

## **Agilent OpenLAB CDS**

Workstation Plus (with Content Management)



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#### **Manual Part Number**

M8410-90002

#### Edition

06/2017

Printed in Germany

Agilent Technologies Hewlett-Packard-Strasse 8 76337 Waldbronn

Software Revision

This guide is valid for revision 2.2 of Agilent OpenLAB CDS.

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## In this Guide ...

This document provides instructions for installation, configuration, administration, and maintenance of an OpenLAB CDS Workstation with Content Management (OpenLAB CDS Workstation Software Plus). It includes information on the license generation with SubscribeNet.

 Table 1
 Terms and abbreviations used in this document

Term	Description
Content Management	Database to manage your analytical data. The database is provided as a component of OpenLAB Server. Always used in Client/Server systems, optional for Workstations.
AIC	Agilent Instrument Controller
Control Panel	Control Panel for Agilent OpenLAB software
Microsoft Control Panel	Part of the Microsoft Windows operating system
Shared Services	Set of administrative services that control, for example, the security policy and the central configuration of OpenLAB CDS. Shared services are accessed via the Control Panel.

#### 1 Install an OpenLAB CDS Workstation with Content Management

This chapter describes the installation of the software.

#### 2 Post Installation Tasks

This chapter describes tasks that are relevant after finishing the installation.

#### 3 Licensing

This chapter provides basic information on licensing. It describes how you generate a license file with SubscribeNet and install the license in the Control Panel.

#### 4 Configure OpenLAB CDS Workstation with Content Management

This chapter describes the initial configuration steps after installing the software. For more details, refer to the Control Panel section in OpenLAB Help & Learning.

#### **5 Optional Procedures**

This chapter describes the installation or upgrade of additional instrument driver software. It also contains information on the installation of OpenLAB Help and Learning only, and on performance improvement on offline machines.

#### 6 About the OpenLAB CDS Software

This chapter contains an overview of the basic software features.

#### 7 System Setup and Maintenance

This chapter contains information on the Control Panel and Shared Services Maintenance. In addition, it describes various maintenance procedures.

#### 8 Upgrade OpenLAB CDS

This chapter describes the upgrade of the software.

#### 9 Uninstall OpenLAB CDS With All of its Components

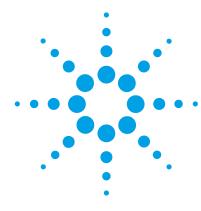
This chapter describes the uninstallation of the software.

## **Contents**

1	Install an OpenLAB CDS Workstation with Content Management	7
	Installation Workflow Overview 8 Before you Begin 9 Run the OpenLAB Installer 10 Silent Installation 22 Install or Upgrade Driver Software 25	
2	Post Installation Tasks 27	
	Set Account to Enable Automatic Printing 28 Configure the Antivirus Program 29 Configure Internet Explorer for OpenLAB Help and Learning 32 Disable Windows 10 Updates 32	
3	Licensing 33	
	About OpenLAB CDS Licensing 34 Get a License 36 Install Your License 40	
4	Configure OpenLAB CDS Workstation with Content Management	41
	Configure Authentication 42 Configure Security Policy 43 Configure users, roles, and privileges 44 Configure Initial Project 48 Configure Initial Instrument 48 Other settings in the Control Panel 49	
5	Optional Procedures 51	
	Install OpenLAB Help and Learning Only 52 Improve Performance on Offline Machines 53	

#### **Contents**

6	About the OpenLAB CDS Software 55  Software Architecture 56 21 CFR Part 11 Compliance 59  Customization 61	
7	System Setup and Maintenance 63 Control Panel 64	
	Shared Services Maintenance 69 Maintenance Procedures 70	
8	Upgrade OpenLAB CDS 91 License Upgrade 92 Upgrade OpenLAB CDS Workstation to Latest Version	9
9	Uninstall OpenLAB CDS With All of its Components Uninstall OpenLAB CDS 96 Uninstall OpenLAB Help and Learning Only 97	95
10	Appendix 103  Privileges in the Control Panel 104 Sales and Support Assistance 113	



# Install an OpenLAB CDS Workstation with Content Management

```
Installation Workflow Overview 8

Before you Begin 9

Run the OpenLAB Installer 10

Silent Installation 22

Export Properties File 22

Run Installation 23

Parameters and Return Codes 24

Logging and Tracing 24

Install or Upgrade Driver Software 25

Register driver software with OpenLAB CDS 26
```

This chapter describes the installation of the software.

