



Agilent Lab Advisor

User Manual

Notices

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1

Lab Advisor Overview

This chapter describes the two versions of Lab Advisor: Lab Advisor Basic and Lab Advisor Advanced.

With its advanced diagnostic and maintenance capabilities, Agilent Lab Advisor helps you to keep your Agilent analytical instruments in top condition and thereby achieve high quality chromatographic results. Agilent Lab Advisor is an application-independent tool: it can support Agilent analytical instrumentation regardless of whether you are using Agilent or non-Agilent software to control the instruments. With add-ons, additional functionality can be added, for example, diagnostics for Agilent mass spectrometers. The Agilent Lab Advisor is available in two flavors: Lab Advisor Basic and Lab Advisor Advanced.

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Lab Advisor Advanced 6

Lab Advisor Basic

Lab Advisor Basic provides state-of-the-art tests, tools and calibrations to support you in the daily operation, maintenance and basic troubleshooting tasks. The Basic version comes with a full set of diagnostic capabilities and full access to the Early Maintenance Feedback counters, allowing you to perform troubleshooting and calibrations efficiently and with little effort.

Lab Advisor Advanced

Lab Advisor Advanced has been designed to support users who need the highest quality data and the utmost reliability from the Agilent LC and CE instrumentation. This is provided by additional functionality that includes tools and features that allow you to carry out sophisticated diagnostic, usage-based maintenance, and generate traceable results, including features such as user log-on with password, traceable result files, advanced EMF functionality and data sharing facilities.



2 Installation

This chapter contains instructions for installing Lab Advisor.

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Prerequisites

Agilent Lab Advisor can run on the following Microsoft Windows or Windows Server operating systems with the appropriate Microsoft .NET Framework installed.

Table 1: Supported Software List

Element	Revision
Windows	10 11
Windows Server	2016 2019 2022
.NET Framework	4.7.2 or later

For optimum performance of your Agilent Lab Advisor software, the following minimum requirements should be fulfilled. The minimum supported configuration is based on the installation on a Netbook, but for larger installations, or for higher performance, the recommended configuration should be used.

Table 2: PC Hardware Configurations

	Minimum (Netbook) Configuration	Recommended Configuration
Processor	Intel Atom processor	Pentium D or higher, Intel Dual-Core 3.4 GHz or higher
RAM	2.0 GB or more	≥ 2 GB
Hard disc free space	1 GB	2 GB or more
Video	1024 × 600 resolution	1280 × 1024 resolution
Removable media	(external) CD-Rom drive	DVD drive
Mouse	MS Windows compatible pointing device	MS Windows compatible pointing device
LAN	10/100baseT	10/100baseT

Installation
Prerequisites

	Minimum (Netbook) Configuration	Recommended Configuration
Operating Systems	Windows 10	Windows 11 Windows Server 2022 for server installations
Printer	all printers supported by the operating system in use	all printers supported by the operating system in use

Deployment Modes

Lab Advisor can be deployed in different modes:

C:\ProgramData\Agilent Lab Advisor\AgilentLabAdvisorData\...¹

Table 3: Lab Advisor Deployment Modes

Mode	Installation	Start	Data location
Standard	Installed on the local hard drive using setup.exe , see Hard drive installation on page 11.	Run from desktop icon or Windows Start menu.	C:\ProgramData\Agilent Lab Advisor\AgilentLabAdvisorData\... ¹
Server	Installed on Windows Server using setup.exe and published as a shareable application, see the <i>Agilent Advisor IT Administrator's Guide</i> .	Run using RDP link at clients' desktops.	C:\ProgramData\Agilent Lab Advisor\AgilentLabAdvisorData-[TerminalHostName]\... ¹
Instant	No installation required.	Run AgilInstrDiag.exe from the installation CD, see Running Lab Advisor from the CD-ROM on page 17	Standard: C:\ProgramData\Agilent Lab Advisor\AgilentLabAdvisorData\... ¹

¹ The ProgramData folder is hidden by default.

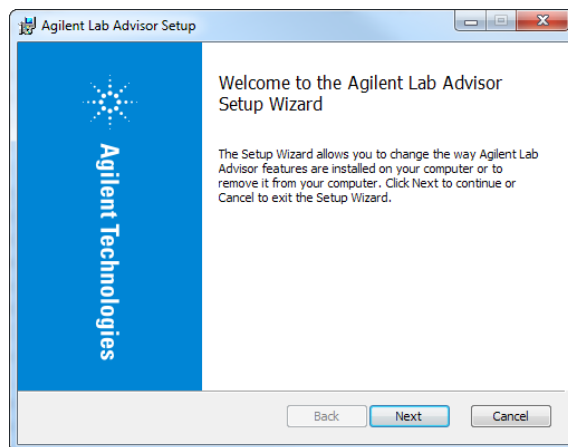
Hard drive installation

Hard drive installation

- 1 Double-click the **Setup** icon to start the installation.



The Lab advisor setup Wizard opens.



NOTE

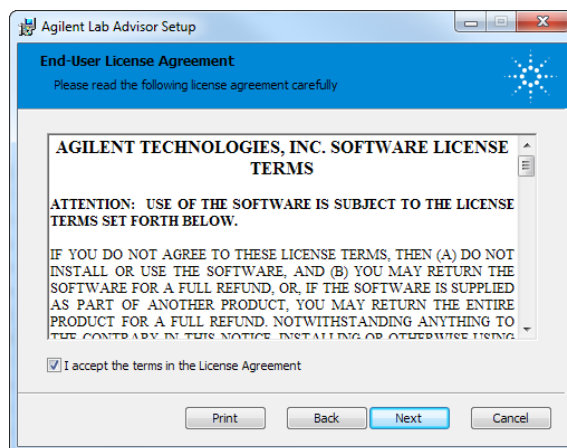
The Lab Advisor Setup Wizard selects the Lab Advisor language automatically depending on the language setting of your operating system. Available languages are English, Chinese and Japanese. English is used if no matching language is available.

- 2 Click **Next** to start the installation.

Installation

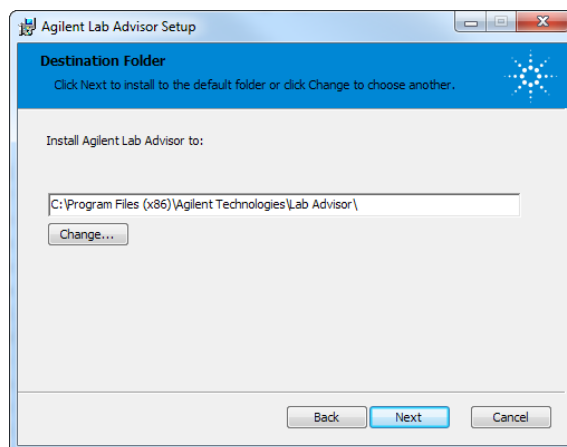
Hard drive installation

The License Agreement is displayed.



- 3 Select to accept the terms of the license and click **Next**.

The destination folder screen opens.

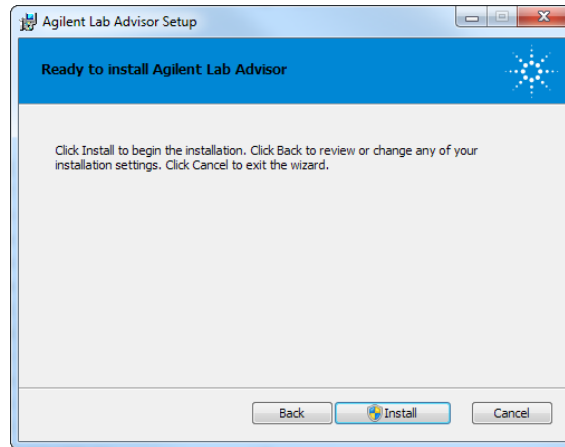


- 4 If you want to change the default installation location, click **Change** to select a new location; otherwise, click **Next**.

Installation

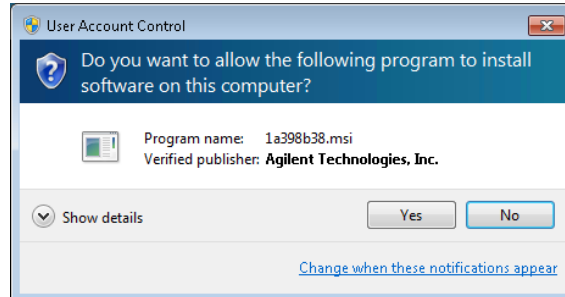
Hard drive installation

The last page of the installation wizard is displayed.



- 5 Click **Install** to begin the installation process.

Windows opens a User Account Control window asking for permission to install software.



NOTE

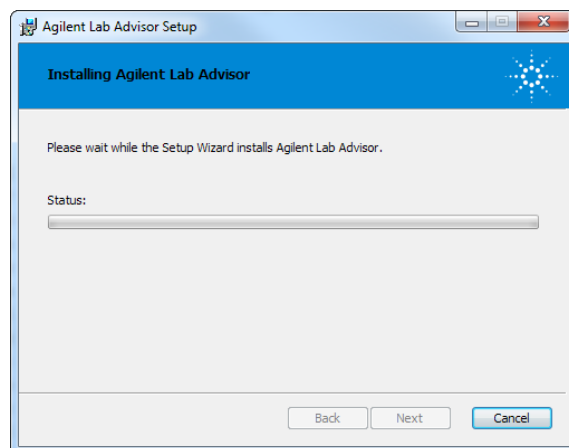
Existing data from previous installations of Lab Advisor B.02.xx and Lab Advisor 2.xx is migrated.

- 6 Click **Yes** to continue the installation.

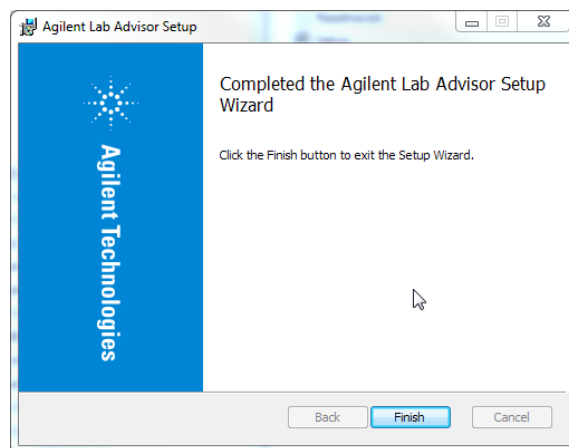
Installation

Hard drive installation

An installation status bar indicates the progress of the installation.



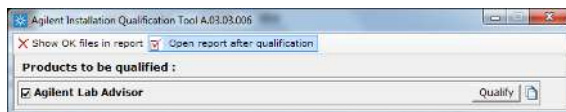
The successful end of the installation process is indicated by the following screen:



- 7 Click **Finish** to leave the Setup Wizard.

Installation Qualification

- 1 Launch the Agilent Installation Qualification Tool. Go to Windows Start Menu > All Programs > Agilent Lab Advisor > Installation Qualification



- 2 To start the Installation qualification, click **Qualify**.

The Installation Qualification Report opens in a browser window and can be printed. To access the report at a later time, go to \Program Files\ Agilent Technologies\Lab Advisor\IQTool\IQProducts\Agilent Lab Advisor LC & CE\ Reports.

Installation Qualification Report					
Date:	24, Jun 2015	Time:	11:49:16 [UTC +02:00]	Host Name:	ALVIS
Windows User Name:	WinUser	Base Revision Number:	B.02.07.136	Product Name:	Agilent Lab Advisor
Install Type:	N/A				
Base Reference File Name : iqtfiler32.xml					
Summary					
Overall Evaluation of Installation Check: : PASS					
File Report Summary					
<ul style="list-style-type: none"> • No missing files or invalid files found • No system file differences found 					
Files Registration Report Summary					
<ul style="list-style-type: none"> • No Registerable Files found for Qualification 					
Registry Report Summary					
<ul style="list-style-type: none"> • No registry entries found for Qualification. 					

Figure 1: Installation Qualification Report

Add a License Key

Additional Lab Advisor functionality can be unlocked by entering the respective license keys.

NOTE

License keys are automatically shared with any Lab Advisor installations using [Lab Advisor Data Sharing](#) on page 70.

- 1 Start the Lab Advisor software and navigate to **Configuration > Licenses**.

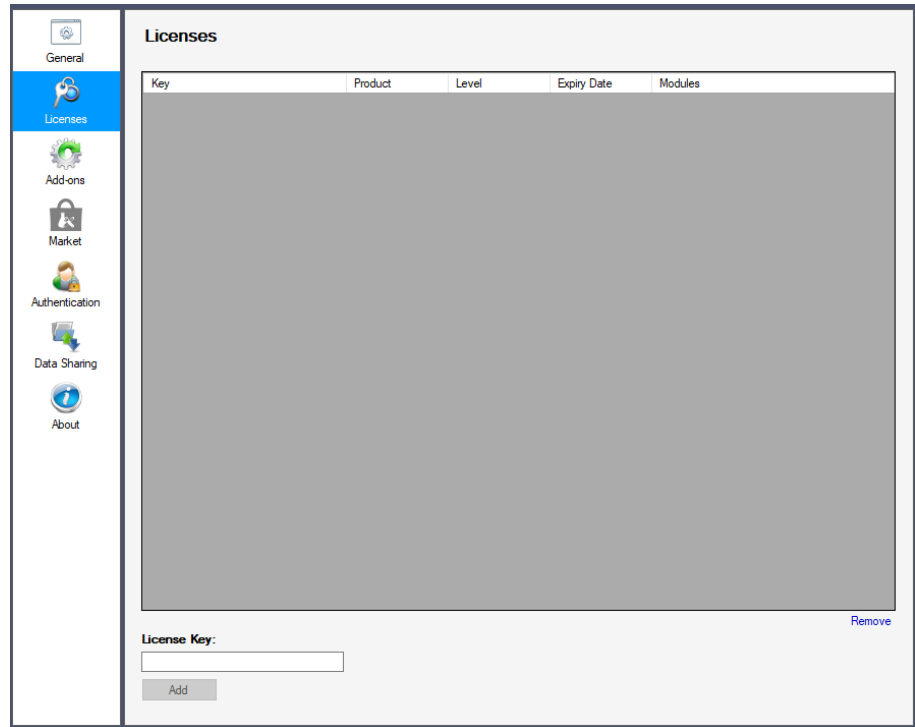


Figure 2: Licenses in Configuration

- 2 Type your license key into the **License Key** field and validate it by clicking **Add**. Repeat the process for multiple license keys.

