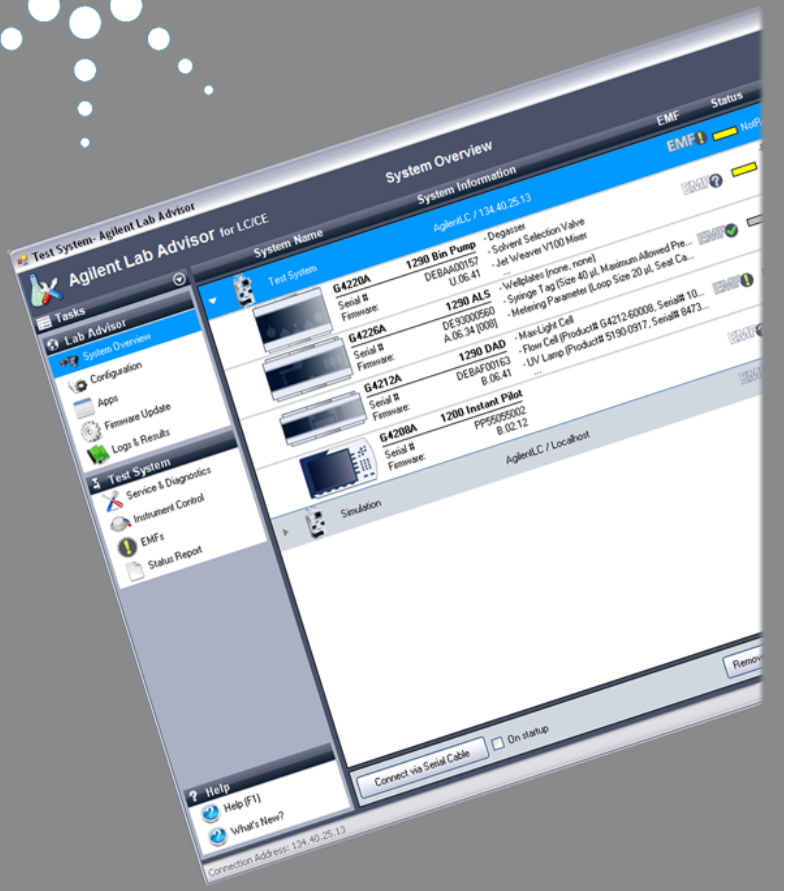
Agilent Lab Advisor

User Manual



Agilent Technologies

Notices

Manual Part Number

M8550-90001

Edition

11/2011

Printed in Germany

Agilent Technologies
Hewlett-Packard-Strasse 8
76337 Waldbronn

This product may be used as a component of an in vitro diagnostic system if the system is registered with the appropriate authorities and complies with the relevant regulations. Otherwise, it is intended only for general laboratory use.

Warranty

The material contained in this document is provided "as is," and is subject to being changed, without notice, in future editions. Further, to the maximum extent permitted by applicable law, Agilent disclaims all warranties, either express or implied, with regard to this manual and any information contained herein, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Agilent shall not be liable for errors or for incidental or consequential damages in connection with the furnishing, use, or performance of this document or of any information contained herein. Should Agilent and the user have a separate written agreement with warranty terms covering the material in this document that conflict with these terms, the warranty terms in the separate agreement shall control.

Technology Licenses

The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

Restricted Rights Legend

If software is for use in the performance of a U.S. Government prime contract or subcontract, Software is delivered and licensed as "Commercial computer software" as defined in DFAR 252.227-7014 (June 1995), or as a "commercial item" as defined in FAR 2.101(a) or as "Restricted computer software" as defined in FAR 52.227-19 (June 1987) or any equivalent agency regulation or contract clause. Use, duplication or disclosure of Software is subject to Agilent Technologies' standard commercial license terms, and non-DOD Departments and Agencies of the U.S. Government will receive no greater than Restricted Rights as defined in FAR 52.227-19(c)(1-2) (June 1987). U.S. Government users will receive no greater than Limited Rights as defined in FAR 52.227-14 (June 1987) or DFAR 252.227-7015 (b)(2) (November 1995), as applicable in any technical data.

Safety Notices

CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

Contents

Contents

1 Lab Advisor B.02.02 Overview

This chapter describes the two versions of Lab Advisor B.02.02: Lab Advisor Basic and Lab Advisor Advanced.

With its advanced diagnostic and maintenance capabilities, Agilent Lab Advisor helps you to keep your Agilent LC and CE instruments in top condition and thereby achieve high quality chromatographic results. Agilent Lab Advisor is an application- independent tool: it can support Agilent LC and CE instrumentation regardless of whether you are using Agilent or non-Agilent software to control the instruments. The Agilent Lab Advisor is available in two flavors: Lab Advisor Basic and Lab Advisor Advanced.

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 and maintenance capabilities, allowing you to perform troubleshooting and maintenance tasks 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 with 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.

1 Lab Advisor B.02.02 Overview

Lab Advisor Advanced

2 Installation

This chapter contains instructions for installing Lab Advisor.B.02.01.

Under construction

Prerequisites

Agilent Lab Advisor can run on any Microsoft Windows XP or Windows 7 PC with Microsoft .NET 2.0 or higher installed. The software has been extensively tested with the following software packages:

Table 1 Supported Software List

Element	Revision
Windows XP Pro	SP3
Windows 7	32 bit
Windows 7	64 bit
Windows Server 2008 R2	
Internet Explorer	7.0
Internet Explorer	8.0
.Net Framework	2.0 and higher
Symantec Antivirus	11.0
Adobe Acrobat	9.0

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 3.4GHz or higher
RAM	1.0 GB or more	≥ 1 GB (Windows XP SP3 Pro) ≥ 2 GB (Windows 7)

Table 2 PC Hardware Configurations

	Minimum (Netbook) Configuration	Recommended Configuration
Hard disc	1 GB	160 GB or bigger
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
Operating Systems	Windows 7 Starter	Windows XP Pro Service Pack 3 Windows 7 Windows Server 2008 R2 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 four different modes:

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 13.	Run from desktop icon or Windows **Start** menu.	Standard: ..\Agilent Lab Advisor\ AgilentLabAdvisorData\...
Server	Installed on Windows Server 2008 using setup.exe and published as a shareable application, see "Server Installation" on page 18.	Run using RDP link at clients' desktops.	..\Agilent Lab Advisor\ AgilentLabAdvisorData-[TerminalHostName]\...
Instant	No installation required.	Run **AgiInstrDiag.exe** from the installation CD, see "Running Lab Advisor from the CD-ROM" on page 19	Standard: ..\Agilent Lab Advisor\ AgilentLabAdvisorData\...

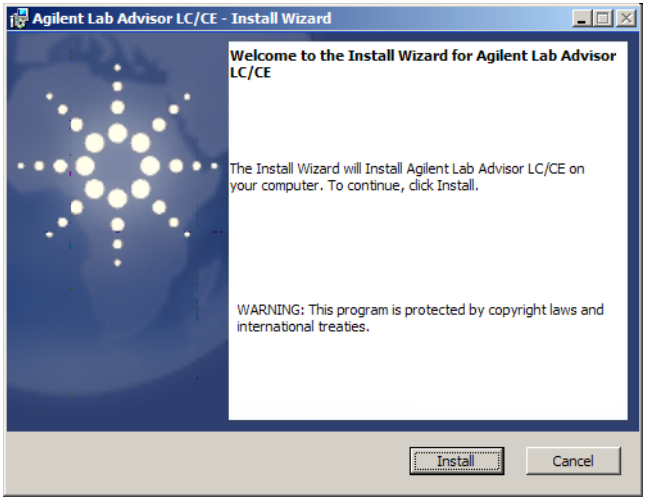
Hard drive installation

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

The **Choose Language** dialog box is displayed.

2 Click the down-arrow and select the language from the list and click **OK**. Lab Advisor supports English, Chinese and Japanese.