#### Installation Workflow Overview

## **Prepare**

- Run System Configuration Checker from the OpenLAB CDS Installer to ensure that all requirements are met
- Check OpenLAB CDS Requirements Guide for details

If you plan scripted installations, see "Silent Installation" on page 22.



#### Install

- 1. Run Installation wizard, incl. software verification
- 2. Post Installation:
  Set Account to Enable Automatic Printing
- 3. Optional: Improve performance on offline machines
- See "Install an OpenLAB CDS Workstation with Content Management" on page 7
- See "Post Installation Tasks" on page 27
- See "Optional Procedures" on page 51



#### **Get Licenses**

- 1. Obtain licenses via SubscribeNet
- 2. Install your license

See "Licensing" on page 33



## Configure

- Authentication
- · Projects, incl. audit trail settings
- Instruments

See "Configure OpenLAB CDS
Workstation with Content
Management" on page 41.
All configuration tasks are performed in
the administrative and management

center of OpenLAB, the Control Panel.
For more details, refer to the Control
Panel section in OpenLAB Help &
Learning.

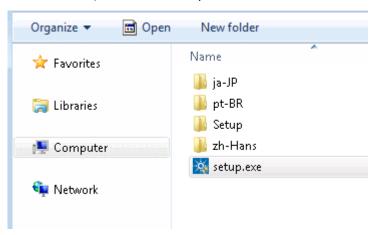
## **Before you Begin**

- 1 Decide on a computer name. Do not use underscores. Installation is not possible if the computer name contains an underscore.
- 2 Install all required hardware, including any cables, instrument detectors, and communication cables. GPIB interfaces may be needed for Waters instruments.
- **3** Run the **System Configuration Checker** from the OpenLAB CDS Installer to make sure that the PC matches all requirements.
  - For details, refer to the OpenLAB CDS Requirements Guide.
- **4** Update Adobe Reader 11 to the most recent version.
  - The OpenLAB CDS installation medium contains the initial version of Adobe Reader 11 (version 11.0.0). To benefit from the latest software improvements, especially related to the software stability, Adobe Reader 11 must be updated to the most recent version (11.x.x).
- **5** Switch off the Adobe Updater.
  - a In Adobe Reader, click Edit > Preferences.
  - b On the Updater page, select Do not download or install updates automatically. If you need to update Adobe Reader, update it manually when the machine is not busy.
- **6** If .NET 4.5.1 or higher is not installed on your system, its installation will automatically be triggered by the installation wizard. However, this may require a system reboot. To avoid the system reboot during installation, install .NET in advance.
- **7** Prepare an account with administrative privileges to run the installation.
- 8 If you use Trend Micro $^{TM}$  as an antivirus software, turn off Web Reputation to allow the installation of all components.
- **9** To allow the successful installation and activation of all components, make sure that the LAN-cable is connected and a network is available. A local network is sufficient. If you install the workstation without a network cable, the activation of the Content Management component will fail, and trying to run the database will return an error.
- **10** If you plan to upgrade from a previous version of OpenLAB CDS please refer to "Upgrade OpenLAB CDS" on page 91.

## Run the OpenLAB Installer

This section describes a new installation of the software. For information on upgrading an existing OpenLAB CDS installation, see "Upgrade OpenLAB CDS" on page 91.

1 Insert the USB media, right-click the setup.exe file, and run it as administrator. Alternatively, copy the content of the USB media to a network share, and run the setup.exe file from there.



NOTE

If User Account Control (UAC) is switched on, this step requires active confirmation to continue.