Running Lab Advisor from the CD-ROM

When you run Lab Advisor from the CD-ROM, no program files are copied to the local hard drive. However, any data that you generate will be saved in a folder **C:\ProgramData\Agilent Lab Advisor\AgilentLabAdvisorData** on the local hard drive.

- 1 Insert the Lab Advisor installation CD-ROM into the drive.
- 2 Double-click the **Instant Diagnostic** item in the root directory of the CD-ROM.

Installing Add-ons

Add-ons are installed from the **Configuration** screen, using a Lab Advisor Extension file with the extension .LAX.

NOTE

You need Administrator rights in order to install Add-ons.

- 1 In the Global Tasks section of the Navigation Panel, click **Configuration**.
The **Configuration** screen is displayed.
- 2 Click **Add-ons** to navigate to the **Configuration - Add-ons** screen.

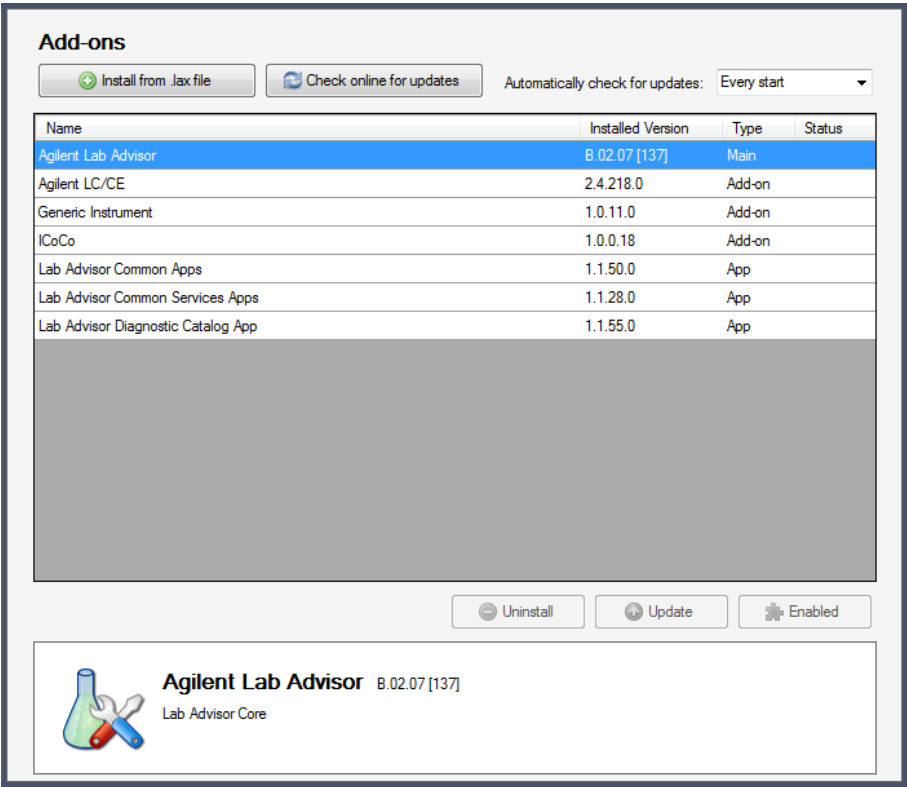


Figure 3: Add-ons in Configuration

Installation

Installing Add-ons

The **Configuration - Add-ons** screen contains a table listing all the Add-ons that are already installed.

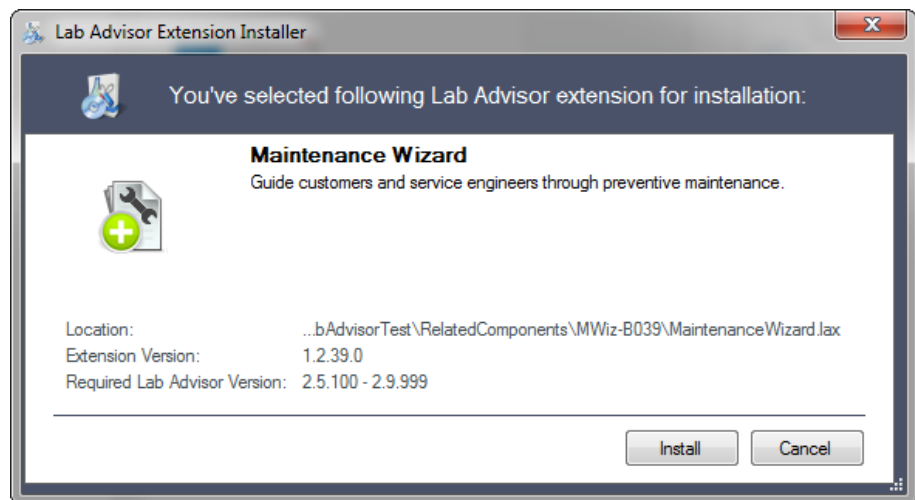
3 Click **Install from .lax file**.

A file selection dialog box is displayed to allow you to select the App or Add-on to install.

4 Navigate to the folder containing the Add-on files, select the .lax file and click **Open** to install the Add-on.

5 Click **Yes** when the request to shut down Lab Advisor appears.

Lab Advisor shuts down and the Add-on installation is started.



When the installation is finished, the newly installed Add-on is included in the table in the **Configuration - Add-ons** screen.

3 Using Lab Advisor

This chapter describes the Lab Advisor user interface and provides details about the available features.

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Navigation

The Lab Advisor User Interface is divided into six main areas. The content of these areas changes depending on the screen selected in the Agilent Lab Advisor software.

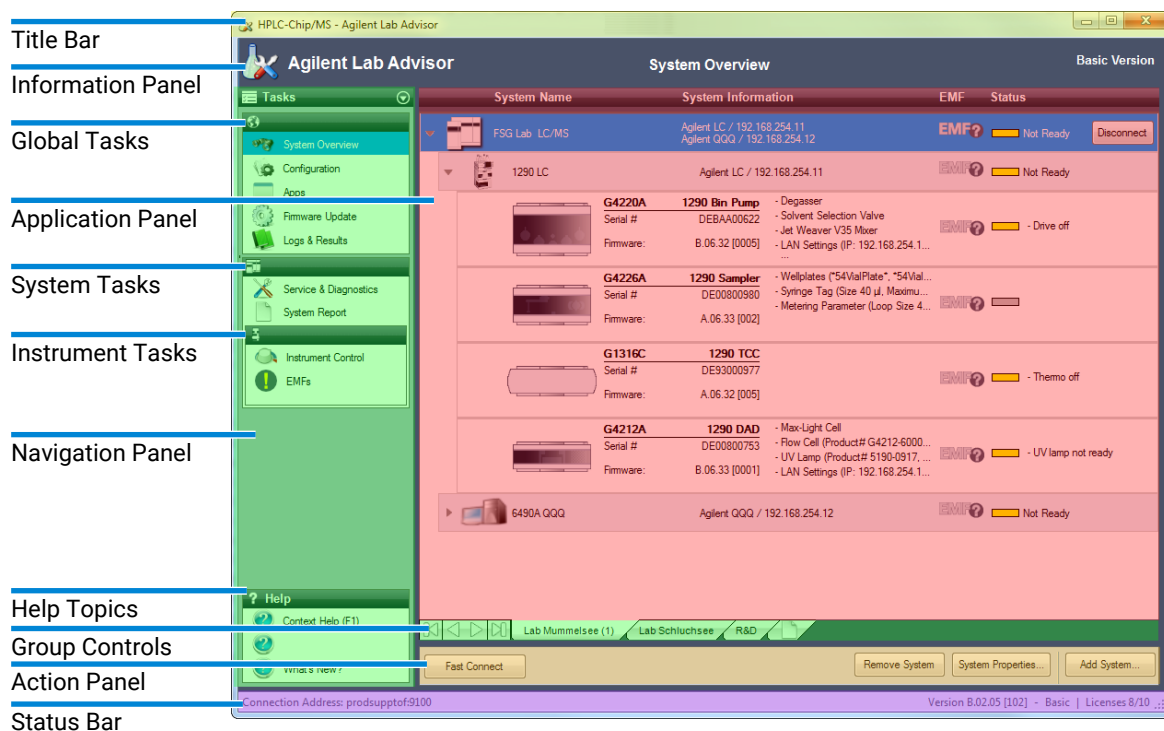


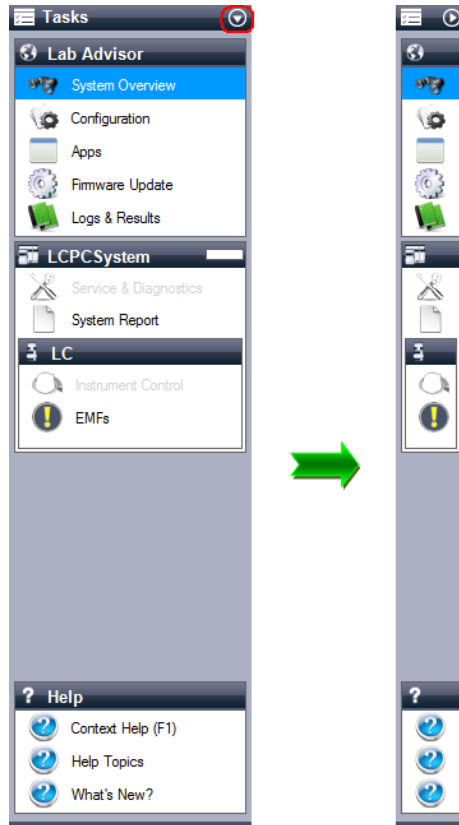
Figure 4: Lab Advisor User Interface

Title Bar



The Title Bar shows which of the configured systems in the System Overview is currently selected. It also hosts the buttons for maximizing, minimizing and closing the Agilent Lab Advisor application.

Navigation Panel



The primary navigation between the different screens of the Lab Advisor software is done in the Navigation Panel. The Navigation Panel consists of four areas:

- The Global Tasks lists system-independent screens that access information or configurations regardless of the configured systems and their current state.
- The System Tasks are System-specific and change with the selected system. The name of the selected system is displayed in the header of the System Tasks and in the Title Bar.
- The Instrument Tasks are Instrument-specific and change with the selected instrument. The name of the instrument is displayed in the header of the Instrument Tasks.

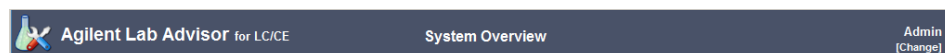
Using Lab Advisor

Navigation

- At the bottom of the Navigation Panel, the Help topics provide information about the software and about the individual screens. Context-sensitive help topics can also be accessed at any time by clicking **F1**.

The Navigation Panel can be minimized by clicking the minimize icon in the top Task bar.

Information Panel

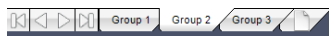


The Information Panel contains information about the currently selected screen and the Agilent Lab Advisor software version. If the Traceability feature is in use, the Information Panel also includes information about the current logged-in user.

Application Panel

This is the primary area where the different screens selected in the Navigation Panel of the Agilent Lab Advisor software are displayed. Refer to the individual applications for more detailed information.

Group Controls



If system grouping has been activated in software configuration, these controls allow you to switch between system groups, and to add a new system group or delete an existing group.

Action Panel



Additional buttons or actions that are applicable to the selected screen may be displayed in the Action Panel. Such controls are applicable to the entire selected screen; buttons or actions that are applicable to individual items within the screen are displayed in the screen itself.

Status Bar



The left side of the Status Bar contains information about the connection used; details about the Agilent Lab Advisor revision, license level and license usage are shown on the right side.

System Overview

The System Overview screen gives a fast overview of the state of all configured and connected systems. The System Overview is also the main selection screen for the System Tasks.