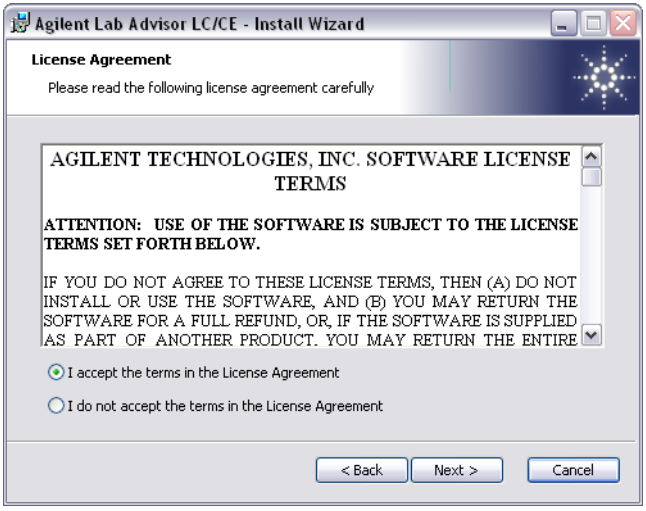
The first page of the installation wizard is displayed.



NOTE You can change the language after installation, see "Language" on page 34

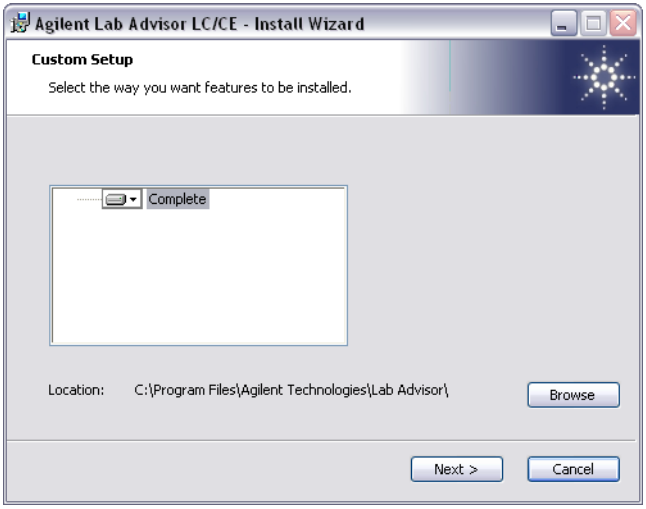
3 Click **Install**.

The License Agreement is displayed.



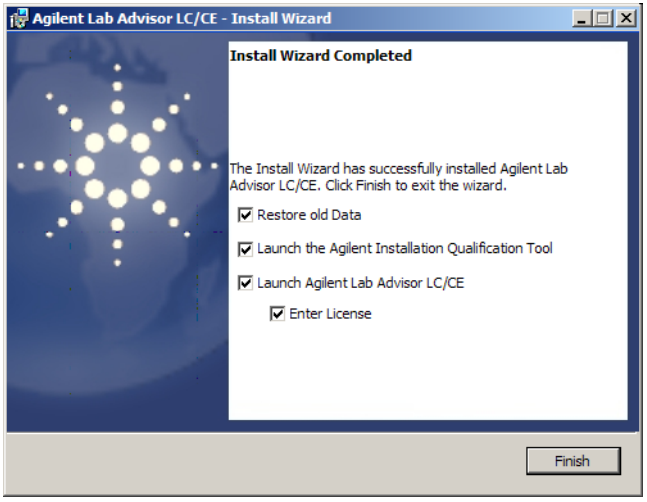
4 Select to accept the terms of the license and click **Next**.

The **Custom Setup** page of the installation wizard is displayed.



5 If you want to change the default location, click **Browse** to select a new location; otherwise, click **Next.**

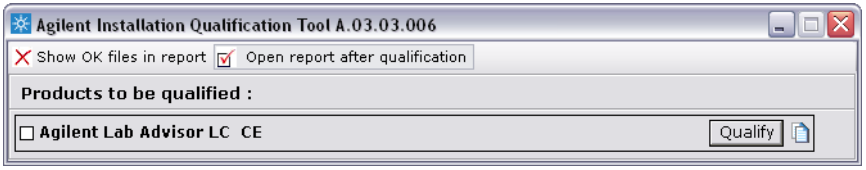
The last page of the installation wizard is displayed.



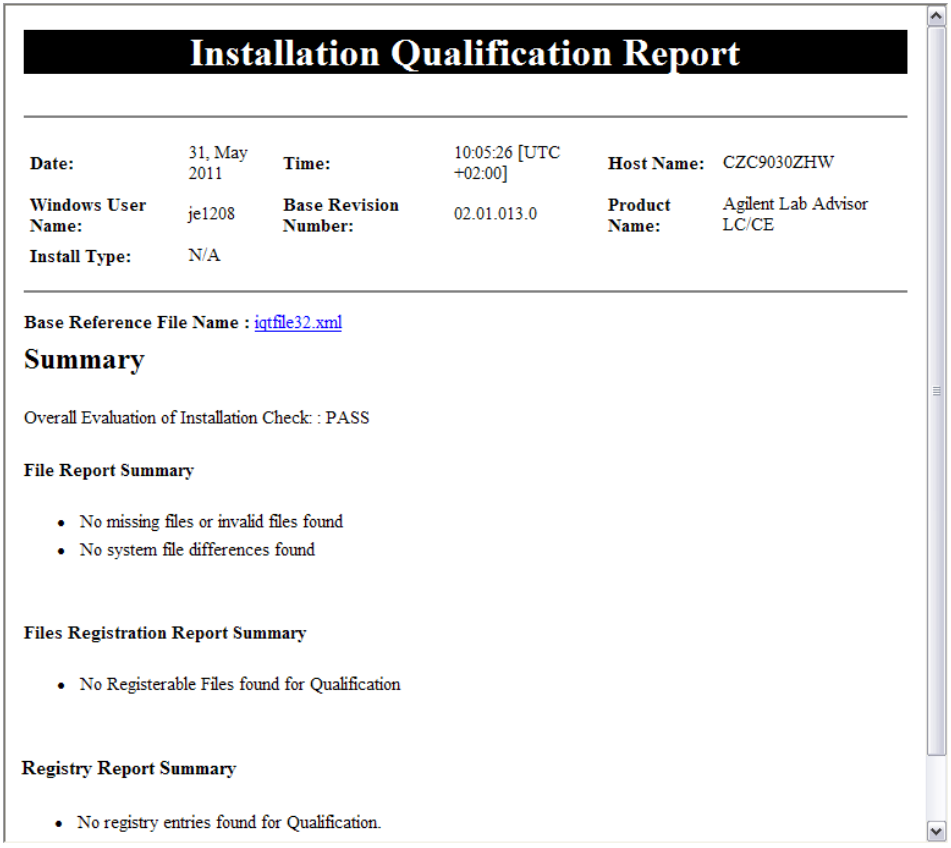
6 Mark the check boxes against the options you want to activate and click **Next**.

Restore old data restores old data from either B.01.xx installations or from previous B.02.xx installations. The data is not removed from the hard drive during de-installation, but if **Restore old Data** is cleared, the old data is permanently removed from the hard drive.

If the **Launch the Agilent Installation Qualification Tool** check box was marked, the Agilent IQT tool launches automatically. To start the Installation Qualification click **Qualify**.