**2** The OpenLAB Installer checks if the Microsoft .NET Framework 3.5 is available. If it is not, the installer automatically tries to install and activate it.

NOTE

If .NET 3.5 cannot be enabled, for example, because the computer has no internet access, install .NET 3.5 from the Windows installation media (see Method 3 under <a href="https://support.microsoft.com/en-us/kb/2734782">https://support.microsoft.com/en-us/kb/2734782</a>). If you do not have installation media, create them as described under

http://windows.microsoft.com/en-US/windows-8/create-reset-refresh-media?woldogcb=0.

3 On the start screen, select OpenLAB CDS, and click OK.



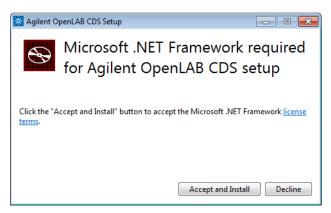
4 Click Install/Upgrade.



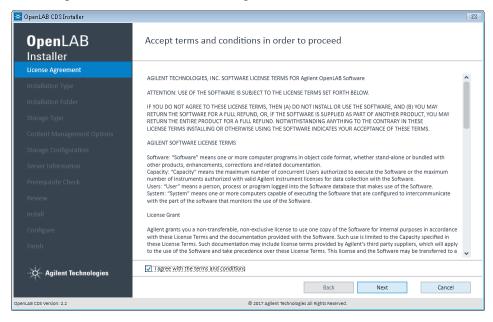
#### 1 Install an OpenLAB CDS Workstation with Content Management

Run the OpenLAB Installer

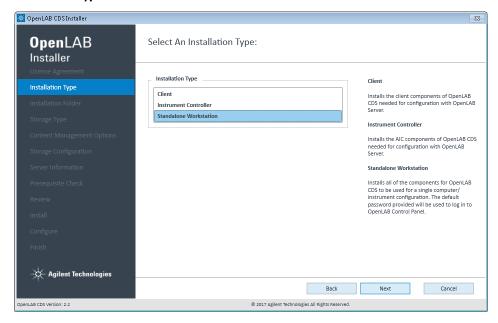
**5** The OpenLAB Installer checks if correct version of Microsoft .NET Framework is available. If it is not, you will be prompted to install it.



6 License Agreement: Read and confirm Agilent terms and conditions.



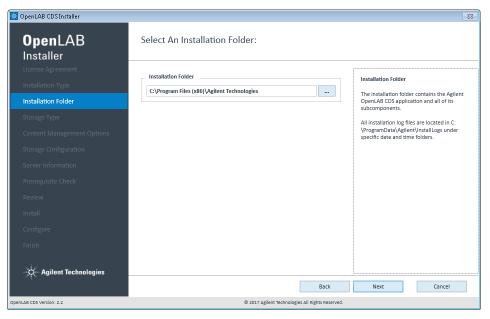
#### 7 Installation Type: Select Standalone Workstation.



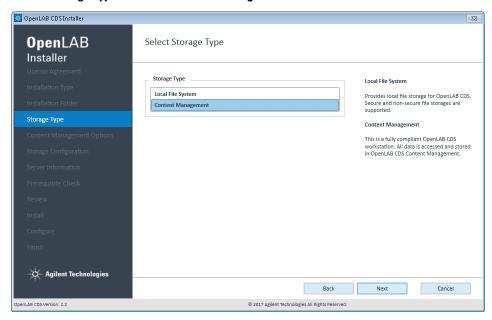
#### 1 Install an OpenLAB CDS Workstation with Content Management

Run the OpenLAB Installer

**8** Installation Folder: Provide an installation folder for OpenLAB CDS. Do not use the root folder of any drive.



9 Select Storage Type: Choose Content Management.



#### 1 Install an OpenLAB CDS Workstation with Content Management

Run the OpenLAB Installer

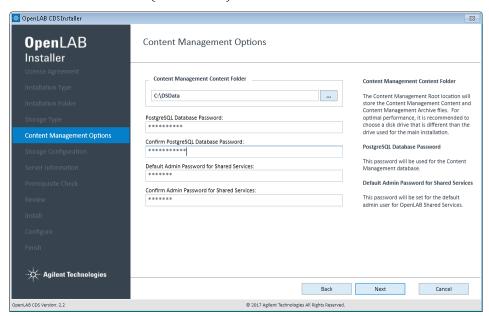
#### **10 Content Management Options:**

**Content Management Content Folder:** Provide a folder for the content and archive files.

We recommend using a disk drive different from the one used for the main installation. Do not use the root folder of any drive.