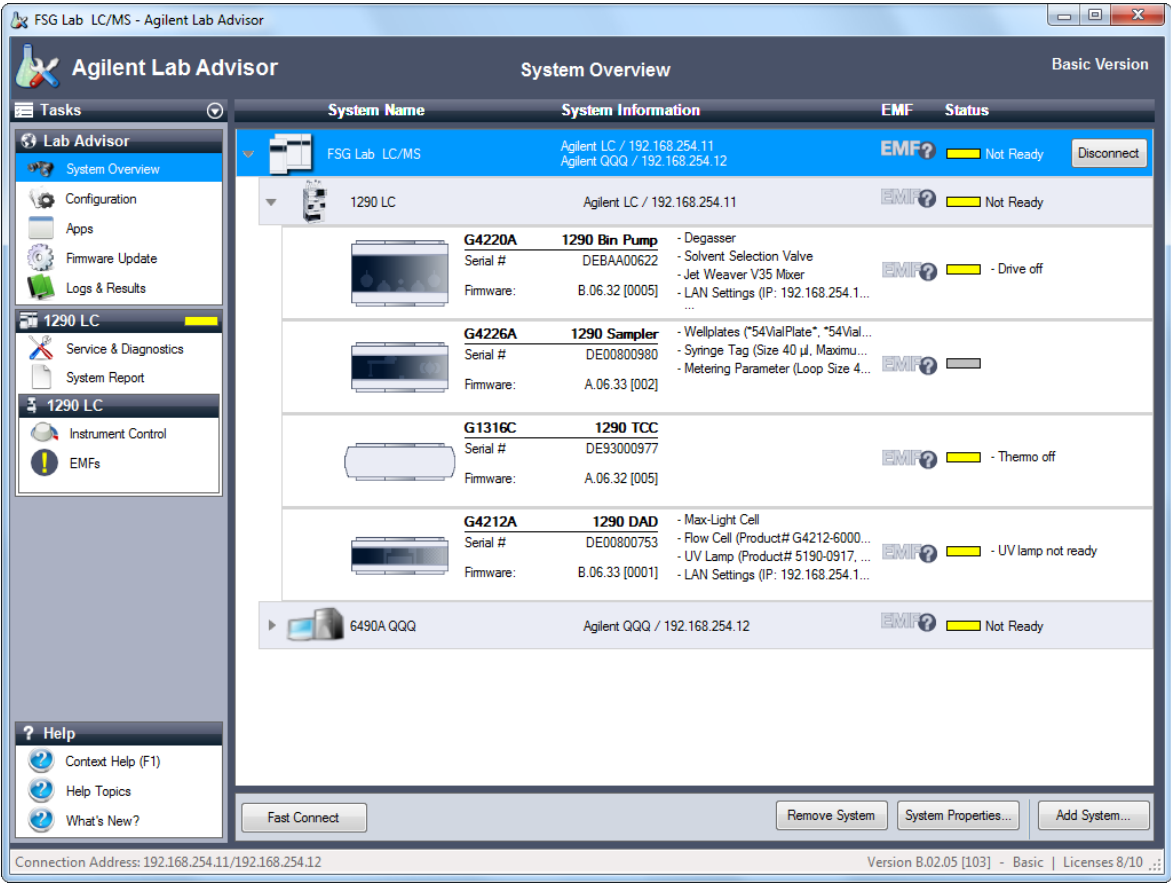


Figure 5: System Overview

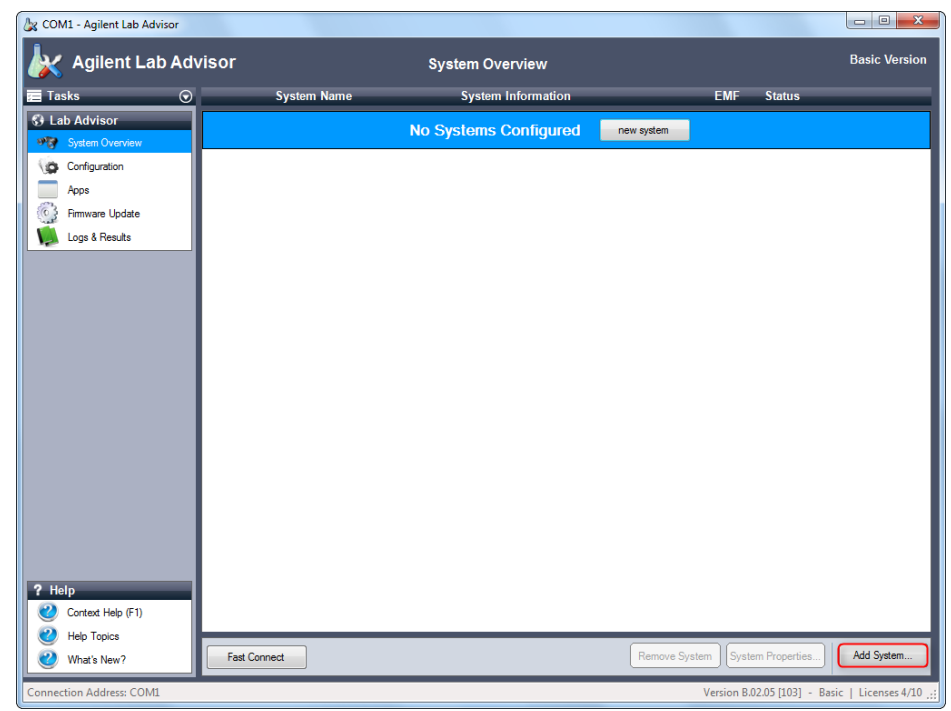
System hierarchy

Lab Advisor recognizes three levels of hierarchy:

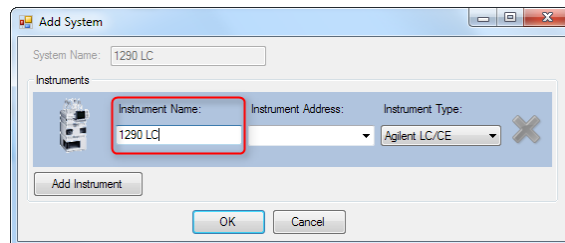
System	The System is the highest level. A system consists of one or more Instruments, each with its own communication address, for example, an LC system with ELSD detector or an LC/MS system. The System icon is always the same.
Instrument	An Instrument is characterized by having an individual connection address to Lab Advisor. Instruments may comprise multiple Devices (for example, a modular LC system), but the Devices all communicate with Lab Advisor through a single connection address. Each Instrument has its own icon.
Device	The Devices (sometimes referred to elsewhere as Modules) are the constituent parts of an Instrument, for example the pump, sampler, and detector in a modular LC system. Each Device type has its own icon.

Adding a new system

- 1 In the Action Panel of the **System Overview**, click **Add System**.



The **Add System** dialog box is displayed.

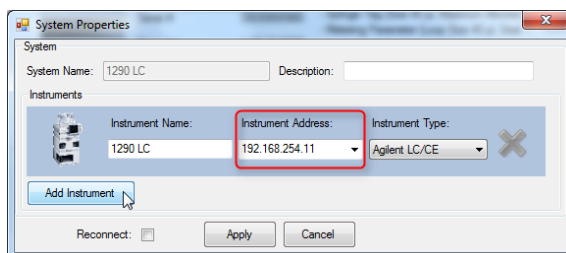


- 2 Enter a name in the **Instrument Name** field.

NOTE

If your system comprises just one instrument, the **Instrument Name** is copied to the **System Name** field.

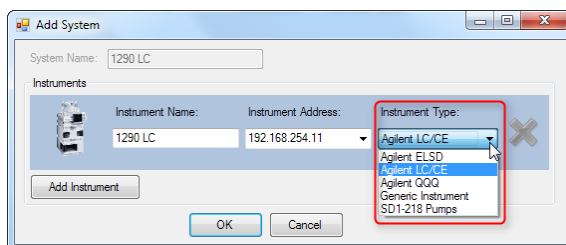
- 3 Enter the connection details in the **Instrument Address** field.



NOTE

The **Instrument Address** can be an IP address, the host name or, if you are connecting using a serial cable, the COM port.

- 4 Click the **Instrument Type** down-arrow and select the type of instrument you are adding from the list. The default setting is **Agilent LC/CE**. Additional instrument types become available when the respective add-ons are installed.



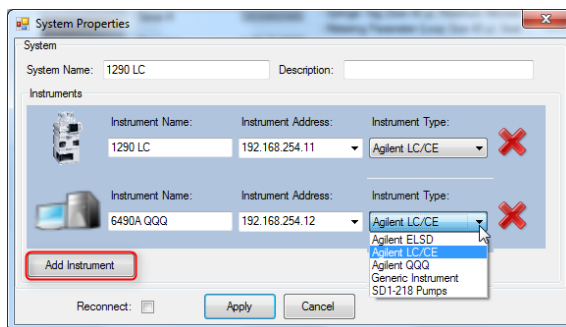
NOTE

By default, the **Instrument Type** drop-down list contains only the entry **Agilent LC/CE**. Additional instrument types can be added by installing the respective add-ons (see Installing Add-ons).

Using Lab Advisor

System Overview

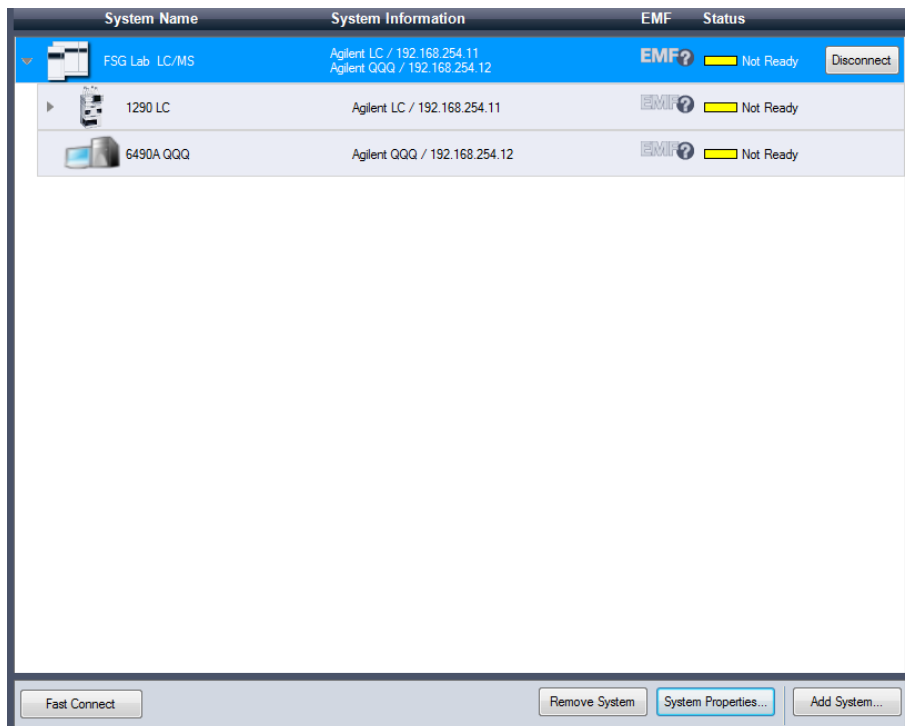
- If your system comprises more than one instrument, click **Add Instrument** and complete the details as above.



NOTE

As soon as you add a second instrument, the **System Name** field is activated to allow you to edit the system name.

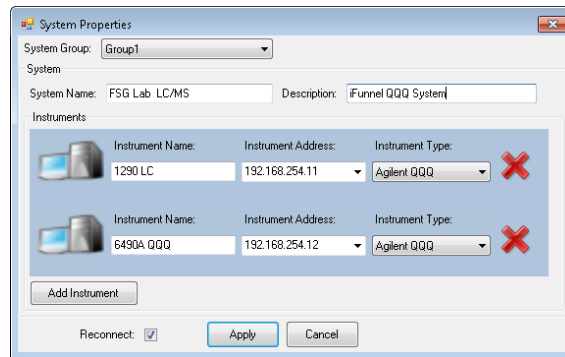
- Click **OK** to finish adding the system and close the **Add System** dialog box. The system becomes visible in the **System Overview**, and Lab Advisor tries to connect to it.



Changing system properties

You can change the name or connection address of an existing system, add additional information or activate the automatic **Reconnect** feature for the system.

- 1 Click on the system in the **System Overview** screen to select it.
- 2 Click **System Properties** in the Action Panel.
Or right-click on the system and select **Properties** from the context menu.
The **System Properties** dialog box is displayed.



Note that the **System Group** field is present only when the **Activate Grouping** check box in the **Configuration - Software** screen is marked.

- 3 Add or modify any of the parameters in the **System Properties** dialog box.

NOTE

When you mark the Reconnect check box, Agilent Lab Advisor automatically tries to connect to the system whenever the application is launched. This feature can be activated for all systems configured in the **System Overview** simultaneously.

- 4 Click **Apply** to register the changes and close the **System Properties** dialog box.

Removing a system

- 1 Click on the system in the **System Overview** screen to select it.
- 2 Click **Remove System** in the Action Panel.

The system is removed from the **System Overview**.


NOTE

The data collected for the system will still be available in the **Logs and Results** application, but will be listed as unassigned systems. Systems that have been removed from the **System Overview** are still counted toward the module limit of the installed license. To permanently delete a module, see [Permanently deleting a Hardware module](#) on page 37.

Adding a new system group

NOTE

The system group controls are available only when the **Activate Grouping** check box in the **Configuration - Software** screen is marked.

- 1 Click  at the right of the group controls.
A new system group tab is added with a default name.
- 2 Right-click on the new tab, select **Rename** from the context menu and overwrite the default name with a new name.
Or double-click on the new tab and overwrite the default name with a new name.
- 3 Click **Add System** to display the **Add System** dialog box, which allows you add a system into the new system group.

Deleting a system group

NOTE

You cannot delete a system group that contains systems. Before deleting a group, move the systems into another group (see [Moving systems between groups](#) on page 33).


- 1 Right-click on the tab of the system group that you want to delete.
- 2 Select **Delete** from the context menu.
If the system group is empty, it is deleted; if the group contains systems, a message is displayed.

Moving systems between groups

- 1 In the System Overview, select the system that you want to move and click **System Properties**.
Or right-click the system that you want to move and select **Properties** from the context menu.
The **System Properties** dialog box is displayed.
- 2 Click the **System Group** down-arrow and select the target group that you want to move the system to.
- 3 Click **Apply**.
The system is moved from the existing group to the new group and the **System Properties** dialog box is closed.

Copying Device Details to the Clipboard

Sometimes, it can be helpful to have the details presented in the **System Information** section of a device available for copying and pasting into other applications.

- 1 Click on the system in the **System Overview** screen to select it.
- 2 If the system modules are not listed, click  to display them.
- 3 Right-click on the module whose details you want to copy and select **Copy details to Clipboard** from the context menu.

The device information is copied to the clipboard, and can be pasted into another application such as Notepad, Wordpad or a Microsoft Office application.

Fast Connect

If you are using mobile laptop computers for servicing systems, a fast connection can be established using a serial cable (RS232) or a USB cable.

All modules with a USB mini-B port can be connected using a USB cable (part number 5188-8050).

For computers without an RS232 port, an RS232-to-USB adapter cable is available (part number 8121-1013).

- 1 Connect the serial cable between the system and the PC (using the RS232-to-USB adapter, p/n 8121-1013, if necessary). The serial cable should be connected to the module that is providing the most data, usually the detector.
- 2 Click **Fast Connect** on the Action Panel.

Lab Advisor searches all available COM and USB ports for installed systems and adds them automatically to the **System Overview** screen.

NOTE

This feature is especially helpful for connecting systems with no LAN access, because it provides easy access to data such as LAN card configuration, MAC address and IP address without having to reconfigure the Laptop internal IP address or set up a BootP server.

Configuration

Application-wide settings, information and tools are accessible from the **Configuration** screen.

Configuring the General Parameters

The **General** configuration specifies the **Path** to the data generated by the Lab Advisor software. This is a non-configurable path, and is dependent on the operating system used and the type of installation (USB stick or hard drive).