The Installation Qualification Report is opened 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:	31, May 2011	**Time:**	10:05:26 [UTC +02:00]	**Host Name:**	CZC9030ZHW
Windows User Name:	je1208	**Base Revision Number:**	02.01.013.0	**Product Name:**	Agilent Lab Advisor LC/CE
Install Type:	N/A				

Base Reference File Name : iqtfile32.xml

Summary

Overall Evaluation of Installation Check: : PASS

File Report Summary

- No missing files or invalid files found
- No system file differences found

Files Registration Report Summary

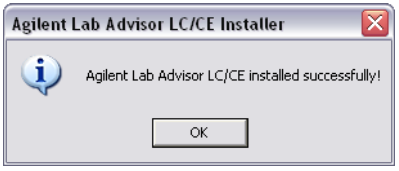
- No Registerable Files found for Qualification

Registry Report Summary

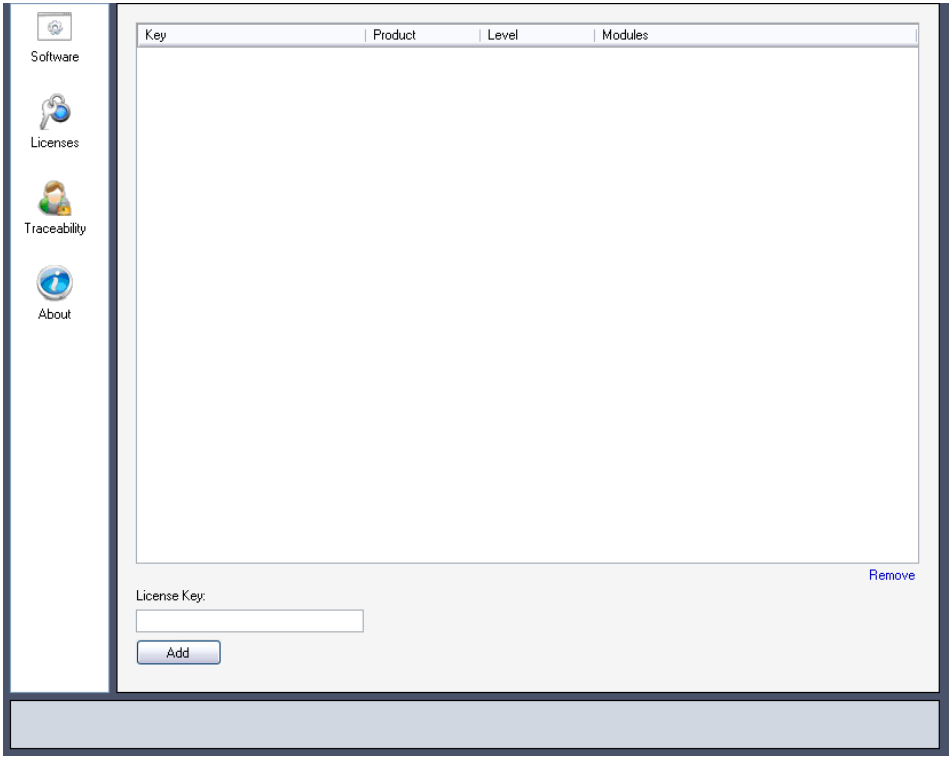
- No registry entries found for Qualification.

To rerun the Installation Qualification at a later date, navigate to Start\All programs\Agilent Lab Advisor\Installation Qualification and start the program.

When you close the IQ tool, the installation is complete.



If the **Enter License** check box was marked in the installation wizard, the software starts and automatically navigates to the Configuration\License screen, where you can enter your the license keys.



Server Installation

You can install Lab Advisor on a Windows Server 2008 server and make it available for use on client systems.

1. Install Lab Advisor on the Windows Server 2008 server as described in "Hard drive installation" on page 13.
2. Install the role **Remote Desktop Services** on the Windows Server 2008 server.
3. Publish the Lab Advisor installation on the Windows Server 2008 server.
4. Create an RDP (Remote Desktop Protocol) file for the Lab Advisor installation.
5. Distribute the RDP file to all client systems.

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 ..\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.

Updating Lab Advisor

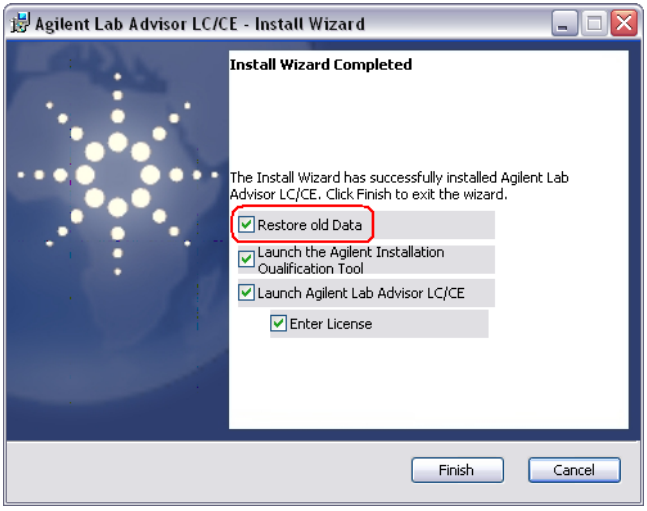
A fast update process has been developed to update the Agilent Lab Advisor software to a new revision. The fast update process uses .DLA files, and is launched by double-clicking the file itself. An update using the fast update process requires files specific to the update required. The file name carries the name of the origin and the destination revisions, and must be selected accordingly. For example, to update from Lab Advisor B.02.01 [012} to B.02.02 [002], double-click the following .DLA file:

```
LA_B.02.01[028]_B.02.02[042].dla
```

The fast update using .DLA files cannot be used to update portable installations of the software. To upgrade these installations, the upgraded software of a hard drive installation needs to be copied to the portable media. It is highly recommended that you rename the old application folder before copying the updated software folder. After finishing the copy of the application folder, the data folder can be copied from the “old” application folder.

Migrating from Lab Advisor B.01.xx

It is possible to migrate data and licenses from B.01.xx installations to B.02.xx. To do this, the B.01.xx has to be uninstalled, since the uninstallation process creates a data repository that can be used by the B.02.xx installer. To access the old data, mark the **Restore old Data** check box during the installation process.



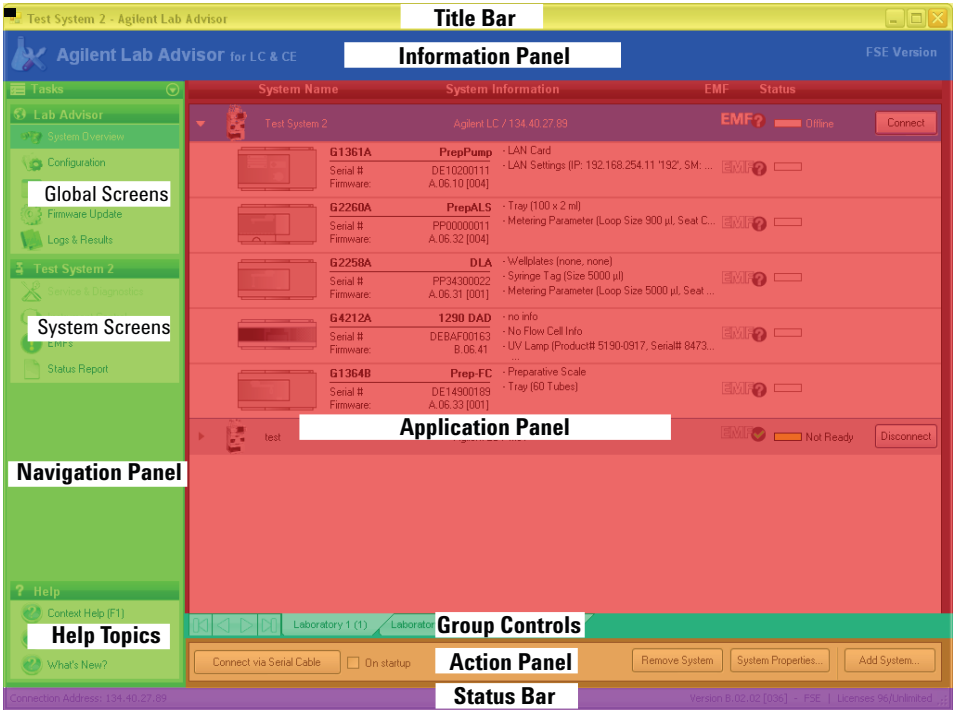
If B.01.xx is uninstalled after the installation of the B.02.xx, then the restore can be activated by navigating to the application folder, typically ..\Program Files\Agilent Technologies\Lab Advisor and double-clicking the Agilent.InstrDiag.DataMigration.exe program.