**PostgreSQL Database Password**: Password to log in directly to the database as administrator (user *admin*).

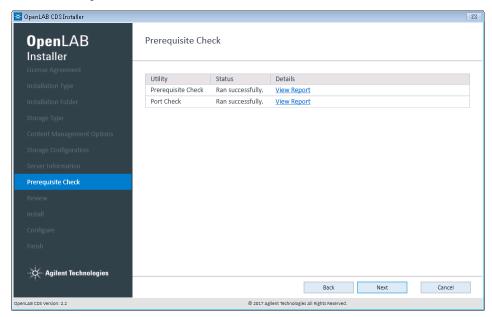
**Default Admin Password for Shared Services**: Password to log in to the Control Panel as administrator (user *admin*).



NOTE

Make sure to document the two passwords at a secure location.

**11 Prerequisite Check**: Mandatory settings in the operating system are checked<sup>1</sup>. The report is located in C:\ProgramData\Agilent\InstallLogs\<date and time>. Note that ProgramData is a hidden folder.



In case of errors, see the following hints:

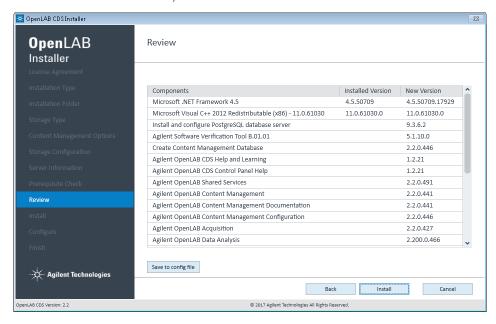
- Is the name of the installation folder still applicable?
- Is there enough space available on the hard disk? For details, refer to the *OpenLAB CDS Requirements Guide* (OpenLABCDSRequirements.pdf).
- Is one of the required ports blocked? For example, if port 80 is blocked by the **World Wide Web Publishing** service, free it by stopping the service.

To run the site preparation tool separately before installing: Start the OpenLAB Installer, select the *Planning* page, and click *System Configuration Checker*.

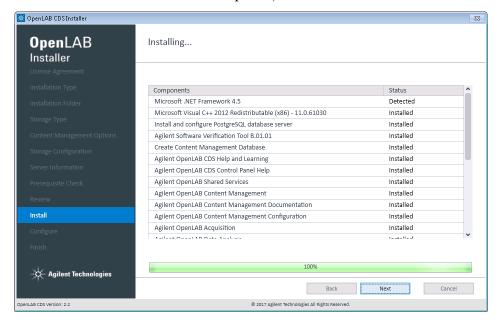
#### 1 Install an OpenLAB CDS Workstation with Content Management

Run the OpenLAB Installer

- **12 Review**: All components that will be installed are listed with their version numbers.
  - To save a properties file for a future silent installation (see "Silent Installation" on page 22), click Save to config File.
  - · To start the installation, click Install.



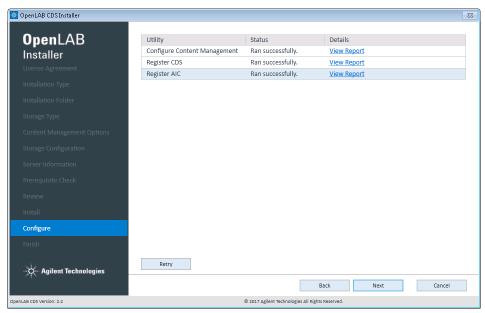
#### 13 Install: After the installation has completed, click Next.