Backup

Backup of Lab Advisor data is provided by export and import functions, where the exported .ZIP file is stored in a safe location. Only the following information can be exported by the function:

- instrument configuration
- instrument modules
- test results

Other information (including audit trail, user settings and passwords) cannot be exported using the function.

This feature can also be used to distribute configured systems and their corresponding data, by exporting data from one Lab Advisor installation and importing it into other installations.

Tracing

If unexpected behavior is observed from the Lab Advisor software, you can click **Export Trace** to start a wizard that allows you to select important and relevant information to help the Agilent Technologies technicians locate the problem. The trace file is implemented as a compressed (zip) file that contains all the selected information; you can specify the name and location of the trace file.

Language

The Lab Advisor software supports English, Chinese and Japanese languages. The language is usually selected during installation of the software. However, there is a possibility to change the language later by selecting the appropriate language in the **Software** configuration screen. After the language has been changed, the software needs to be restarted for the new settings to take effect.

System Groups

Lab Advisor supports the grouping of systems, for example, by laboratory. Up to 25 systems can be assembled into a group; each system can contain up to 50 devices. An unlimited number of groups can be defined.

The grouping of systems is switched on by marking the **Activate Grouping** check box. When the check box is marked, the group controls (see [Group Controls](#) on page 24) are appended to the application panel in the System Overview and the Review Client.

Licenses

The licensing scheme of Lab Advisor B.02.xx has changed compared to previous versions. The unique combinations of *Type* and *Serial number* for each configured device are counted and tracked in the license module of the software. For each configured device, a license is deducted from the total number of eligible devices; the license status can be tracked in the Status Bar.

Lab Advisor licenses acquired for previous versions of Lab Advisor and Lab Monitor and Diagnostic software are still eligible for Lab Advisor B.02.xx and are transformed according to [Table 4](#) on page 36.

Table 4: Lab Advisor Licenses

Product Number	Description	HW Modules	Replaces
M8550A	Agilent Lab Advisor Advanced	20	G4800AA, G4809AA
M8551A	5 add-on HW modules*	5	G4801AA
M8552A	25 add-on HW modules*	25	G4802AA

Product Number	Description	HW Modules	Replaces
M8553A	50 add-on HW modules*	50	G4803AA
M8554A	100 add-on HW modules*	100	New
M8555A	Agilent Lab Advisor Basic	20	Agilent Instrument Utilities LC/CE
M8556A	Agilent Lab Advisor Advanced 1-year license per user	Unlimited	New

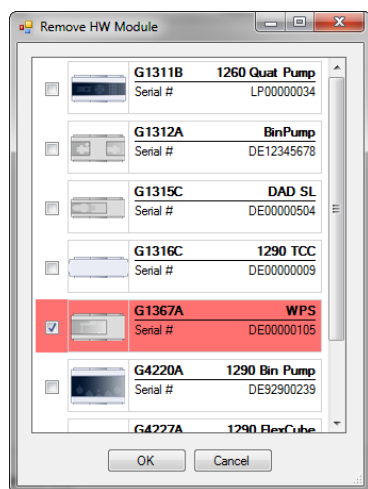
* Requires M8550A installed

Any combination of the advanced license (M8550A) and its add-on license packs is possible, and it is also possible to install a Product Number multiple times. Each unique license number adds to the number of modules supported.

The situation is quite different with the 1-year Advanced License M8556A. Here, you have only one Unlimited license per user. It is not recommended to mix the 1-year Advanced License M8556A with other license types, especially when using Data Sharing.

Permanently deleting a hardware module

If a hardware module is retired or removed from a system, it can be permanently deleted from the license count in the Agilent Lab Advisor installation by clicking **Permanently delete HW module** in the **Licenses** tab in the **Configuration** screen. **Permanently delete HW module** is active only if all systems are disconnected in the **System Overview** screen. The **Remove HW Module** window that opens lists all modules contributing to the license limit; selecting the appropriate module and pressing **OK** permanently deletes the selected device.

**NOTE**

When a device is permanently deleted, all data belonging to the device is also permanently deleted.

Add-ons

The **Configuration - Add-ons** screen allows you to manage the Lab Advisor software and related additional products. For information on installing Add-ons, see [Installing Add-ons](#) on page 18.

The currently installed Add-ons are listed in a table. The table provides information on the version, type and current status of the Add-on. You can get more information on an Add-on by selecting it in the table; the panel below the table gives an additional description of the selected Add-on.

The controls above the table allow you to select how and when to update the installed Add-ons. You can select to automatically check for updates at regular intervals, or spontaneously check for updates by clicking **Check online for updates**.

The controls below the table allow you to manage the Add-ons individually. You can uninstall, update or disable/enable a selected Add-on. If you change the enabled/disabled status of an Add-on, you must restart Lab Advisor to activate the change. The Add-on's status is shown in the table. Some Add-ons are

essential to the operation of Lab Advisor; in these cases, **Uninstall** and **Disable** are disabled. **Update** is enabled only when an up date is available for the selected Add-on.

Market

The **Market** is a mechanism that provides access to the Agilent Technologies web site to allow you to download additional products related to Lab Advisor.

The products available for download are separated into channels, which you can select from the drop-down list at the top right of the **Market** screen. For example, the **Software** channel gives you access to additional Apps and Add-ons that can extend the usability of your Lab Advisor installation; the **Documents** channel allows you to download the current revisions of Lab Advisor documentation.

Authentication

The Advanced version of Lab Advisor provides two independent authentication providers:

- the **Legacy Lab Advisor Authentication Provider** is the equivalent of the **Traceability** authentication function of Lab advisor revisions prior to B.02.11.
- the **NT Authentication Provider** uses the authentication components of the Windows operating system.

When you enable authentication, you can select one or both providers to ensure that only authorized users have access to Lab Advisor functions and data.

NOTE

Before you enable Authentication, you must have set up and enabled at least one authentication provider with at least one user with the Administrator role. See the Lab Advisor online help for details.

Legacy Lab Advisor Authentication Provider

Users of the Legacy Lab Advisor Authentication Provider are set up during configuration using the **Add User** dialog box and are assigned one or more [Lab Advisor Roles](#) on page 40. During configuration, the administrator can specify that the user is required to log in with a password; this is equivalent to **Full Traceability** in Lab Advisor B.02.10 and earlier.

During configuration, the administrator decides whether to specify a password for each user or to allow users to specify their own passwords when they first log in to Lab Advisor.

All configured users and their details are shown in a table in the **Configuration** screen. The **Active** status of each user is denoted by a check box. This status is changed in the **Add User** dialog box.

NT Authentication Provider

Users of the NT Authentication Provider are those that are already configured as Windows users. During configuration, the administrator associates the **Roles** that are set up in Lab Advisor (see [Lab Advisor Roles](#) on page 40 with the **Groups** that are set up in the Windows networking environment. The administrator also decides whether or not users are allowed to edit their Lab Advisor profiles.

Lab Advisor Roles

A Lab Advisor role is characterized by a specified set of permissions. Lab Advisor roles are of two types:

- **Built-in** roles are provided by Agilent; the permissions can be viewed, but they cannot be edited or deleted. They include the **Administrator** role and the **Standard User** role.
- **User-defined** roles are set up by the administrator. User-defined roles have permissions that are specified by the administrator during configuration. They can be viewed and edited by users with Administrator permissions.

NOTE

The Administrator role must be assigned to at least one user in order to enable Authentication.

The **Roles** table in the **Authentication** screen shows the name of each role and its type.

Data Sharing

The **Data Sharing** feature of the Advanced version of Lab Advisor allows multiple Lab Advisor installations to upload and synchronize the collected instrument information and data to an upload folder.

For full details of **Data Sharing**, see [Lab Advisor Data Sharing](#) on page 70.

Apps

Apps are small applications designed to help you perform specific non-system-related tasks.

Audit Log

The **Audit Log** feature of the Advanced version of Lab Advisor lists all actions that generate an entry in the Audit Log in a four-column table. The table contains the following information:

- The date and time of generation of the audit log entry.
- The name of the host computer from which the entry was generated.
- The display name of the user that was logged on when the entry was generated.
- The message that was entered into the log.

New entries are added at the top of the list, but you can reverse the order of the entries by clicking in the header line of the table.

The controls **Host**, **Display Name** and **Facility** allow you to filter the entries that are displayed. Click **Refresh** to update the list of entries.

Data Sharing

The **Data Sharing** feature of the Advanced version of Lab Advisor allows multiple Lab Advisor installations to upload and synchronize the collected instrument information and data to an upload folder.

For full details of **Data Sharing**, see [Lab Advisor Data Sharing](#) on page 70.

Lab Inventory Spreadsheet

The **Lab Inventory Spreadsheet** add-on is available with Lab Advisor Advanced, and can be retrieved through the Market. It tabulates all devices with connections (previous or current) to Lab Advisor.

Laboratory Inventory

☐ not System assigned Devices

☐ show Device Details

☐ show Logs and Results

☐ ... as one Cell

Export to MS Excel File...

60 rows for 21 systems with 22 instruments and 60 devices

Initial Order	System Group Name	System Name	System Status Since	Instrument Name	Instrument Address	Instrument Type	Instrument Description	Instrument Status Since	Duplicate Device Data	Device Class	Device Name	Device Type	Serial Number	Firmware Revision	
10-1-1	QC Lab	LC-Q-A01	2017-04...	LC-Q-A01	localhost	Compact...	Compac...	2017-04...		Pump	GradPump	G4281B	DEABC...	B.06.32 ...	
10-1-2	QC Lab	LC-Q-A01	2017-04...	LC-Q-A01	localhost	Compact...	Compac...	2017-04...		Sampler	ALS	G4282B	DEABC...	B.06.32 ...	
10-1-3	QC Lab	LC-Q-A01	2017-04...	LC-Q-A01	localhost	Compact...	Compac...	2017-04...		Compat...	Oven	G4283A	DEABC...	B.06.32 ...	
10-1-4	QC Lab	LC-Q-A01	2017-04...	LC-Q-A01	localhost	Compact...	Compac...	2017-04...		Detector	VWD	G4284B	DEABC...	B.06.32 ...	

The default table contains 14 columns:

Initial Order	An identifier in the format <System>-<Instrument>-<Device>.
System Name	The system name as specified in the System Properties .
System Status Since	The date of the last modification to the system properties.
Instrument Name	The instrument name as specified in the System Properties .
Instrument Address	The connection details (for example, IP address) of the instrument.
Instrument Type	The instrument type as identified in the system properties.
Instrument Description	The Description string as specified in the system properties.
Instrument Status Since	The date of the last modification to the instrument properties.
Duplicate Device Data	Indicated if the device has duplicate data, for example, if it has been moved from one instrument to another.
Device Class	The class of the device, as provided by the firmware.
Device Name	The name of the device, as provided by the firmware.
Device Type	The type number of the device, as provided by the firmware.

- Serial Number

The serial number of the device, as provided by the firmware.
- Firmware Revision

The firmware revision of the device.

The controls above the table allow you to customize the table and export it in Microsoft Excel format:

- not System assigned Devices

Mark this check box to show only orphaned devices, which have been deleted from Lab Advisor, but for which data still exists.
- show Device Details

Adds a new column at the end of the table:
 - Device Details
 - Shows the device details in separate rows, so that each device has multiple rows in the table.

Laboratory Inventory

☒ show Device Details
☐ show Logs and Results
☐ ... as one Cell

Export to MS Excel File...

189 rows for 21 systems with 22 instruments and 60 devices

Initial Order	System Group Name	System Name	System Status Since	Instrument Name	Instrument Address	Instrument Type	Instrument Description	Instrument Status Since	Duplicate Device Data	Device Class	Device Name	Device Type	Serial Number	Firmware Revision	Device Detail
10-1-1	QC Lab	LC-Q-A01	2017-0...	LC-Q-A01	localhost	Compa...	Compa...	2017-0...		Pump	GradPu...	G4281B	DEABC...	B.06.32...	Integral...
10-1-1	QC Lab	LC-Q-A01	2017-0...	LC-Q-A01	localhost	Compa...	Compa...	2017-0...		Pump	GradPu...	G4281B	DEABC...	B.06.32...	Degasser
10-1-2	QC Lab	LC-Q-A01	2017-0...	LC-Q-A01	localhost	Compa...	Compa...	2017-0...		Sampler	ALS	G4282B	DEABC...	B.06.32...	Integral...
10-1-2	QC Lab	LC-Q-A01	2017-0...	LC-Q-A01	localhost	Compa...	Compa...	2017-0...		Sampler	ALS	G4282B	DEABC...	B.06.32...	Tray (1...
10-1-2	QC Lab	LC-Q-A01	2017-0...	LC-Q-A01	localhost	Compa...	Compa...	2017-0...		Sampler	ALS	G4282B	DEABC...	B.06.32...	Meterin...
10-1-3	QC Lab	LC-Q-A01	2017-0...	LC-Q-A01	localhost	Compa...	Compa...	2017-0...		Compar...	Oven	G4283A	DEABC...	B.06.32...	Integral...
10-1-4	QC Lab	LC-Q-A01	2017-0...	LC-Q-A01	localhost	Compa...	Compa...	2017-0...		Detector	VWD	G4284B	DEABC...	B.06.32...	Integral...
10-1-4	QC Lab	LC-Q-A01	2017-0...	LC-Q-A01	localhost	Compa...	Compa...	2017-0...		Detector	VWD	G4284B	DEABC...	B.06.32...	LAN Se...
10-1-4	QC Lab	LC-Q-A01	2017-0...	LC-Q-A01	localhost	Compa...	Compa...	2017-0...		Detector	VWD	G4284B	DEABC...	B.06.32...	Current ...

- show Logs and Results

Adds three new columns at the end of the table showing the entries in **Logs & Results**. Each entry is given a separate line in the table:
 - Device Data Type
 - The type of data added to the **Logs & Results** screen.
 - Data Time Stamp
 - The time of the entry in the **Logs & Results** screen.
 - Device Data
 - The content of the **Message** in the **Logs & Results** screen.

Laboratory Inventory

☐ show Device Details☒ show Logs and Results☐ not System assigned Devices☐ ... as one Cell

Export to MS Excel File...