3 Using Lab Advisor

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

Navigation

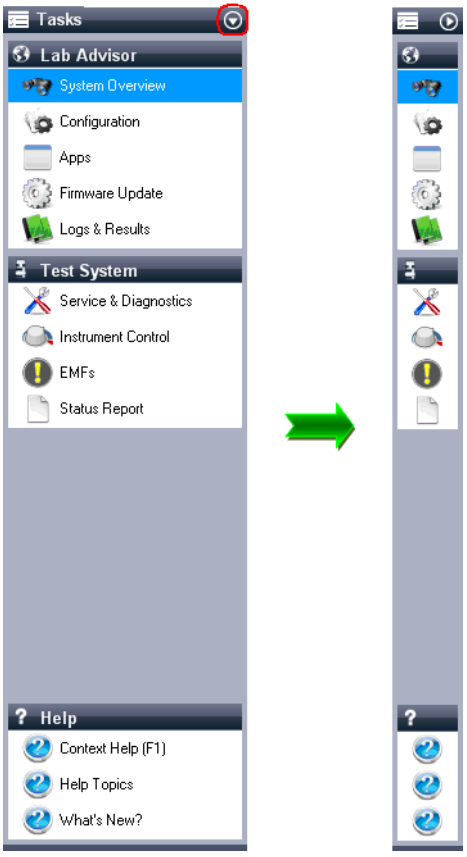
The Lab Advisor User Interface is divided into six main areas. The content of these areas changes depending on the screen selected in the Agilent Lab Advisor software.



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



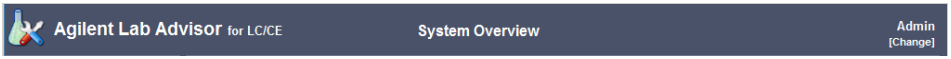
The primary navigation between the different screens of the Lab Advisor software is done in the Navigation Panel. The Navigation Panel consists of three areas:

- 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.

- 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

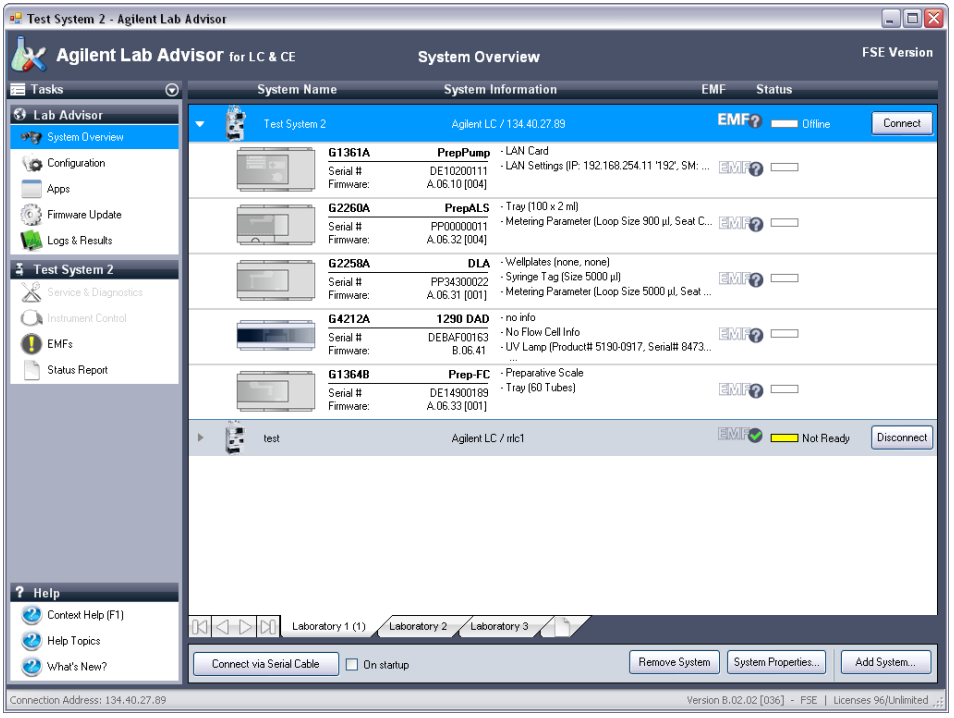
Additional buttons or actions that are applicable to the selected screen may be displayed in the Action Panel. Such controls are applicable to the entire selected screen; buttons or actions that are applicable to individual items within the screen are displayed in the screen itself.

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

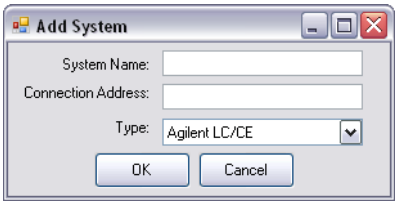
The System Overview screen gives a fast overview of the state of all configured and connected systems. The System Overview is also the main selection screen for the System Tasks.



Adding a new system

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

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



2 In the **Add System** dialog box, enter a name for the system in the **System Name** field and the connection details in the **Connection Address** field.

NOTE The connection details can be an IP address, the host name or, if you are connecting using a serial cable, the COM port.

3 Click the **Type** down-arrow and select the type of system you are adding from the list.

4 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.

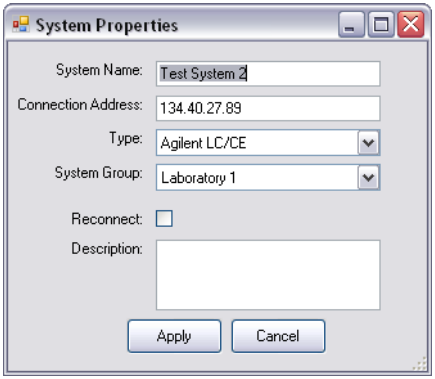
1 Click on the system in the **System Overview** screen to select it.

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 36.

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 31).

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

In the System Overview, 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).

1 Connect the serial cable between the system and the PC (a USB-to-Serial adapter, p/n 8121-1013, might be necessary). The serial cable should be connected to the module that is providing the most data, usually the detector.

2 Click **Connect via Serial Cable** on the Action Panel.

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

Lab Advisor can also be setup to do this automatically on startup by marking the **On startup** check box in the Action Panel.

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 Software

The **Software** 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).

Import/Export Data

To distribute configured systems and their corresponding data, it is possible to export data from one Lab Advisor installation and import it into other installations. This feature can also be used as a backup solution, where the exported .ZIP file is stored in a safe location.

Tracing

If unexpected behavior is observed from the Lab Advisor software, a trace file can be generated to help the Agilent Technologies technicians locate the problem.

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 B.02.02 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 26) 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 35.

Table 4 Lab Advisor Licenses

Product Number	Description	HW Modules	Replaces
M8550A	Agilent Lab Advisor Advanced	10	G4800AA, G4809AA
M8551A	5 add-on HW modules*	5	G4801AA
M8552A	25 add-on HW modules*	25	G4802AA
M8553A	50 add-on HW modules*	50	G4803AA
M8554A	100 add-on HW modules*	100	*New*

Table 4 Lab Advisor Licenses

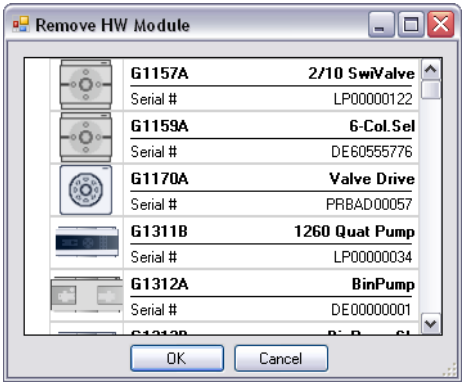
Product Number	Description	HW Modules	Replaces
M8555A	Agilent Lab Advisor Basic	10	Agilent Instrument Utilities LC/CE

* Requires M8550A installed

Any combination of the listed Product Numbers 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.

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.

Traceability

The **Traceability** feature of the software logs the use of Lab Advisor and keeps track of which user did what procedure and when. This information is written into the **Logs & Results** and is included in the printed results. If the **Data Sharing** feature is used, the traceability data is also uploaded.

Traceability Level

Lab Advisor offers three levels of traceability. Change of traceability level requires administrator rights. For the initial setting, the user *Admin* is set up using the password *Admin*. After the first login, this password should be changed to prevent unauthorized access.

The default level is **No Traceability**, which allows any user to access all parts of the Lab Advisor software, depending on Licenses. At this level, no user names are added to **Logs & Results** or printouts.