#### 1 Install an OpenLAB CDS Workstation with Content Management

Run the OpenLAB Installer

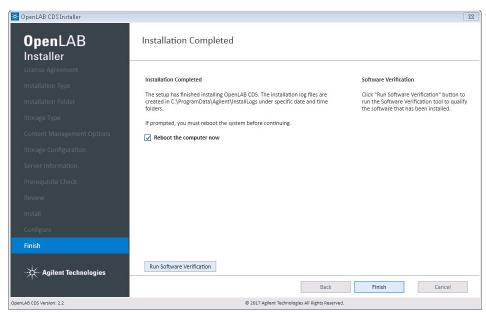
**14 Configure**: Configuration tools run in the background to configure Content Management. This takes about 10 min. When finished, click **Next**.



In case of registration problems, a potential conflict may be a blocked firewall port. For example, check if port 80 is open. If it is blocked by the **World Wide Web Publishing** service, stop this service.

#### 15 Finish:

- To confirm everything has been installed correctly, click Run Software Verification<sup>1</sup>.
- To complete the installation, select the Reboot the computer now check box, and click Finish.



**16** In case of errors during the installation: Check the installation log files under C:\ProgramData\Agilent\InstallLogs\[date and time]. Note that ProgramData is a hidden folder.

The installation includes a set of standard instrument drivers. If you need other instrument driver software, install it in a separate step. See "Install or Upgrade Driver Software" on page 25.

To start the tool separately at a later point in time, select Start > Agilent Technologies > Software Verification Tool.

## Silent Installation

OpenLAB CDS supports a command-line mode for installation, also referred to as *silent installation*. This mode supports installation, upgrade, repair, and uninstallation. You can execute silent installations either manually or as part of software management systems such as LANDesk or HP CM.

## **Export Properties File**

The OpenLAB Installer supports a feature to export the installation parameters into a properties file which you can then use for the silent installation.

- 1 Launch the OpenLAB Installer.
- **2** Follow the instructions of the wizard.
- **3** When you have reached the **Review** screen, click **Save to config file**. Save the file to a suitable location. The file will automatically be saved as a properties file.

You can now use the properties file for the silent installation.

#### **Run Installation**

#### **Prerequisites**

- You have prepared a properties file for silent installation. See "Export Properties File" on page 22.
- .Net Framework is present on your system.

If it is not present, it will automatically be installed. You must then manually select **Accept** to agree with the license agreement.

- 1 Copy the content of the USB media to a centralized folder.
- **2** Copy the properties file to the same directory as the CDSInstaller.exe.
- **3** Right-click the executable of the command prompt or Power shell prompt, and run it as administrator.
- **4** Navigate to the location where you have saved the installation files.

For example:  $C:\CDS$ 

**5** To start the installation, call CDSInstaller.exe with the following syntax:

CDSInstaller.exe -s -c <PropertiesFile>

For example:

CDSInstaller.exe -s -c Silent.Properties

With this command, you start the OpenLAB Installer without a user interface.

**6** Wait about 5 minutes while the installation takes place. To check the process of installation, look at the log files under %ProgramData%\Agilent\ lnstallLogs.

If a required installable is missing, the OpenLAB Installer will create an entry in a log file, and, depending on the component type, will continue or roll back the installation. An error code will be returned in such scenarios.

**7** After the installation has finished, reboot the PC.

#### **Parameters and Return Codes**

#### **Parameters**

Use the following parameters when calling CDSInstaller.exe in command-line mode:

- -S
  - Silent mode no user interface will be shown.
- -(

Configuration file - a properties file contains all parameters.

<PropertiesFile>

The properties file contains all required inputs for the installer. Replace <PropertiesFile> with the correct file path and file name. The file must be located in the same directory as the CDSInstaller.exe.

#### **Return Codes**

After installation, uninstallation, upgrade, or repair in the command-line mode, the system will return a number code which is explained below.

