruments and Notifications Printer	Image: Configure Shortcuts Configure from Configure from Connection	Copy to Clipboard
Waters Acquity	Configuration	
 Instruments Instruments Options Projects Administration 	Image: Waters Acquity Image: Waters Acquity	ch Offline Help
· ·		
		Welcome SYSTEM.

- **1** Open the Configuratio Options dialog
- 2 Uncheck the PDA option.



Note: Re-visit the Configuration Options dialog again after you (re-) configured the modules

IMPORTANT NOTE After launching an online Waters Acquity System in context of EZChrom Client/Server for the first time please **wait at least one minute** before using the system. This is needed the Client/Server system is getting its configuration information in place.

Configure instrument with your ChemStation Edition

1 Create and save an instrument with **Waters Acquity LC System** selected as the instrument type. See the Control Panel help for more information.

<u>e</u>	Agile	nt Open LAB Control Pane	I X	
Management			(? ,
Edit Delete Refresh Instruments and Locations	dit ations erties	ite Configure uts Instrument ctions		
Navigation «	Edit waters			~
S Instruments	Name:	waters		
	Description:			
	Application:	Chemistation	-	
	Instrument controller:	WIN-DDCLDUM663E	-	
	Instrument type:	Waters Acquity LC System	-	Links
	Contact:			
		OK Cancel		
Instruments				
X Administration				
Your startup license has 32 days remain	ning.	Welcome S'	YSTEM	1.:2

- 2 In the navigation pane, select the instrument.
- 3 In the Actions toolbar, select Configure Instrument.
- 4 Move the Waters ACQUITY icon from Configurable Modules to Selected Modules.

Configure Instrument: Waters (#1) Waters Acquity LC System Use classic drivers Method load on startup: Always ask user to choose an option	Options V 3D spectral evaluation Enable Intelligent Reporting
Configurable Modules Waters Acquity LC System Configurable Modules Generic Modules Agilent LT-ELSD (G4218A)	Selected Modules Configuration
	Additional configuration -

The **ACQUITY** configuration screen appears:

System Name: waters Pressure Units: psi Must match the units selected in the Waters Acquity Console. onfigured Modules # Module Type Serial Number ACQ-BSM C08UPB561M 2 ACQ-CM E07UPM389M 3 ACQ-FLR C08UPF295M Add Delete 			Server/IP Address: localhost				
Pressure Units: psi Must match the units selected in the Waters Acquity Console. Imfigured Modules Module Type Serial Number Scan I ACQ-BSM C08UPB561M Scan 2 ACQ-CM E07UPM389M Add 3 ACQ-FLR C08UPF295M Add 4 ACQ-PDA A06UPD868M Delete	System	Name	:	waters	s		
mrfigured Modules # Module Type Serial Number Scan 1 ACQ-BSM C08UPB561M Scan 2 ACQ-CM E07UPM389M Add 3 ACQ-FLR C08UPF295M Add 4 ACQ-PDA A06UPD868M Delete 5 ACQ-SM A05UPS526N Delete	Pressu	re Units	e:	psi	•	Must match the units selected in the Waters Acquity Con	nsole.
# Module Type Serial Number Scan 1 ACQ-BSM C08UPB561M 2 ACQ-CM E07UPM389M 3 ACQ-FLR C08UPF295M 4 ACQ-PDA A06UPD868M 5 ACQ-SM A05UPS526N							
# Module Type Serial Number Scan 1 ACQ-BSM C08UPB561M Scan 2 ACQ-CM E07UPM389M Add 3 ACQ-FLR C08UPF295M Add 4 ACQ-PDA A06UPD868M Delete 5 ACQ-SM A05UPS526N Delete	onfigure	ed Mod	ules				
1 ACQ-BSM ✓ C08UPB561M 2 ACQ-CM ✓ E07UPM389M 3 ACQ-FLR ✓ C08UPF295M 4 ACQ-PDA ✓ A06UPD868M 5 ACQ-SM ✓ A05UPS526N		#	Module	Туре		Serial Number	
2 ACQ-CM ▼ E07UPM389M 3 ACQ-FLR ▼ C08UPF295M Add 4 ACQ-PDA ▼ A06UPD868M Delete 5 ACQ-SM ▼ A05UPS526N Delete	•	1	ACQ-BS	М	-	C08UPB561M	•
3 ACQ-FLR C08UPF295M Add 4 ACQ-PDA A06UPD868M Delete 5 ACQ-SM A05UPS526N Delete		2	ACQ-CN	1	-	E07UPM389M	
4 ACQ-PDA ▼ A06UPD868M 5 ACQ-SM ▼ A05UPS526N		3	ACQ-FL	R	-	C08UPF295M Add	
5 ACQ-SM A05UPS526N Delete		4	ACQ-PD	A	-	A06UPD868M	_
		5	ACQ-SN	1	-	A05UPS526N Delet	e
* 6	*	6			-		
			~				