Medium Traceability requires that the user be selected from a drop-down list. No password is required, and users can register and enable themselves. The selected user name is added to the printouts and **Logs & Results**.

Full Traceability requires that the user logs in with a unique password. Users must be granted access by an Administrator before they can access the Lab Advisor software.

Setting Up a New User

To enable the Lab Advisor to print the user names in the reports and **Log & Results**, the users need to be set up. This is done in the **Traceability** tab of the **Configuration** screen.

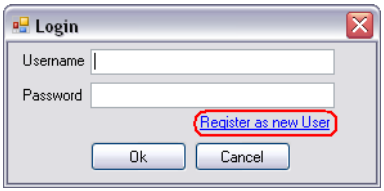
1 Click **Add** at the bottom right of the **Traceability** screen.

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

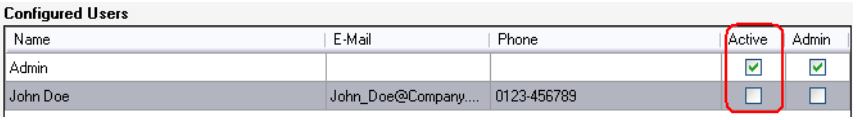
2 Enter the user name as it will be printed on reports, and optionally the user's email address and telephone number.

This information will be included in the **User** section of the **Status Report**.

Alternatively, a new user can be added by clicking **Register as new User** in the **Login** box:



If **Full Traceability** is active, an Administrator must activate the user before the user can use Lab Advisor:

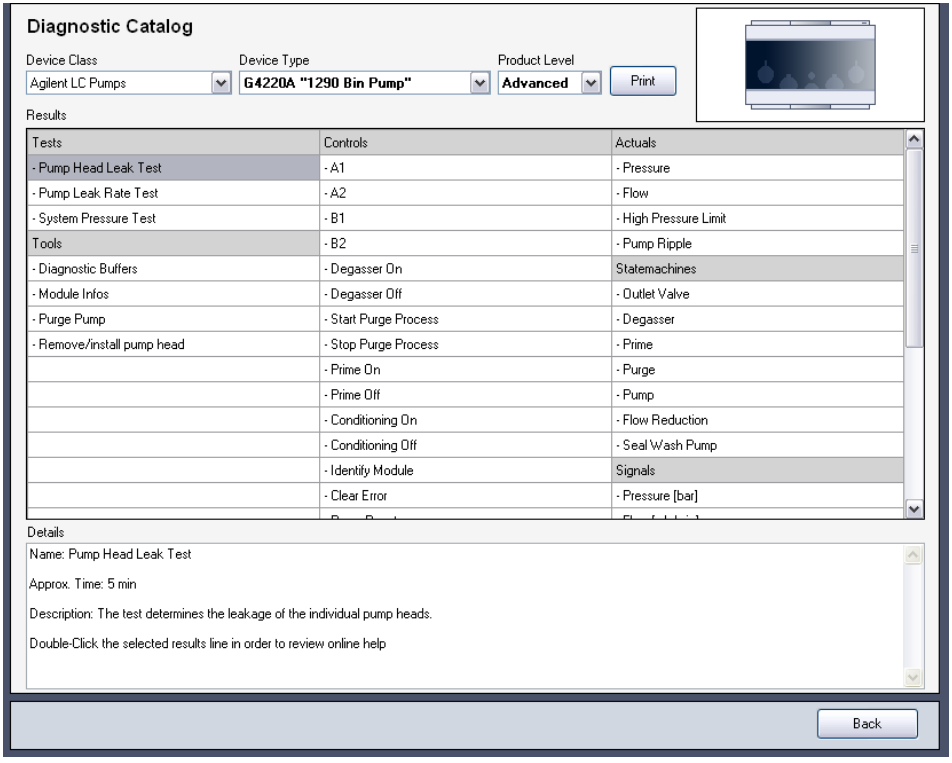


Apps

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

Diagnostic Catalog

Diagnostic Catalog



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**.

Data Sharing

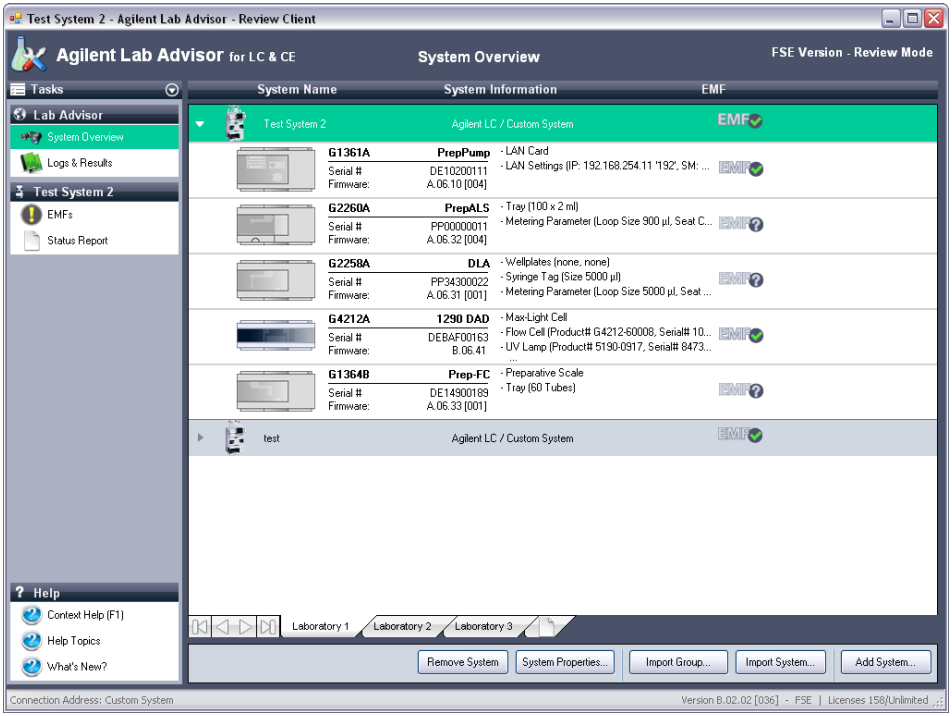
The **Data Sharing** feature of Lab Advisor allows multiple Lab Advisor installations to upload and synchronize the collected instrument information and data to an upload folder. When activating the synchronization, all data and information for the systems and devices configured in the Lab Advisor installation are uploaded to a specified upload folder. If data and information for these systems and devices has already been uploaded to the upload folder, the uploaded data is merged with the existing data. Additionally, the delta between the two data sets is downloaded to the Lab Advisor installation to complement the data. This ensures that all participating Lab Advisor installations connecting to specific systems and devices have all data available regardless of which installation generated the data. The Lab Advisor installation receives data only from systems and devices configured in that installation. No other data is downloaded.

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** app. 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 the number of licenses corresponding to the number of modules hosted on the upload share. Deleting a system from the **System Overview** will not free usable licenses. The number of licenses entered in the normal Lab Advisor installation is reused in the Review Client, so that if you have a 10-module license installed, you will only be able to start the Review Client if there are less than 10 modules uploaded to the upload share.



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.