Table 2 Return codes

Error/return code	Return value
Success. You can see all of the information in the log file.	0
Failure. Verify against the log file to see what failed.	any other number

## **Logging and Tracing**

All exceptions, errors and information messages are logged under C:\
ProgramData\Agilent\InstallLogs\<date and time>. Note that ProgramData is a hidden folder.

## **Install or Upgrade Driver Software**

The following driver software packages are automatically installed and configured with OpenLAB CDS. For details, see chapter *Instrument Connections* in the *OpenLAB CDS Requirements Guide*.

- Agilent GC & GC/MS
- Agilent LC & LC/MS
- · Agilent A/D
- Virtual Instruments

Other instrument driver software, add-on software, or upgrades to existing driver software, must be installed and configured manually. Instrument driver software and add-on software can be found on the installation media under Setup\Packages\Add-Ons.

The latest Agilent drivers are available in SubscribeNet. In the Product List, select OpenLAB Software > OpenLAB Agilent Instrument Drivers.

#### Install or upgrade driver software

- 1 Run the installer package, and follow the installation wizard.
  For details on the installation or upgrade procedures, refer to the respective driver documentation.
- 2 Register driver software with OpenLAB CDS.
  See "Register driver software with OpenLAB CDS" on page 26.

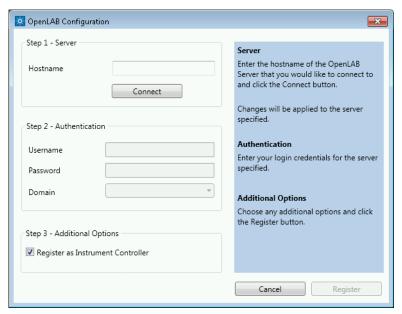
The **OpenLAB Configuration** will find all newly installed or updated instrument drivers and register them with the Shared Services. New instrument types will be available in the Control Panel.

## Register driver software with OpenLAB CDS

Register driver software with OpenLAB CDS

The following procedure must be carried out after installing drivers other than the ones listed above, and after upgrading any driver. With these steps you make the new drivers available in OpenLAB CDS.

- 1 In Windows, select Start > All Programs > Agilent Technologies > OpenLAB Configuration.
- 2 In the OpenLAB Configuration tool, enter one of the following strings as a server name:
  - The IP address of the workstation, starting with 192.x.x.x
  - The IP address of the localhost, 127.0.0.1
  - The computer name



- **3** Click **Connect** to enable the input boxes for the user credentials.
- 4 Under Step 2 Authentication, enter your user credentials.
- 5 Make sure the **Register as Instrument Controller** check box is cleared.
- 6 Click Register.



Disable Windows 10 Updates

This chapter describes tasks that are relevant after finishing the installation.

32

## **Set Account to Enable Automatic Printing**

OpenLAB CDS allows you to process your data already during the acquisition, without opening Data Analysis. During this automatic processing you can also generate reports and print them to printer or save them as files. Exporting the reports to a network share is a typical way how they are sent to an external system (for example, LIMS).

To access a printer, and also to access a network share, Data Analysis must be started from an account with the required configuration and privileges.

- 1 Create a domain user or local user with access to the relevant printer and network share.
- **2** On the Workstation, add the new user to the local **Administrators** group.
- **3** Log in as the new user, and configure the relevant printer as this user's default printer.
- 4 Change the Agilent OpenLAB Instrument Service to run under this user.
  - **a** In the Windows command line, run **services.msc** as a user with administrative rights.
  - **b** In the Services window, right-click the Agilent OpenLAB Instrument Service, and select Properties.
  - c On the Log On tab, select This account, and enter the credentials of the new user.
- **5** Reboot the PC.