- 5 In the Server/IP Address field, add a name or an IP.
 - a For Workstation, use localhost.
 - **b** For a distributed system, make sure you use the **computer name or the IP of the AIC**.
- 6 In the System Name field, type a unique system name.
- 7 In the **Pressure Units** list, make sure you select **psi** as the pressure unit. See also Chapter "Known Issues"
- 8 Click **Scan**, all available modules for the ACQUITY instrument being configured should be displayed under **Configured Modules**.
- 9 Click OK. The Waters ACQUITY icon should now be under Selected Modules.

Known Issues and Limitations

Following is the list of known issues and limitations that users may encounter using the ACQUITY instruments with OpenLAB CDS. These items are known at the time of publication of this guide.



• Starting the 'Waters Acquity Console' standalone outside the Open LAB Application (EZChrom Edition / ChemStation Edition) leads to an undefined state of the instrument.

The 'Waters Acquity Console' must not be started outside of the OpenLAB environment.

A **reboot of your PC is required**, if the standalone 'Waters Acquity Console' outside OpenLAB Application was started.

• Changing an existing instrument configuration by adding/deleting or changing any module a reboot is required . In case of an OpenLAB CDS EZChrom Client/Server system the AIC has to be rebooted as well.

Table 4	List of issues and limitations	known with OpenLAB	CDS and Waters Acqu	ity Driver
---------	--------------------------------	--------------------	---------------------	------------

OpenLAB CDS		
EZChrom Edition	ChemStation Edition	Issue
\checkmark		Baseline Check is not supported
\checkmark		Extend run is not supported
\checkmark	\checkmark	Overlapped injection is not supported
\checkmark	\checkmark	Easy Sequence is not supported
\checkmark	\checkmark	The online plot is not supported. Use the UPLC ACQUITY Console, Detector Node to view online plots
\checkmark	\checkmark	There are a number of localization defects in the driver. This includes translation issues and strings being cutoff.
✓	✓	Only "psi" is supported for pressure unit. Although "bar" can be selected in Acquity Console this will cause problems. Pressure data values in CDS are always in unit "psi"
~		After (re-)configuring the instrument modules the "PDA" option is always marked which requires a 3D-Addon license. If you will not do any 3D scanning you need to remove checkmark from the PDA option in the Configuration Options dialog
	✓	When the user loads an Acquity Method with the "Acquisition Method Viewer" the User Interface might stick because the PDA selection dialog moves behind the CDS UI. This happen only when using the mouse to click OK on the PDA dialog. If the UI already sticks use the "Alt Tab" to bring the PDA Selection Dialog to front again
✓		Preview Run not supported
✓	\checkmark	FLR supports only 2D mode, no 3D mode or Spectral scanning is supported.

Troubleshooting Guide

Before you go ahead, please ensure that

- \checkmark The instrument is connected to the Ethernet cable which is either connected to the AIC or to the workstation PC.
- \checkmark All modules of the instrument are turned on.
- ✓ All modules show a green LED. A red LED is an indication that either a power-cycle is needed or a general issue with this module. To power cycle, turn off the module and wait for about 10 seconds before turning it on again.

In the unlikely event that no modules are detected using 'Waters DHCP Server Configuration.exe', please

- Use C:\Program Files (x86)\Waters Instruments\Waters DHCP Server Configuration.exe in 64bit operating systems for verification.
- Use C:\Program Files\Waters Instruments\Waters DHCP Server Configuration.exe in 32bit operating systems for verification.

Power-cycle all the modules. Check again in the 'Waters DHCP Server Configuration.exe'. If still no modules are shown, proceed with this guide.



You have made the additional DCOM settings and allow permissions on the AIC if you installed this Waters Core Driver on an EZChrom distributed system.