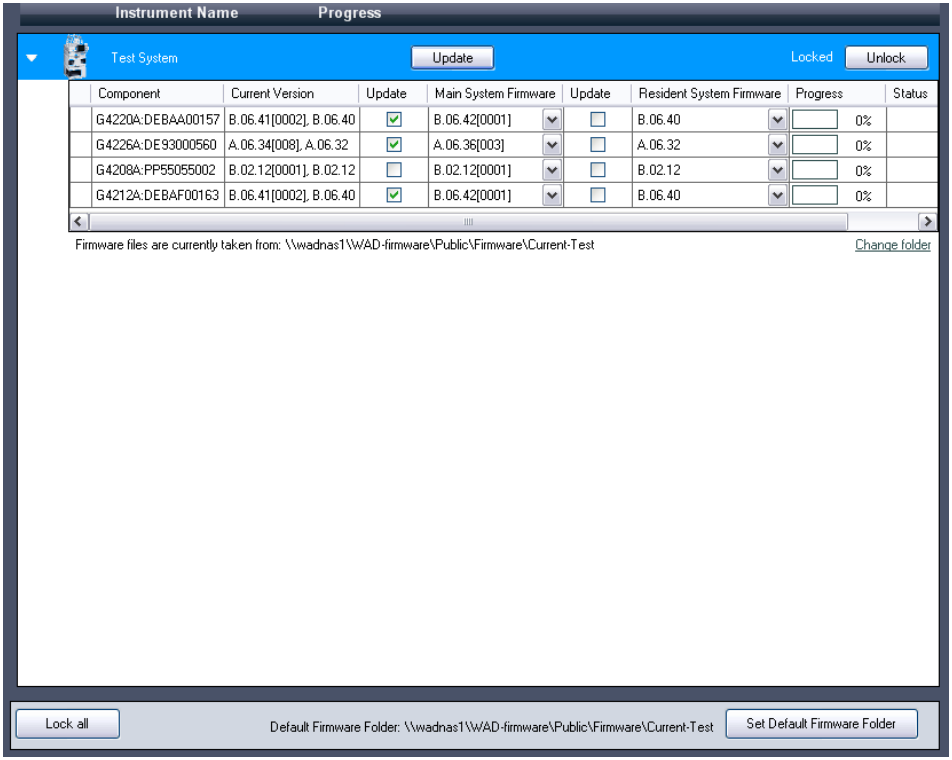
In each case, the installation starting the Review Client needs enough licenses for all uploaded modules.

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.

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.



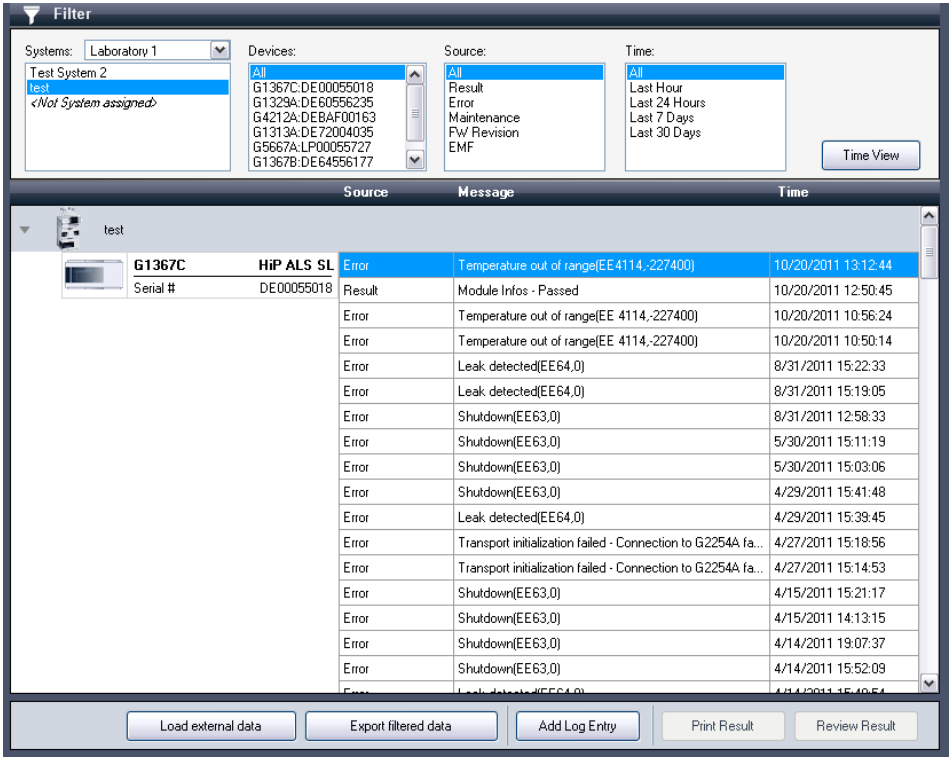
Logs and Results

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

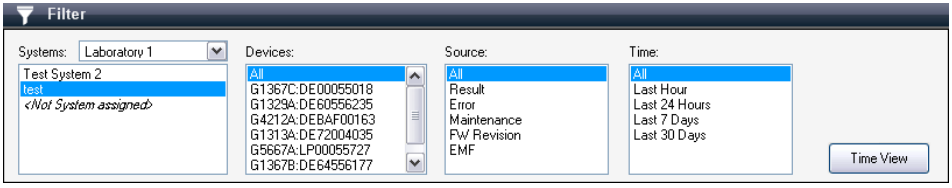
The **Logs & Results** data includes:

- 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.

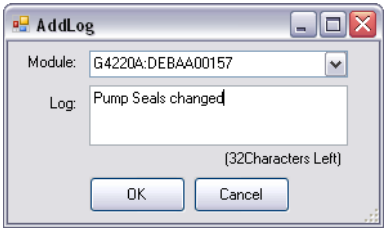


For easy overview, you can filter the data by **Instruments**, **Devices**, **Source** or **Time**. Multiple selections are supported for **Devices** and **Source**, and can be selected by keeping **Ctrl** pressed while clicking the data required in the filter.



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 type a log entry to the device, which is stored on the device main board. The information written to the device is limited to 50 characters; this is typically maintenance log data.

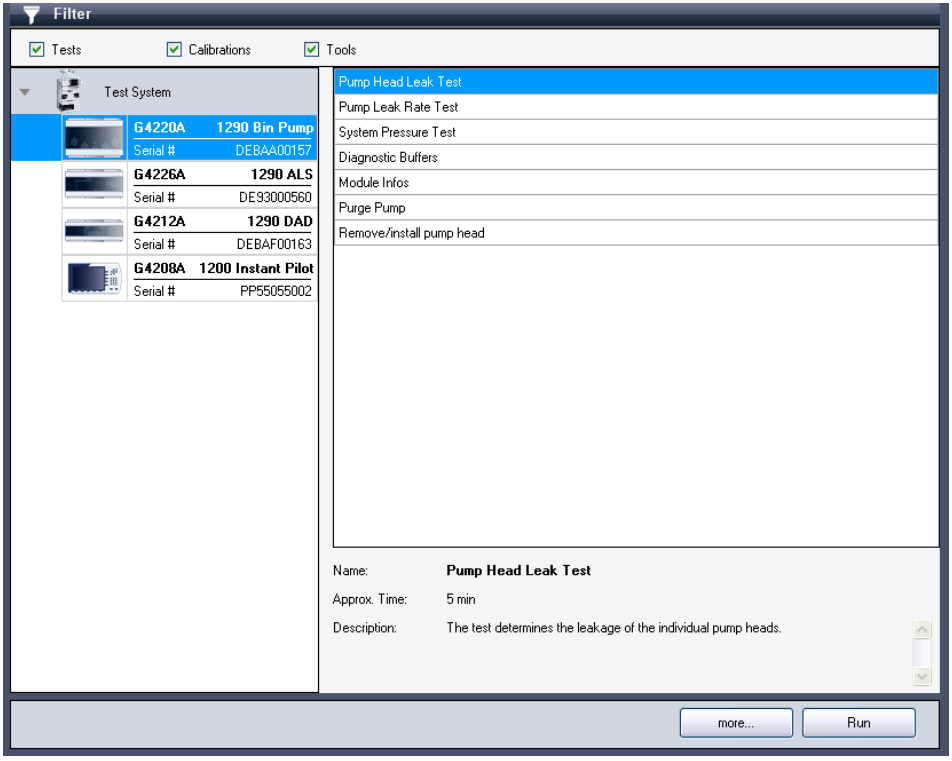


The data filtered by the built-in filter can be exported in ZIP format to enable it to be distributed. This is typically helpful if remote engineers need to assess data from the system. Clicking **Load external data** allows you to navigate to the storage location of the ZIP file and load the exported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

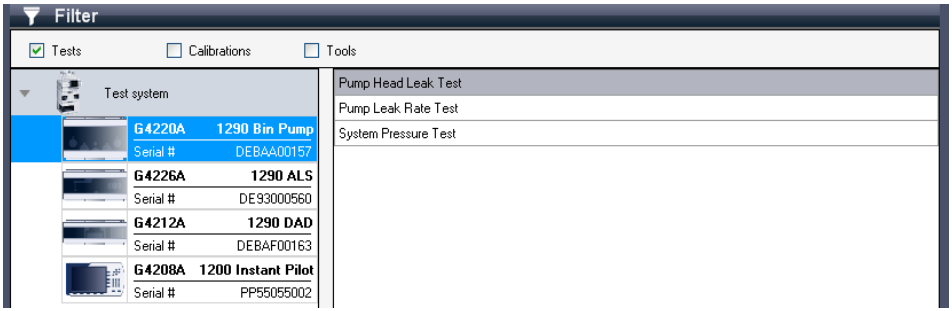
NOTE You can also use **Load external data** to load LRS files.