5537 rows for 21 systems with 22 instruments and 60 devices

Initial Order	System Group Name	System Name	System Status Since	Instrume Name	Instrume Address	Instrume Type	Instrume Descripti	Instrume Status Since	Duplicate Device Data	Device Class	Device Name	Device Type	Serial Number	Firmware Revision	Device Data Type	Data Time Stamp	Device Data
10-1-1	QC Lab	LC-Q-...	2017-...	LC-Q-...	localh...	Comp...	Comp...	2017-...		Pump	GradP...	G4281B	DEAB...	B.06.3...	Error	2011-...	Pressu...
10-1-1	QC Lab	LC-Q-...	2017-...	LC-Q-...	localh...	Comp...	Comp...	2017-...		Pump	GradP...	G4281B	DEAB...	B.06.3...	Error	2011-...	Pressu...
10-1-1	QC Lab	LC-Q-...	2017-...	LC-Q-...	localh...	Comp...	Comp...	2017-...		Pump	GradP...	G4281B	DEAB...	B.06.3...	Error	2011-...	Pressu...
10-1-1	QC Lab	LC-Q-...	2017-...	LC-Q-...	localh...	Comp...	Comp...	2017-...		Pump	GradP...	G4281B	DEAB...	B.06.3...	Mainte...	2011-...	New e...
10-1-1	QC Lab	LC-Q-...	2017-...	LC-Q-...	localh...	Comp...	Comp...	2017-...		Pump	GradP...	G4281B	DEAB...	B.06.3...	Mainte...	2011-...	This is...
10-1-1	QC Lab	LC-Q-...	2017-...	LC-Q-...	localh...	Comp...	Comp...	2017-...	Compact LC	Pump	GradP...	G4281B	DEAB...	B.06.3...	Mainte...	2011-...	Addin...
10-1-1	QC Lab	LC-Q-...	2017-...	LC-Q-...	localh...	Comp...	Comp...	2017-...		Pump	GradP...	G4281B	DEAB...	B.06.3...	FW R...	2011-...	B.06.3...

... as one Cell

Collects the additional data into single line in the table, in up to two new columns:

- **Device Details**
Shows the information provided by **show Device Details** (if activated) in a single cell for each device.
- **Device Logs and Results**
Shows the information provided by **show Logs and Results** (if activated) in a single cell for each device.

Laboratory Inventory

☒ show Device Details☒ show Logs and Results☐ not System assigned Devices☒ ... as one Cell

Export to MS Excel File...

60 rows for 21 systems with 22 instruments and 60 devices

Initial Order	System Group Name	System Name	System Status Since	Instrume Name	Instrume Address	Instrume Type	Instrume Descripti	Instrume Status Since	Duplicate Device Data	Device Class	Device Name	Device Type	Serial Number	Firmware Revision	Device Details	Device Logs and Results
10-1-1	QC Lab	LC-Q-A...	2017-0...	LC-Q-A...	localhost	Compa...	Compa...	2017-0...		Pump	GradP...	G4281B	DEAB...	B.06.3...	Integral Type: G4290B	Error logged 2011-07-0
10-1-2	QC Lab	LC-Q-A...	2017-0...	LC-Q-A...	localhost	Compa...	Compa...	2017-0...		Sampler	ALS	G4282B	DEAB...	B.06.3...	Integral Type: G4290B	FW Revision logged
10-1-3	QC Lab	LC-Q-A...	2017-0...	LC-Q-A...	localhost	Compa...	Compa...	2017-0...		Compa...	Oven	G4283A	DEAB...	B.06.3...	Integral Type: G4290B	FW Revision logged
10-1-4	QC Lab	LC-Q-A...	2017-0...	LC-Q-A...	localhost	Compa...	Compa...	2017-0...		Detector	VWD	G4284B	DEAB...	B.06.3...	Integral Type: G4290B	Maintenan logged 2011-05-1

Export to MS Excel File

Exports the table in its current form to the Desktop of the local host computer in Microsoft Excel format.

Back

Returns to the Lab Advisor **Apps** screen.

Diagnostic Catalog

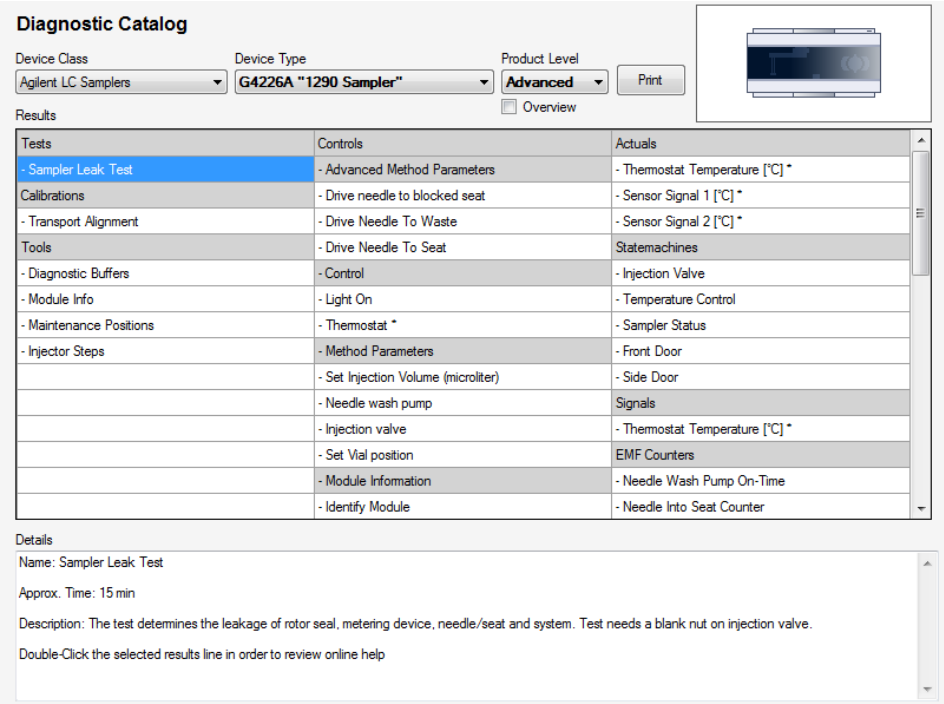


Figure 6: Diagnostic Catalog App

The Diagnostic Catalog is a catalog of all tests, calibrations, tools, instrument controls and EMF counters for each module at each Lab Advisor product level. The list is filtered by **Device Class** (that is, instrument or module type), **Device Type** and **Product Level**. The diagnostic catalog for the selected module at the selected product level is displayed in the **Results** table three columns:

- **Tests, Calibrations and Tools** available in Lab Advisor at the selected product level
- **Controls** provided in the **Instrument Control** screen of Lab Advisor at the selected product level
- **EMF Counters** shown the **EMFs** screen of Lab Advisor at the selected product level

For the tests, calibrations and tools, a short description is provided in the **Details** panel below the **Results** table. You can retrieve more information on the test, calibration or tool by double-clicking its name, which displays the online help.

You can print the diagnostic catalog for the current selection by clicking **Print**.

Telnet Console

The **Telnet Console** app provides a Telnet connection that allows you to administer the LAN settings of an instrument. Full details of LAN configuration with Telnet are given in each module's Service Manual.

TCP Relay Service

The TCP Relay Service replaces the Lab Advisor Relay service in Lab Advisor B.02.09 and later. The TCP Relay Service has a new, simplified Dashboard, and is compatible with both Lab Advisor and Agilent Remote Advisor. For full details of the TCP Relay Service, see the *Agilent TCP Relay Service Administrator's Guide*, available on the installation CD-ROM in the \Support\RelayService folder.

LC Network Setting Tool

The **LC Network Setting Tool** allows you to administer the network configuration of LC modules and G1369 LAN cards.

Agilent LC Modules with LAN capability and G1369X LAN Cards can either use a default IP address (192.168.254.11), a stored IP address (user configured) or DHCP/Bootp. To determine the correct capability refer to the Module's User manual.

- The mode is dependent on the configuration of the DIP switches at the back of the LC module (or on the G1369X LAN Card)

- The module firmware contains an active (that is, in use) configuration and a stored configuration (which may not be in use).
 - *stored* is a configuration that has been specified using Telnet, Instant Pilot or Lab Advisor and is used when the DIP switches are configured accordingly
 - *active* is the active configuration gathered by DHCP, BootP or taken from the stored section when DIPs are configured for stored IP.

The **LC Network Setting Tool** guides you through the process, and informs you:

- if you need to change DIP switches
 - only if required and if the app is able to read the actual setting from FW, otherwise it refers to the user manual
 - if you are configuring a G1369X LAN card, it will tell you to modify the DIP switches on the LAN card (DIP switches on the LAN card's host module have no effect on the LAN card configuration)
- if you have to modify your connection settings
 - when you configure your current CAP, you may have to change connection settings in Lab Advisor/CDS/... for example, when you modify the IP address
- that you have to restart your module to make the settings *active*. Without a restart, the settings are stored in the module's firmware, but are not activated until the module is next restarted.

NOTE

To configure a G1369X LAN Card, you must be connected with the LAN card, either by a DHCP or a stored address or via the default IP address. Configuration is not possible when Lab Advisor is connected to another module in the instrument. The **LC Network Setting Tool** then shows you the currently active configuration, which may not use the stored address (for example, when DHCP is used).

Firmware Update

Lab Advisor can be used to update the device-internal software (called firmware – FW).

The **Firmware Update** screen lists all systems configured in the **System Overview** screen. The devices of these systems can be updated individually, or the entire system can be updated at one time. It is also possible to update multiple systems at one time. To start the FW update procedure, select the **Firmware Update** tab in the global screens section of the Navigation Panel.

If a network connection is available, you can download firmware sets from the Market. Click **Select Market Location** and select the firmware set to download from the list. Firmware sets can also be downloaded from

<https://www.agilent.com/en-us/firmwareDownload?whid=69761>

Unzip the downloaded firmware archive **C:\Temp\Firmware** or another location of your choice. Use **Select Folder** to point Lab Advisor to this location.

Using Lab Advisor Firmware Update

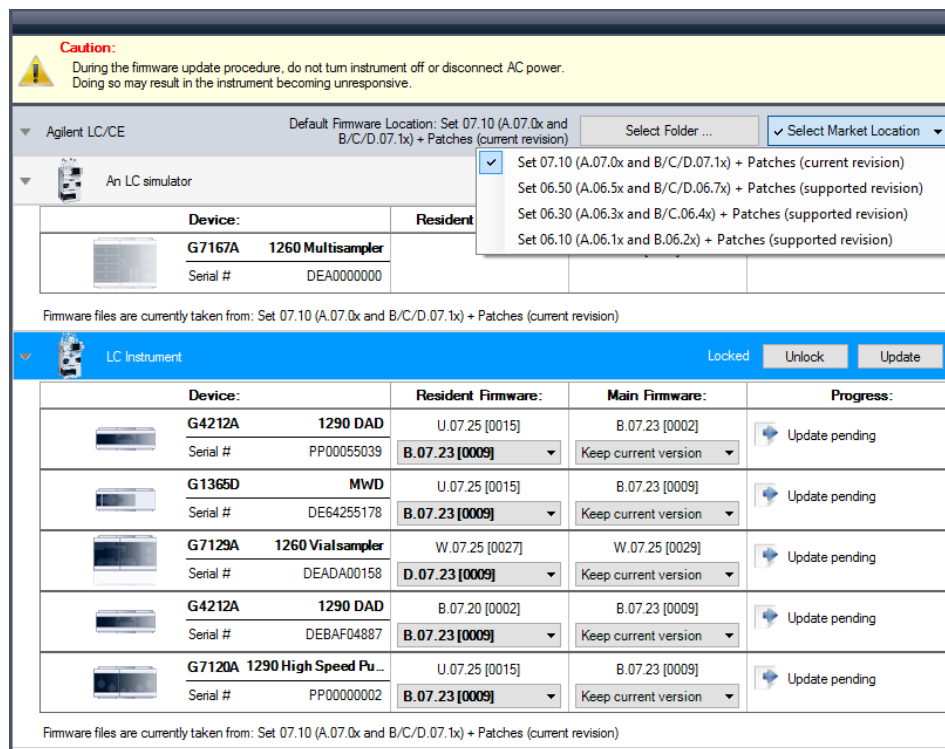


Figure 7: Firmware Update in Lab Advisor

Logs and Results

The **Logs & Results** screen presents data collected from the configured devices, and helps to review the status of the systems or devices.

The **Logs & Results** data includes:

- Test results
- Error information
- FW revision and updates
- EMF changes
- Maintenance log entries

Each line in the log shows the module identifier (type and serial number), type of information, description and a time stamp. If the **Traceability** feature is in use, user-generated data is logged with user name in the **Message** field.

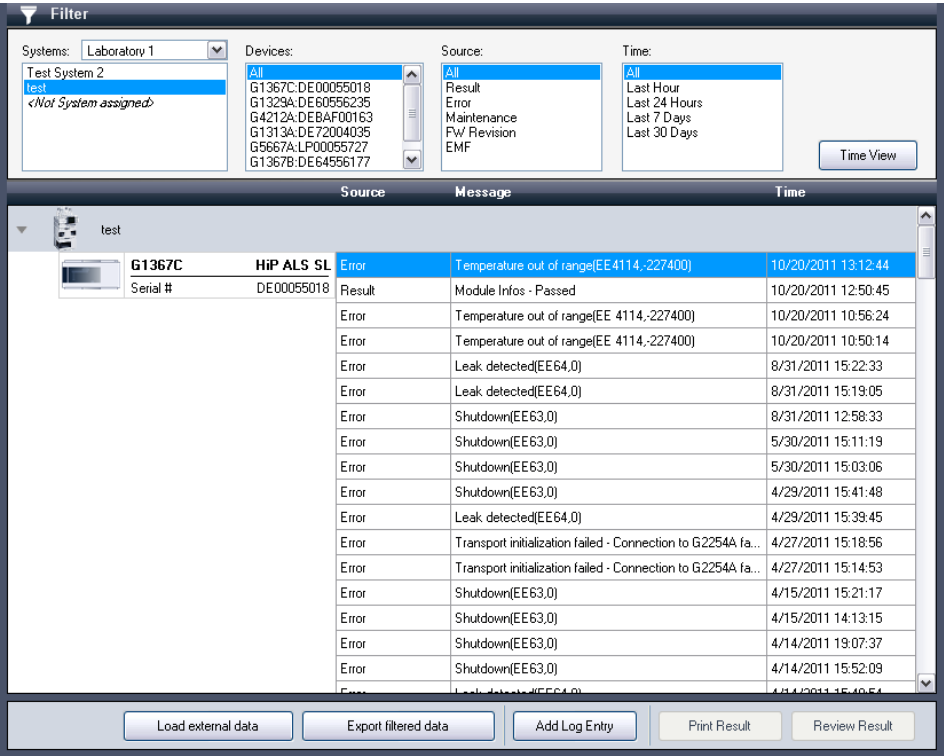


Figure 8: Lab Advisor Logs & Results

For easy overview, you can filter the data by **Instruments**, **Devices**, **Source** or **Time**. Multiple selections are supported for **Devices** and **Source**, and can be selected by keeping **Ctrl** pressed while clicking the data required in the filter.