Refer to Table 3 "DCOM Settings and permissions on EZChrom AIC"

No modules detected during SCAN in OpenLAB Configuration

ChemStation Edition distributed / networked / workstation

- ✓ Check if the Ethernet card which is connected to the instrument has the IP 192.168.0.1
- Check if Waters DHCP configuration lists all supported modules

C:\Program Files (x86)\Waters Instruments\Waters DHCP Server Configuration.exe in 64bit operating systems.

C:\Program Files\Waters Instruments\Waters DHCP Server Configuration.exe in 32bit operating systems

In the unlikely case that there are modules present in 'Waters DHCP Server Configuration.exe' but not in OpenLAB, delete all detected modules in 'Waters DHCP Server Configuration.exe'. Select from the menu of the 'Waters DHCP Server Configuration.exe' **Server-Configuration Wizard** and choose the Ethernet card with the IP from above and click **Next**, again Next and then Finish. Follow the online instructions.

The above mentioned action is only required for installation troubleshooting purposes, in case the IP addresses got mixed up or lost during the upgrade from Waters Core DP3 to Waters Core DP4. With the Waters Core DP4 the DHCP assignment of IP address changed and during the installation each documented step to reboot the system and/or instrument is required to avoid the IP address mix up.

EZChrom Edition Client

- ✓ Check that the IP address listed in the OpenLAB Configuration window, is the IP address the AIC is using to communicate with the company network.
- NOTE The Waters DHCP Configuration won't list the modules, if running from the EZChrom Client.

EZChrom Edition AIC

- ✓ Check if the Ethernet card which is connected to the instrument has the IP 192.168.0.1
- ✓ Check if waters DHCP configuration lists all supported modules

C:\Program Files (x86)\Waters Instruments\Waters DHCP Server Configuration.exe in 64bit operating systems.

C:\Program Files\Waters Instruments\Waters DHCP Server Configuration.exe in 32bit operating systems

If there are modules present in 'Waters DHCP Server Configuration.exe' but not in OpenLAB, delete all detected modules in 'Waters DHCP Server Configuration.exe'. Select from the menu of the 'Waters DHCP Server Configuration.exe' **Server-Configuration Wizard** and choose the Ethernet card with the IP from above and click **Next**, again **Next** and then **Finish**. Follow the online instructions.

If initial start from EZChrom Edition client does not work

StatusUI empty from EZChrom Edition client

Solution:

- ✓ You have made the additional DCOM settings and allow permissions on the AIC if you installed this Waters Core Driver on an EZChrom distributed system.
 Before to Toble 2 "DCOM Settings and permissions on EZChrom AIC"
 - Refer to Table 3 "DCOM Settings and permissions on EZChrom AIC" $\label{eq:alpha}$

As the server requires to load several services and process, the server readiness may be slower than the Client readiness. The following start up procedure allows the server to start its processes and services: **1** Start the instrument from the client and wait about a minute. Try to access the StatusUI from the client. If the StatusUI does not load up with all elements, close the client and wait a minute. Repeat this step at most five times.

If after these attempts the StatusUI is still unavailable or incomplete Status apply Step b).

2 Re-start both the EZChrom AIC and the EZChrom Client.

Firmware Update of Waters Acquity Modules

a Automated Firmware update failed at Step 4 "Install the Waters Core Driver"

or -

b Manual update of Firmware is required

Firmware Update:

- ✓ Check if the Ethernet card which is connected to the instrument has the IP 192.168.0.1
- ✓ Turn **on** or **power cycle** all modules connected to the dedicated LAN card
- ✓ Check if waters DHCP configuration lists all supported modules

C:\Program Files (x86)\Waters Instruments\Waters DHCP Server Configuration.exe in 64bit operating systems.

C:\Program Files\Waters Instruments\Waters DHCP Server Configuration.exe in 32bit operating systems

Start the Autoloader application

C:\Program Files (x86)\Waters Instruments\Firmware\Autoloader.exe in 64bit operating systems.

C:\Program Files\Waters Instruments\ Firmware\Autoloader.exe in 32bit operating systems

The Autoloader window will find and show every module in the Waters ACQUITY instrument.

Make sure, that the firmware revision of all listed modules is up-to-date. If necessary double-click the red-highlighted modules in the autoloader window and start the updating process. Follow the on-screen instructions. Wait until it is finished and then close the window.

Power cycle all modules connected to the dedicated LAN card.

In This Book

This installation guide is designed to help users install the drivers for the Waters ACQUITY and ACQUITY H-Class instruments for use with the Agilent OpenLAB Chromatography Data System (CDS) EZChrom and ChemStation Editions.

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