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.



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



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.

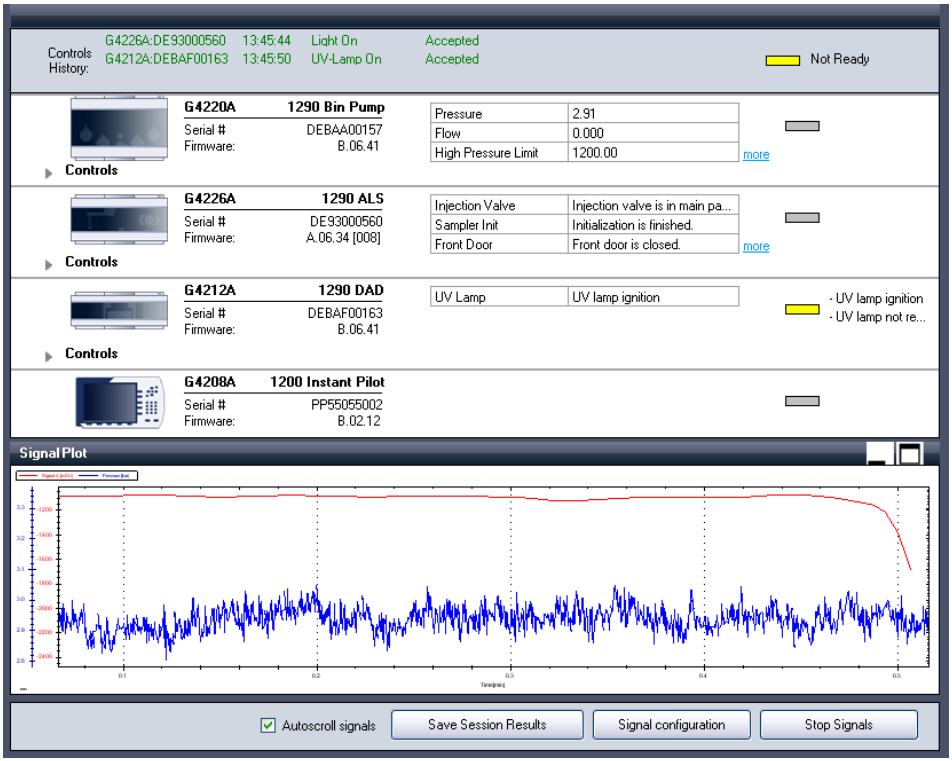
Tools

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

Instrument Control

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.

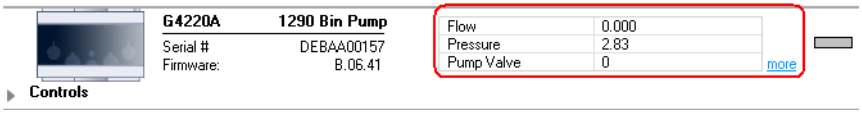
Instrument Control in the Basic version provides only limited functionality, whereas the Advanced version provides a full set of controls and a freely configurable Signal Plot.



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.

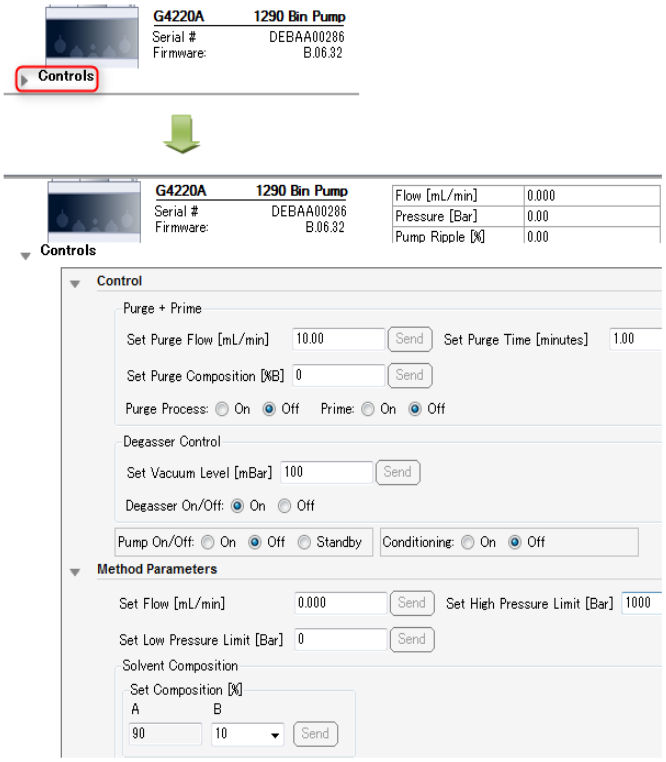
Actual Status Information

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.



Controls

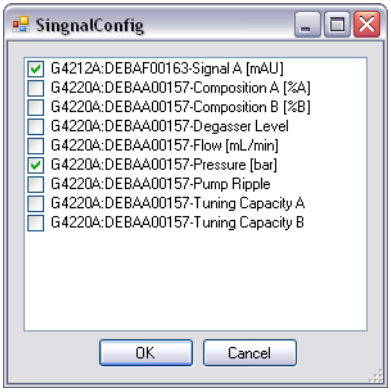
When the **Controls** section is expanded, a complete set of buttons becomes available providing extensive control of the device. This includes setpoints, controls, special commands and module information. When the buttons are clicked, a reply for the action (reply accepted or reply error) is displayed 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**.



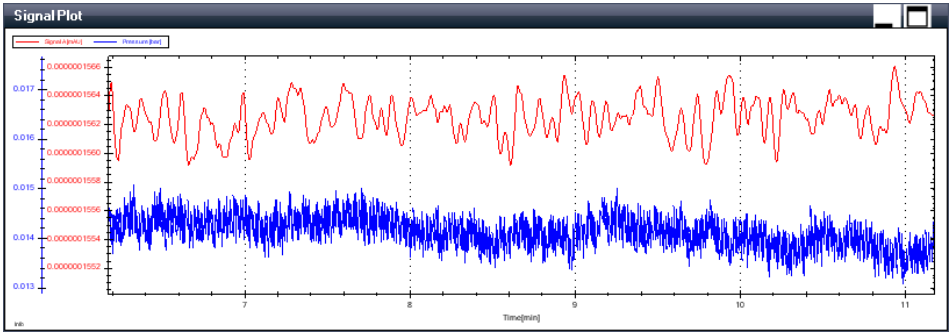
Signal Plot

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.

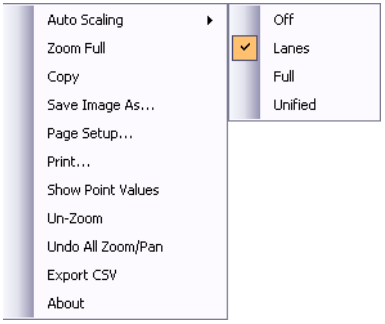
The Signals that you want to monitor are set up by clicking **Signal Configuration** in the Action Panel. The **Signal Config** dialog box that is displayed contains all available signals for the system. To select a signal, mark its check box and click **OK**.



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.

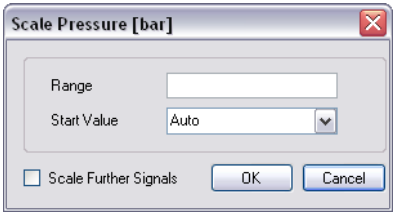


Other scaling parameters can be selected by right-clicking the signal window and selecting the **Auto Scaling** from the context menu. The available scaling options are presented in the submenu.