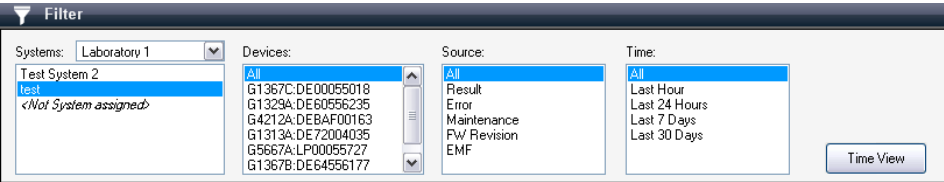
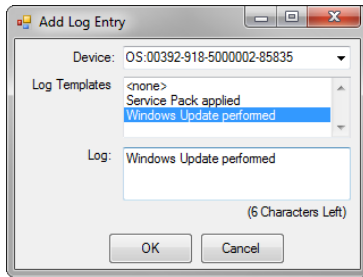


Figure 9: Logs & Results filter

The **Logs & Results** screen offers two modes of operation. The default mode is the **Module View**, which lists the devices by system, and presents the information per device. In the alternative **Time View**, the data is presented and sorted by time stamp. This allows for a system-wide overview of the sequence of the data.

When you click **Add Log Entry**, you can add a log entry to the device, which is stored on the device main board. You can select a **Log Template** (not available for every device), or type your own text in the **Log** field. For Agilent LC and CE devices, the information written to the device is limited to 50 characters; this is typically maintenance log data.



The data filtered by the built-in filter can be exported in ZIP format to enable it to be distributed. This is typically helpful if remote engineers need to assess data from the system. Clicking **Load external data** allows you to navigate to the storage location of the ZIP file and load the exported data.

NOTE

You can also use **Load external data** to load LRS files.

Service and Diagnostics

The **Service & Diagnostics** screen hosts the procedures (tests, calibrations and tools) of the Lab Advisor software. To select a procedure, select the device and then select the procedure from the list.

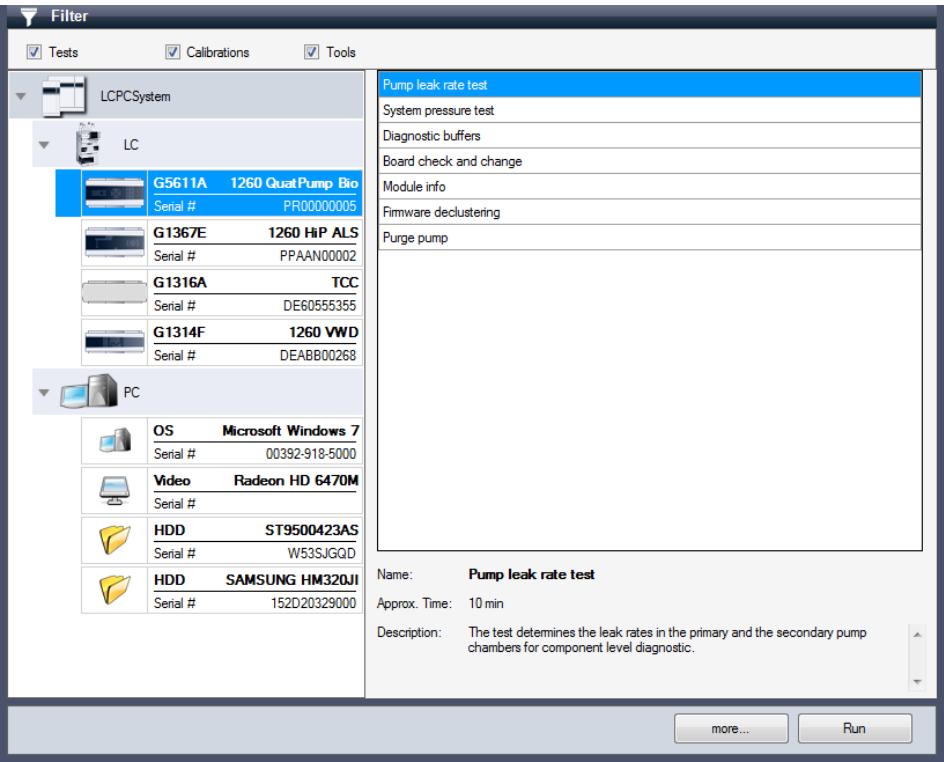


Figure 10: Lab Advisor Service and Diagnostics

For a better overview, you can filter the type of procedure you want to use.

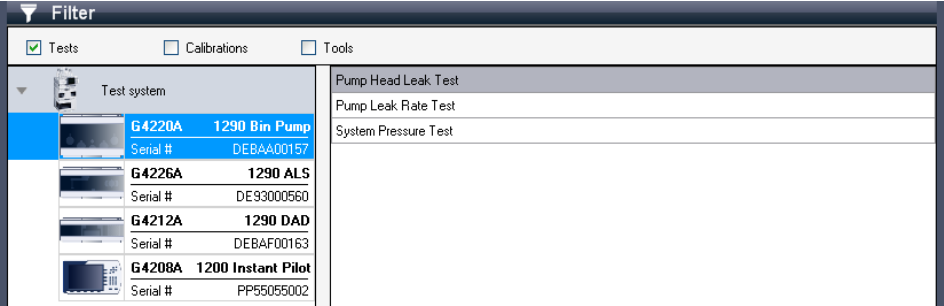


Figure 11: Service and Diagnostics filter

Tests

Tests are procedures that result in a Passed/Failed statement, so the results of the test are compared with predefined limits. The Pump Pressure Test is an example of a test.

Calibrations

If internal calculations in the devices need to be corrected, calibration procedures normally take care of this. An example of a calibration is the Detector Wavelength Calibration. If you are operating in a controlled environment, this type of procedure might need to be verified. This could typically be done using a System Suitability Test.

Tools

Tools are procedures that have a supporting function and that do not produce a Passed/Failed statement when finished.

System Report

The Lab Advisor **System Report** screen provides a system-wide overview of the devices in the system.

The information in the **System Report** includes:

- Lab Advisor software information
- Contact information
- PC information (optional)
- System configuration
- Logbook
- EMF counters
- Test Results
- Instrument actuals (optional)

The information included in the **System Report** can be used to document the system or to share diagnostic information with a remote engineer when troubleshooting the system.

The **System Report** screen displays the information in at least two tabs: a **General** tab that includes Contact Information, Company, Logs and results and PC information, and a tab for each instrument in the system. The instrument tabs allow you to select the instrument-specific information to include.

Report Name

General **Compact LC**

Contact Information

Name

Phone

Email

Company

Included Information

Logs and results ▼

☒ Include PC information

Comments

Create Report

Figure 12: Lab Advisor System Report Setup

Contact and Company information can be helpful for easy and precise identification if the report is sent to a Remote engineer during troubleshooting.

The Logs & Result information stored by each individual device might be extensive, so to reduce the amount of data, you can filter the data based on time.

If you mark the **Include PC information** check box, a list of Agilent programs installed on the PC is generated for the report. This includes all programs starting with *Agilent*.

The instrument actuals are the setpoints currently loaded in the system at the time of generation of the report. If a method has been loaded in the CDS (and has not been changed), then Lab Advisor can report these settings. Note, however, that the receiver of the **Status Report** will be able to see method information.

The screenshot shows a web browser window displaying the 'Agilent System Report' for a 'Test system'. The report is organized into three sections: Software Information, Contact Information, and PC Information. The browser's address bar shows 'Page Width' and search options. A 'Back' button is located at the bottom right of the report area.

Agilent System Report		Test system
Software Information		
Lab Advisor Version:	Version B.02.01 [010]	
Data updated on:	5/20/2011 15:26:26	
Contact Information		
Name	John Doe	
Phone		
EMail		
Company	Big Company Inc.	
Comment		
PC Information		
Name	CZC9030ZHW	
Free Disk Space	C:\ 91.92 GB	
Installed Agilent Programs	Agilent Windows XP Security Template - AD Agilent Lab Advisor Agilent Installation Qualification Tool A.03.03.008 Agilent Internet Explorer8 Settings Agilent OLECM BPM Client	

Back

Figure 13: Example System Report

Instrument Control (LC and CE)

The **Instrument Control** screen allows you to control a connected system without having to have a CDS running. This might be helpful in complex diagnostic situations, where the built-in diagnostic tests do not give a definitive answer.

Instrument Control in the Basic version provides only limited functionality, whereas the Advanced version provides a full set of controls and a freely configurable Signal Plot.

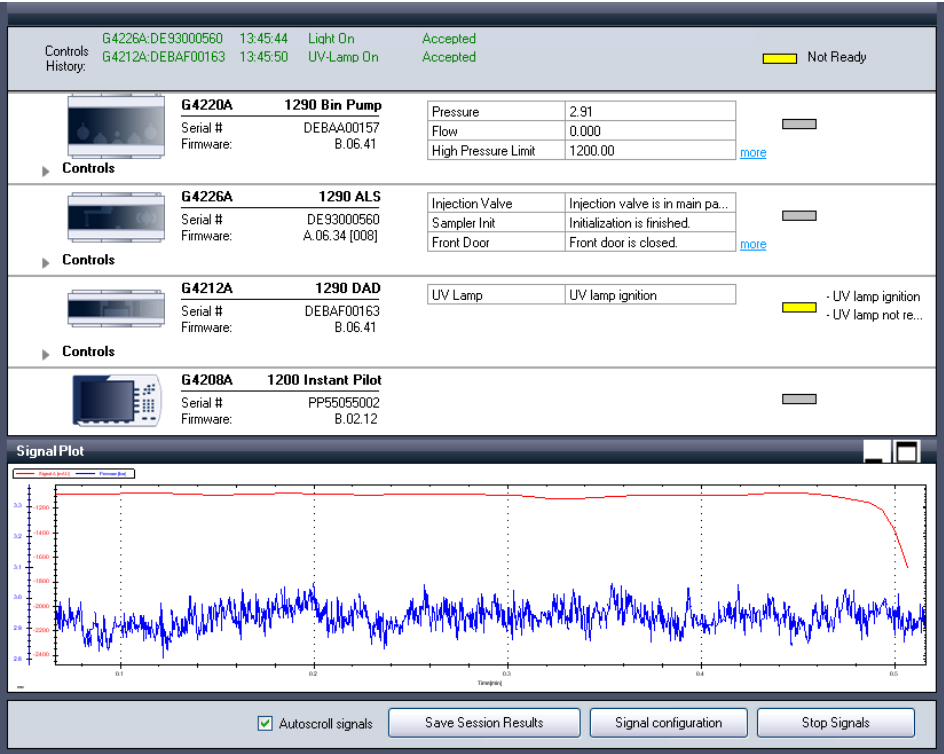



Figure 14: Lab Advisor Instrument Control

The Reply Panel of the **Instrument Control** screen displays any replies generated from the device, to verify that the control used was accepted; it shows only the last three replies. In order to get a complete history of replies, click **Save Session Results** in the Action Panel. The reply history is saved and can be viewed in the **Logs & Results** screen.

Actual Status Information

Each device is displayed separately in the Control Panel, and provides information about actual values. If a device has several actual values to display, the **more** link gives access to these values.



G4220A	1290 Bin Pump
Serial #	DEBAA00157
Firmware:	B.06.41

Flow	0.000
Pressure	2.83
Pump Valve	0

[more](#)

► **Controls**

Controls

When the **Controls** section is expanded, a complete set of buttons becomes available providing extensive control of the device. This includes setpoints, controls, special commands and module information. When the buttons are clicked, a reply for the action (reply accepted or reply error) is displayed in the Reply panel. Initially, the setpoints display the value already loaded in the device; the displayed value changes on changing the setpoint. When a setpoint is changed, the change must confirmed by clicking **Send**.

Using Lab Advisor

Instrument Control (LC and CE)

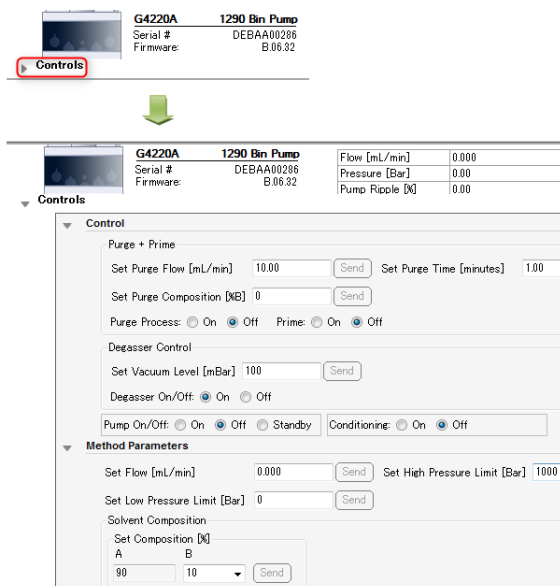
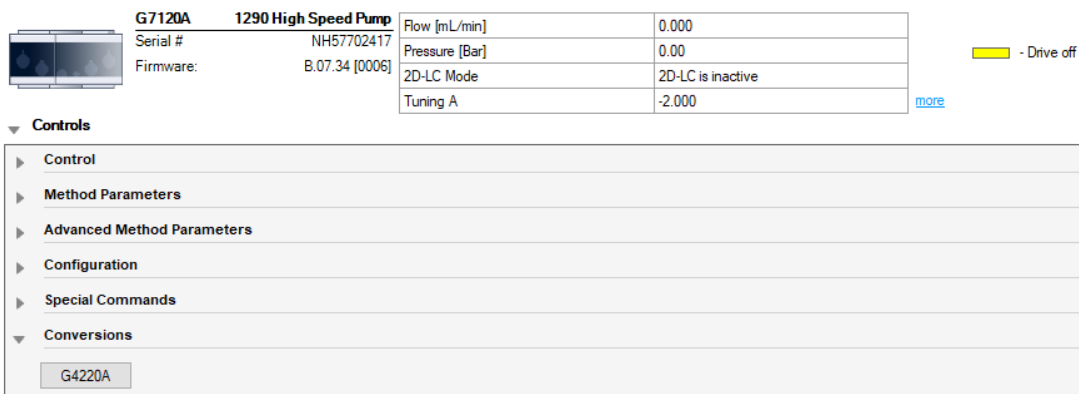


Figure 15: Example of Controls section of Instrument Control

Conversions

When the **Conversions** section is expanded, a list of possible emulation targets is shown. Click an emulation target to start the conversion. The module is restarted as the selected new type. The **Controls History** in the upper panel shows the module's original type and current type. The conversion can be reversed in the same manner.

Not all modules have an emulation target while some others have multiple.



G7120A 1290 High Speed Pump

Serial #	NH57702417	Flow [mL/min]	0.000
Firmware:	B.07.34 [0006]	Pressure [Bar]	0.00
		2D-LC Mode	2D-LC is inactive
		Tuning A	-2.000

[more](#)

Controls

- Control
- Method Parameters
- Advanced Method Parameters
- Configuration
- Special Commands
- Conversions

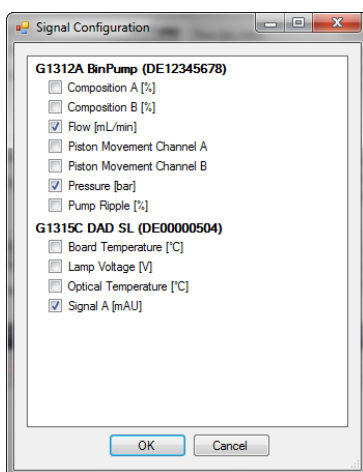
G4220A

Figure 16: Example of Conversions section of Instrument Control

Signal Plot

The Signal Plot is used for monitoring specific function(s) of a system in real time. Combined with the Controls, it can provide very valuable troubleshooting information for experienced users. It can also be used to monitor the progress of certain tasks, and check when they are complete, saving time.

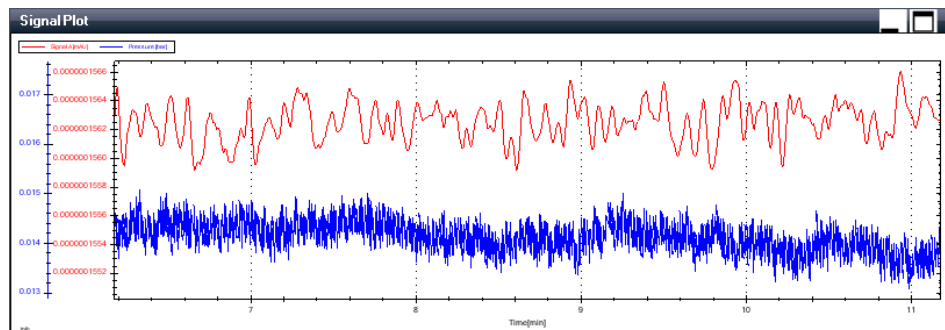
The Signals that you want to monitor are set up by clicking **Signal Configuration** in the Action Panel. The **Signal Config** dialog box that is displayed contains all available signals for the system. To select a signal, mark its check box and click OK.



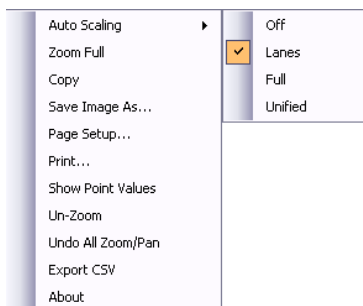
Using Lab Advisor

Instrument Control (LC and CE)

The selected signals are visible in the Signal Plot starting in "lanes" mode, which divides the available area of the window between the number of configured signals. This gives each signal a limited size in the window, but all are easy to differentiate and each scale is shown on the left side of the plot.



Other scaling parameters can be selected by right-clicking the signal window and selecting the **Auto Scaling** from the context menu. The available scaling options are presented in the submenu.



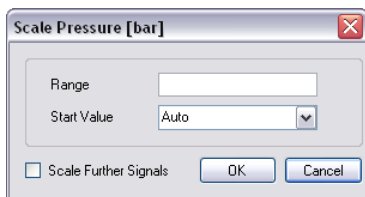
Using the mouse pointer, it is also possible to scroll the scales directly. Click the scale you want to change and use the scroll wheel to change the scale. You can also change the placement of the scale by pressing the scroll wheel while moving the mouse forward and back.



Using Lab Advisor

Instrument Control (LC and CE)

Alternatively, you can specify a fixed scale window. Double-click the scale to open the **Scale** dialog box and enter the scale range and/or the lower starting value of the scale.



EMFs (LC and CE)

Agilent Technologies LC Instrumentation has supported the Early Maintenance Feedback (EMF) feature since the introduction of the 1100 system in 1995, and continues to support this feature. EMF helps to keep the usage of devices in focus, and facilitates usage-based maintenance, which minimizes maintenance costs.

The EMF counters can be read and reset with both the Basic and the Advanced versions of the software, but the Advanced version allows limits to be activated and set in addition. Lab Advisor provides Agilent-recommended EMF limits. These limits have been determined by measurements under standard laboratory conditions, and do not take into account any application-, user- or site-specific conditions; to maximize the lifetimes of system components, they might need to be adjusted based on experience.

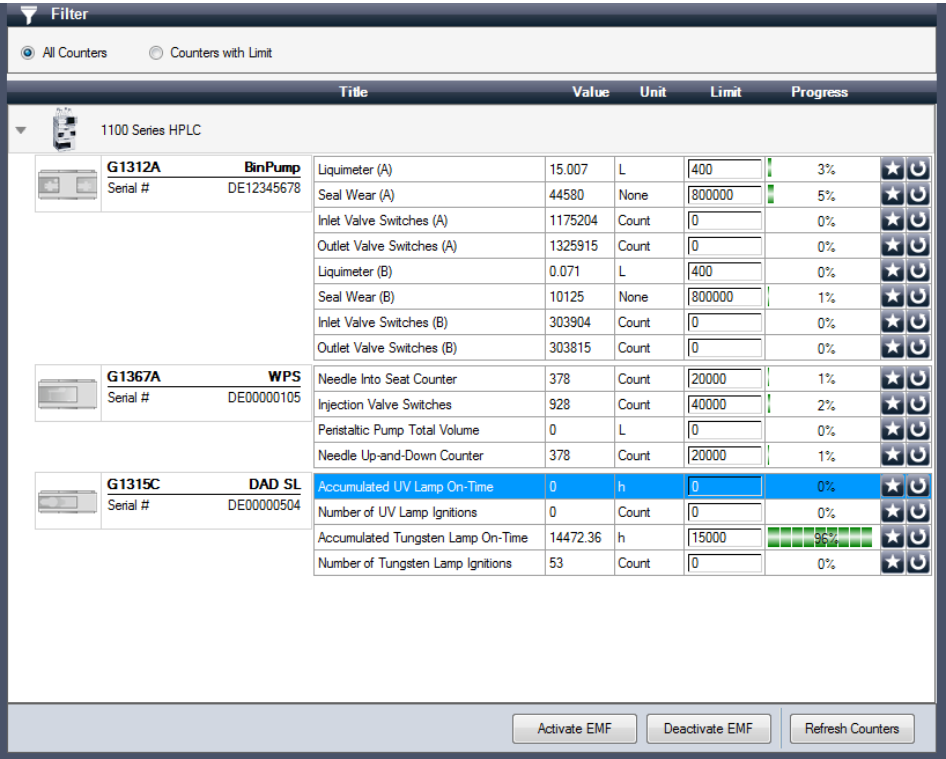
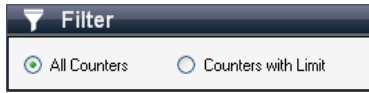


Figure 17: EMFs in Lab Advisor

The EMF screen can be used to view all possible counters or, for better overview, to filter only those counters that have an activated limit.



Firmware Update Report

The **Firmware Update Report** allows you to select and print a detailed report on the firmware changes of a selection of modules from the currently connected system or any previously connected system from the **System Overview**.

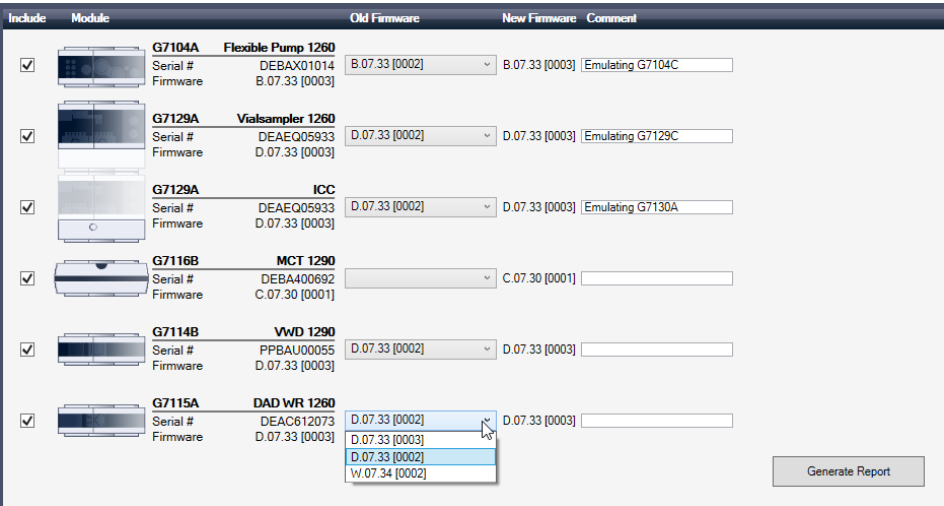


Figure 18: Lab Advisor Firmware Update Report Setup

The selected system's modules are displayed in a five-column table:

Include	Mark the check boxes against the modules you want to include in the report.
Module	Shows detailed information about the module: module type, serial number and current firmware revision.
Old Firmware	Click the down-arrow to display a list of previous firmware revisions installed in the module. Select the firmware revision to include in the report from the drop-down list.
New Firmware	Shows the current firmware installed in the module.

Using Lab Advisor
Firmware Update Report

- Comment

You can add a comment to be included in the Firmware Update Report in this field.
- Generate Report

Generates a PDF file of the Firmware Update Report. Select where to save it in the **Save As** dialog box.

When the report has been generated, a button bar at the top of the Firmware Update Report screen allows you to choose what to do with it:

- open the report
- open the folder containing the report
- copy the report path to the clipboard

The button bar closes after a few seconds.

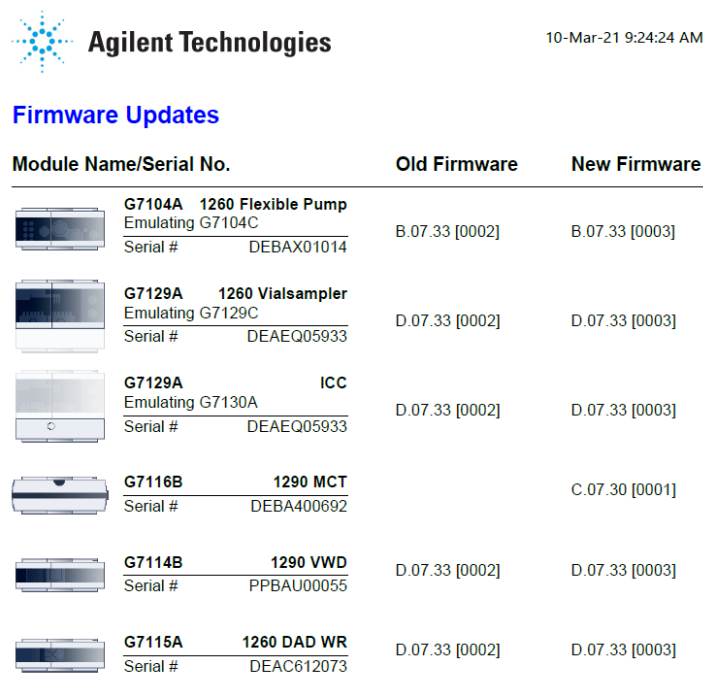


Figure 19: Example Firmware Update Report



4 Lab Advisor Data Sharing

This chapter describes the setup and use of Lab Advisor Data Sharing.

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Typical Uses of Data Sharing 72

Data Sharing Setup 74

Data Import from the Data Share Folder 76

Data Sharing Review Client 77

Data Sharing

The Agilent Lab Advisor Advanced software features Data Sharing, a function that allows Lab Advisor to upload and synchronize collected instrument information and data to an upload folder anywhere on a Windows network share. When using the Advanced license M8550A in combination with device add-on license packs, Data Sharing also synchronizes the licenses and **Authentication** configuration to the data share. This allows administrators to add license keys in one installation and make them available to all installed PCs connected to the data share.

With the 1-year advanced license M8556A, only data and the **Authentication** configuration can be synchronized, because sharing of Module Licenses is not appropriate for this license type and therefore not possible.

NOTE

Mixing Unlimited licenses with the per-module licenses will lead to unforeseen problems, especially in conjunction with Data Sharing.