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.

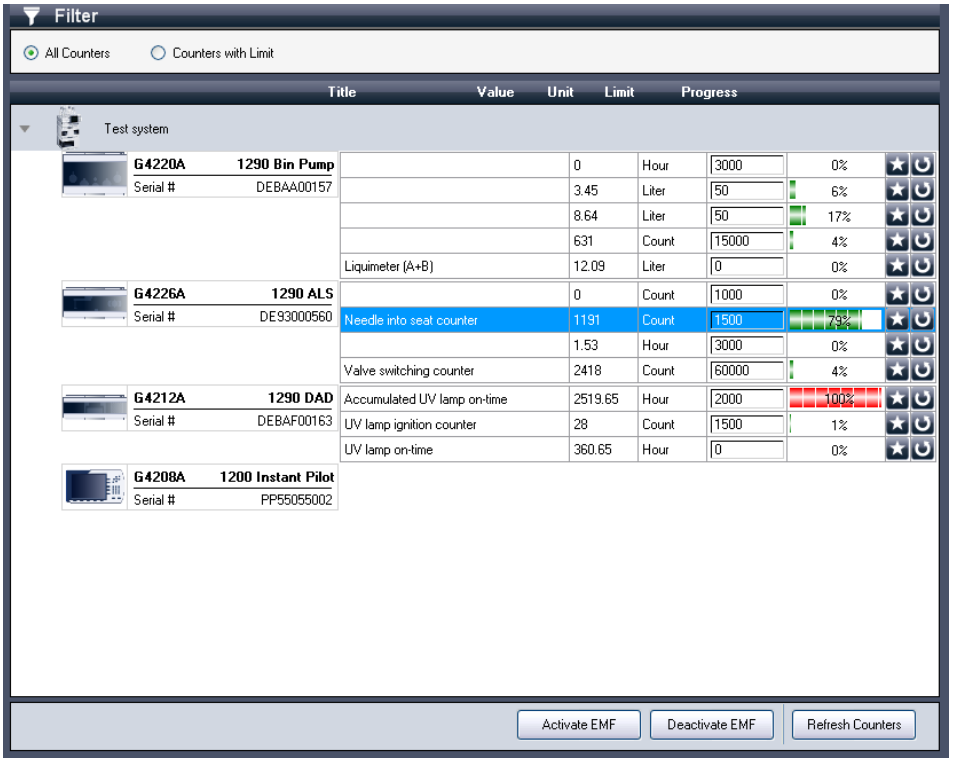
Alternatively, you can specify a fixed scale window. Double-click the scale to open the **Scale** dialog box and enter the scale range and/or the lower starting value of the scale.



EMFs

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.



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

Status Report

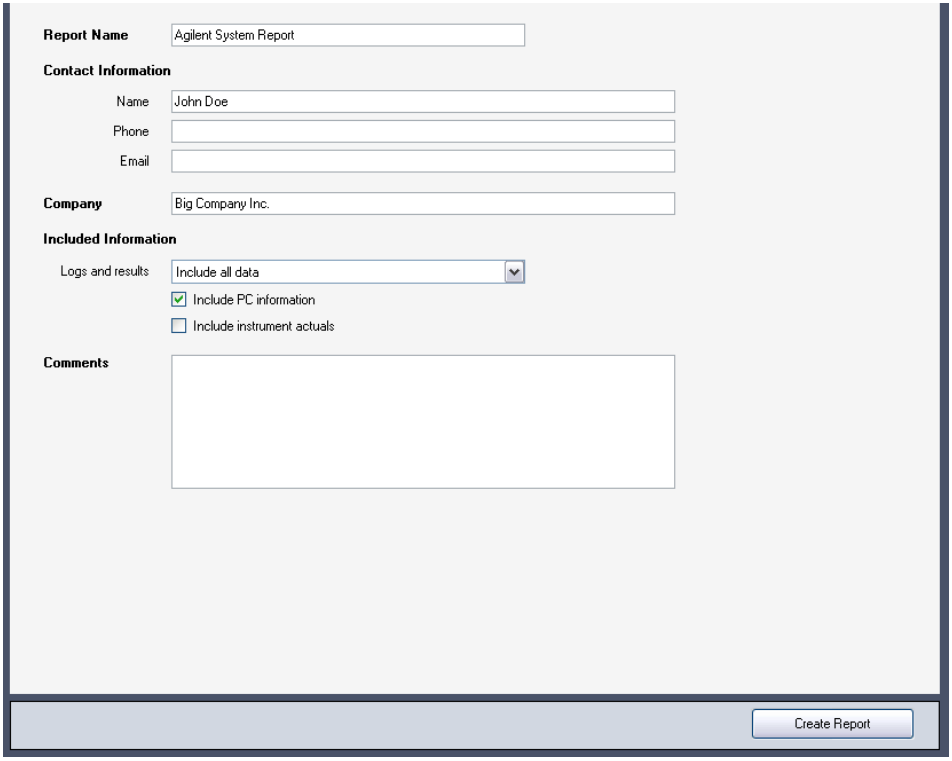
The Lab Advisor **Status Report** screen provides a system-wide overview of the devices in the system.

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

When you start the **Status Report** screen, you can include initial information for Report Name, Contact Information, Company, Logs and results, PC information and Instrument Actuals.

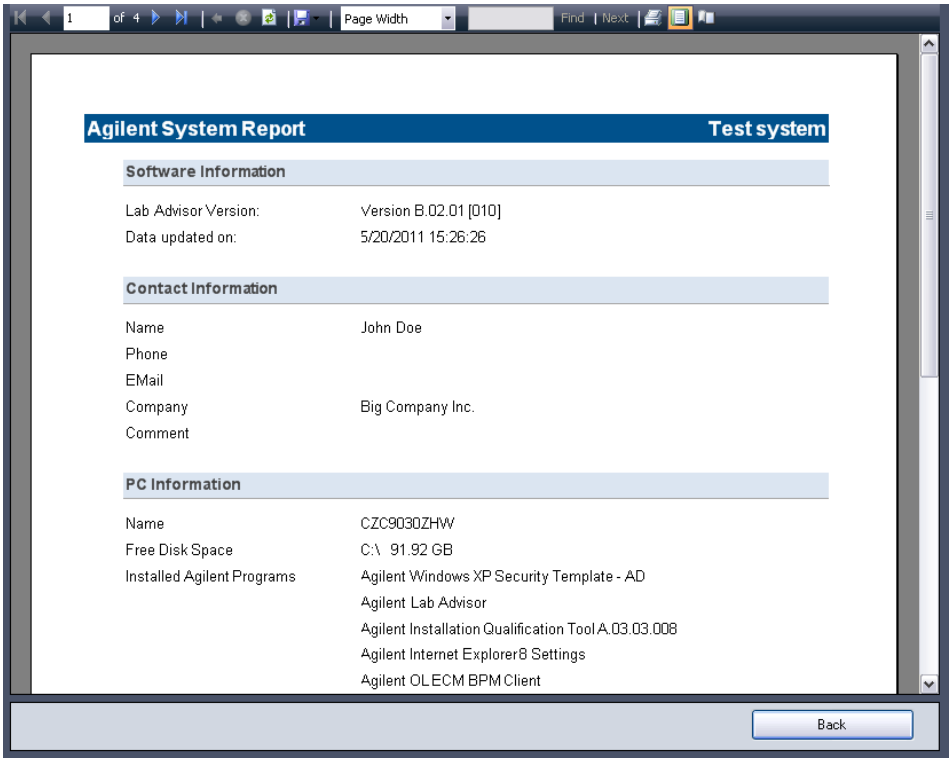


Contact and Company information can be helpful for easy and precise identification if the report is sent to a Remote engineer during troubleshooting.

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.


1
of 4
Page Width
Find
Next
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

Index

O

P

R

S

T

U

V

www.agilent.com

In This Book

This manual describes the two versions of Lab Advisor B.02.02: Lab Advisor Basic and Lab Advisor Advanced.

The manual contains the following information:

- Lab Advisor B.02.02 Overview
- Installation
- Using Lab Advisor

Printed in Germany
11/2011

M8550-90001

Agilent Technologies