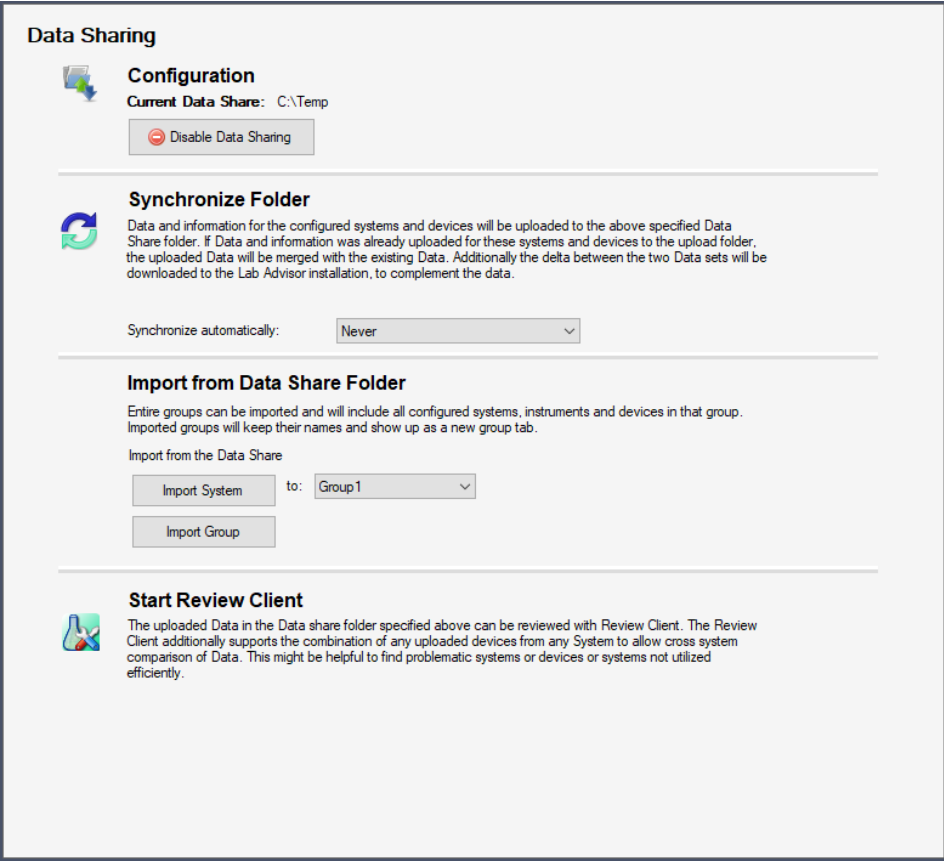


Figure 20: The Data Sharing User Interface

Typical Uses of Data Sharing

Centralized monitoring of instrument performance using the Review Client of Lab Advisor Advanced

In this case, all instrument controllers are equipped with Lab Advisor Advanced software. They upload their logs and results automatically to the Data Share folder. The lab manager can use the Review Client of Lab Advisor Advanced to review any diagnostic data from any of the instruments in the lab. This allows the Lab Manager to monitor system performance, schedule preventive maintenance and keep the systems in good working condition.

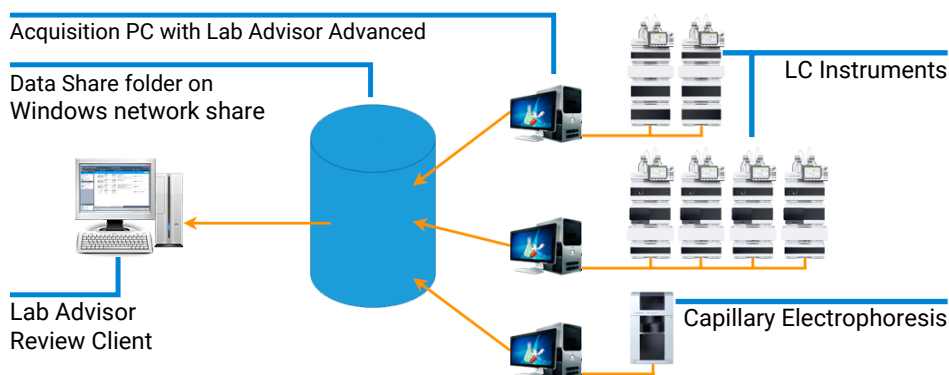


Figure 21: Data upload of multiple Lab Advisor Advanced installations to a central data sharing folder

Company-internal support group using Lab Advisor Advanced laptops

This case requires Lab Advisor Basic only on every instrument controller PC. The company-internal support group members, however, connect their Lab Advisor Advanced-enabled laptops to the lab instruments they are servicing, run tests or calibrations, and synchronize the generated data with the data sharing folder on the network. When another support group member connects to this lab instrument using Lab Advisor Advanced, it automatically downloads all previously acquired data and test results for this instrument from the centralized Data Share folder, and uploads any new data and results.

Lab Advisor Data Sharing

Typical Uses of Data Sharing

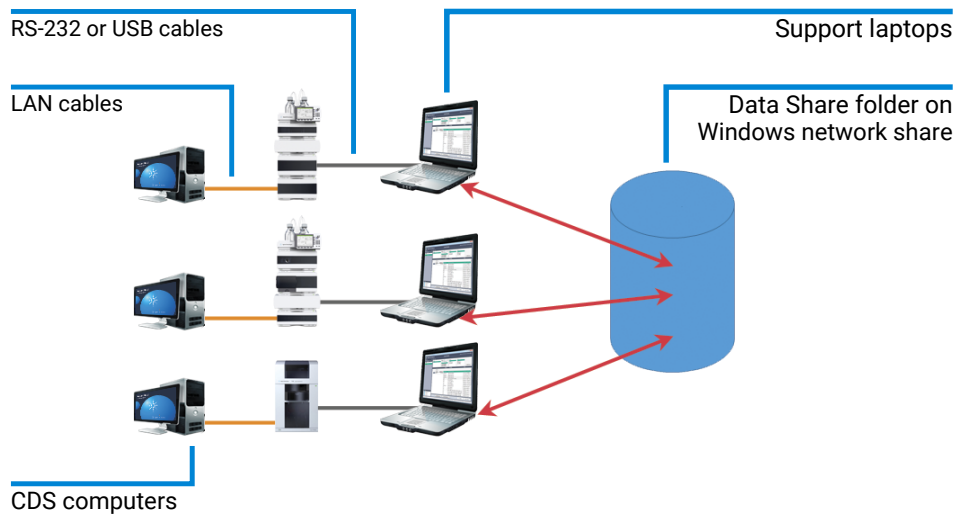


Figure 22: Log and results synchronization of support laptops

Data Sharing Setup

During setup of Data Sharing, all installed device licenses are copied to the data share and can be used on any Lab Advisor installation. Therefore, you can configure Data Sharing on one PC, add all required licenses to connect to the devices, then configure and enable Data Sharing on your other PCs; the licenses are automatically synchronized.

NOTE

With the 1-year advanced license M8556A (*per-user license*, licenses an unlimited number of hardware modules) Module License sharing is not appropriate and therefore not possible. Note that mixing *per-user* Unlimited licenses with the per module licenses will lead to unforeseen problems in conjunction with Data Sharing.

Authentication is also synchronized by Data Sharing; the Authentication that is configured on one PC is automatically propagated to your other PCs that use Data Sharing.

Data Share folder

The Data Share folder can be located on any Windows network share. It can either be mapped as a drive letter or given as a network location.

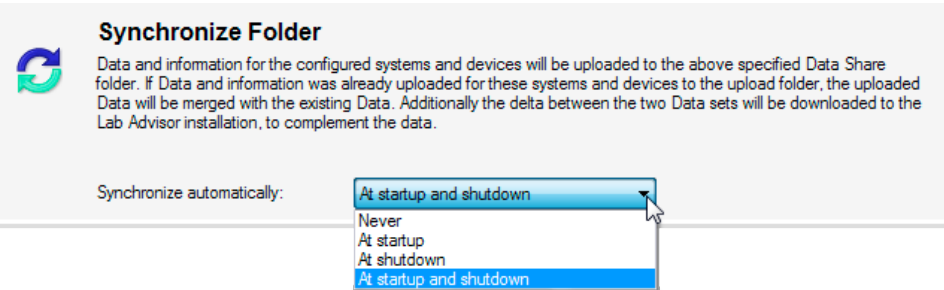


Figure 23: Data Share Folder dialog box

NOTE

The Lab Advisor Advanced user needs WRITE access to the Data Share folder.

Data Synchronization



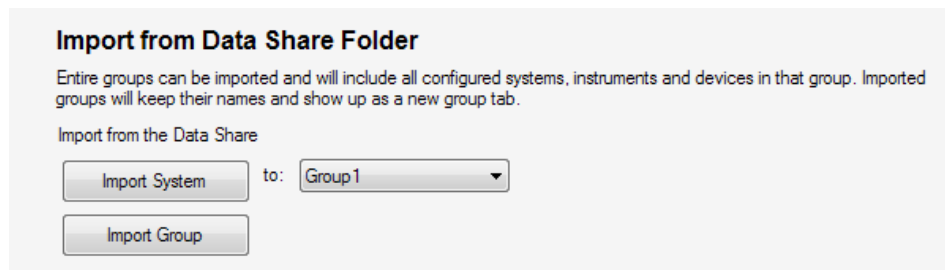
Select the synchronization behavior from the drop-down list that best fits your requirements.

Table 5: Data Synchronization

Setting	Behavior	Use case
Never	Data and information are never exchanged with the Data Share folder	Default setting
At startup	Upon startup, Lab Advisor Advanced downloads logs and results updates for all configured devices from the Data Share folder	Central review client
At shutdown	Upon shutdown, Lab Advisor Advanced uploads logs and results updates for all configured devices to the Data Share folder	Lab PC with Lab Advisor Advanced runs tests on a regular basis (for example, lamp intensity test)
At startup and shutdown	Lab Advisor Advanced synchronizes its logs and results with the Data Share folder in both directions	Customer support group computers stay up to date no matter who ran tests on which analytical device

Licenses and authentication configuration are synchronized independently of these settings whenever the data share is reachable. If a Data Share is disconnected, for example, when the mapped network location with the Data Share is not available, a local copy is used until the next time the Data Share is connected.

Data Import from the Data Share Folder



Import from Data Share Folder

Entire groups can be imported and will include all configured systems, instruments and devices in that group. Imported groups will keep their names and show up as a new group tab.

Import from the Data Share

to:

Figure 24: Data import dialog box

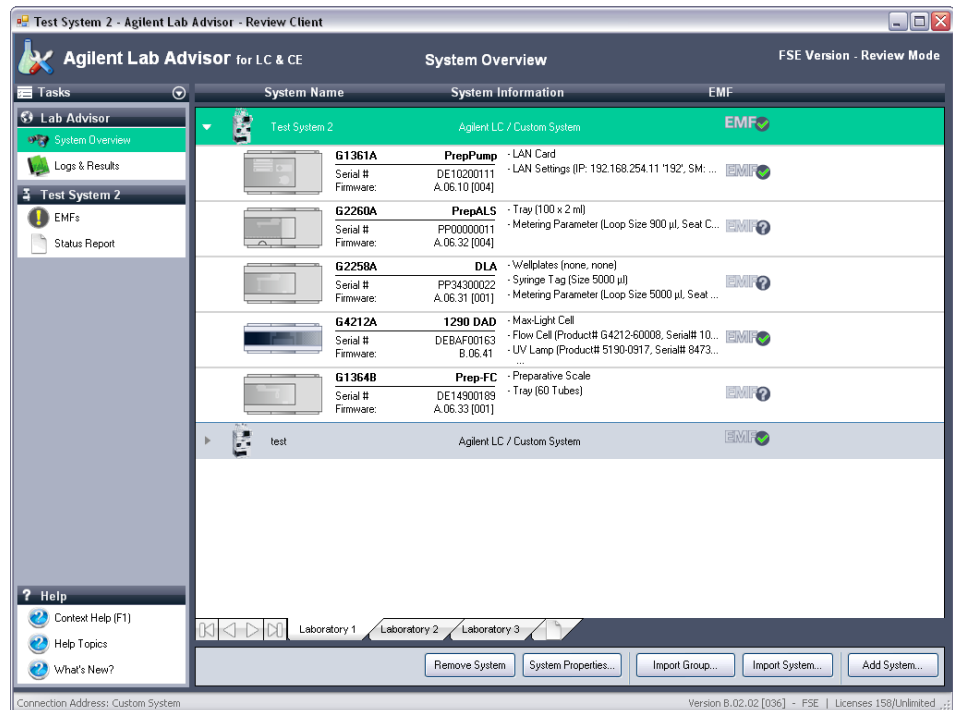
Logs & Results from devices that are not configured in this instance of Lab Advisor can be imported from the Data Share folder. It is possible to either import systems (for example, an LC) or groups of systems.

If the [Adding a new system group](#) on page 32 has been activated, systems can be imported into existing groups.

Data Sharing Review Client

The complete set of data uploaded to the data share folder can be accessed by the built-in Review Client, which is started from the **Data Sharing** user interface. The Review Client additionally supports the combination of any uploaded devices from any system to allow cross-system comparison of data. This might be helpful in finding problematic systems or devices, or systems not being used efficiently.

The Review Client requires a Lab Advisor Advanced license, but is not limited by module licenses. All modules hosted on the upload share are displayed, even when the number of module licenses available on the Review Client would not normally allow it.



There are several ways to use the Review Client:

- All portable Lab Advisor installations upload their data to the same folder. Each portable Lab Advisor is then up to date, and a Review Client has the opportunity to observe the entire data pool.
- Each portable Lab Advisor has its own folder, which is used for back-up. By changing the share folder in the Review Client, it is possible to look into each separate user's data.
- Lab Advisor installations on local PCs connected to a single Instrument can use the synchronize function to upload data to a system-specific folder. This can be used as a backup solution, and by changing the share folder the Review Client can be used to look at each system separately.

In each case, the installation starting the Review Client needs a Lab Advisor Advanced license.

If system grouping has been activated in software configuration, you can set up groups of systems; the group controls allow you to switch between the groups. The groups you set up in the Review Client are independent of those set up in the System Overview.

In This Book

This manual describes the two versions of Lab Advisor: Lab Advisor Basic and Lab Advisor Advanced.

The manual contains the following information:

- Lab Advisor Overview
- Installation
- Using Lab Advisor
- Lab Advisor Data Sharing

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