## **Configure the Antivirus Program**

- **1** Be sure to open the firewall ports listed in the Firewall Settings in the *OpenLAB CDS Requirements* guide.
- **2** For best performance, consider the following folder exclusions. These folders should only be scanned while the instruments are idle, and no data acquisition or data analysis takes place.
  - [C:\]DsData\DsArchive
  - [C:\]DsData\DsContent
  - [C:\]DsData\DsIndex
  - [C:\]Program Files (x86)\Agilent Technologies
  - [C:\]ProgramData\Agilent
  - [C:\]ProgramData\Agilent IPB Files
  - [C:\]ProgramData\Agilent Technologies
  - [C:\]ProgramData\ChromatographySystem
  - [C:\]ProgramData\Firebird
  - [C:\]ProgramData\IsolatedStorage

Refer to your specific antivirus software documentation on how to configure folder exclusions.

### Settings for Trend Micro $^{\text{TM}}$ antivirus software

OpenLAB CDS can be used with other antivirus programs as well. If you use Trend Micro $^{\rm TM}$ , the following settings are recommended to optimize system performance.

1 Web Reputation: Turn off to maximize performance.

The risk of turning off Web Reputation is that web traffic through browsing from the machine will not be checked.

Ensure that there is another URL/web scanner on the gateway level to protect the endpoint, or ensure that the endpoints have limited access to Internet. These production machines should not have access to Internet websites where most of the infections are coming from.

2 Real time scan: Add exclusions, and modify scan direction from Created/Modified/Retrieved to Created/Modified.

Exclusions ensure that the working directory of Agilent Technologies will not be scanned, thus improving performance.

The risk is that only files that are created and changed on this machine are scanned. Files that are just accessed will be bypassed. Dormant Files that got infected without being noticed at the time they were created or written to the machine will not be scanned.

Increase scheduled scan to daily to ensure all files on the machine are being checked for infections that are dormant or not moving.

3 Behavior Monitoring: Add below list of programs to Approved programs.

C:\Program Files (x86)\Agilent Technologies\...

- OpenLAB Acquisition\Agilent.OpenLAB.Acquisition.AcqInstrumentService.exe
- OpenLAB Acquisition\Agilent.OpenLAB.AcquisitionClient.exe
- OpenLAB Data Analysis\Bin\ Agilent.Chromatography.DataAnalysis.Processing.ProcessingServer.exe
- OpenLAB Data Analysis\Bin\ Agilent.Chromatography.DataAnalysis.UI.CustomCalculationDesigner.exe
- OpenLAB Data Analysis\Bin\Agilent.OpenLab.DataAnalysis.exe
- OpenLAB Data Analysis\Bin\Reporting\ Agilent.OpenLab.Reporting.RdIDescriptor.exe
- OpenLAB Data Analysis\Bin\Reporting\ Agilent.OpenLab.Reporting.RdIDescriptorContextMenu.exe

- OpenLAB Data Analysis\Bin\Reporting\ IntelligentReporting.RenderServiceHost.exe
- OpenLAB Data Analysis\Bin\Reporting\TemplateDocumentation.exe
- OpenLAB Services\Automation\AutomationServerHost.exe
- OpenLAB Services\Diagnostics\DiagnosticsToolsServiceHost.exe
- OpenLAB Services\Licensing\Flexera\Imadmin.exe
- OpenLAB Services\Licensing\Licensing.Service.Host.exe
- OpenLAB Services\Server\SharedServicesHost.exe
- OpenLAB Services\UI\Agilent.OpenLab.ControlPanel.exe

The risk is that if any of the excluded files get infected, it will not be detected. For example, trigger a schedule on a daily basis to cover these files.

**4 Realtime monitoring**: Add below folder to the exclusion list of Realtime Monitoring setting:

C:\Program Files (x86)\Agilent Technologies\

## Configure Internet Explorer for OpenLAB Help and Learning

If you use Google Chrome, no further settings are required.

If you use Internet Explorer as your default browser: Make the following settings to ensure that OpenLAB Help and Learning is opened without showing a confirmation prompt.

- 1 In Internet Explorer, click Tools > Internet Options.
- 2 Select the Advanced tab.
- 3 Under Security, select Allow active content to run in files on My Computer.
- **4** Confirm your settings.
- **5** Reboot the computer to make the settings effective.

## **Disable Windows 10 Updates**

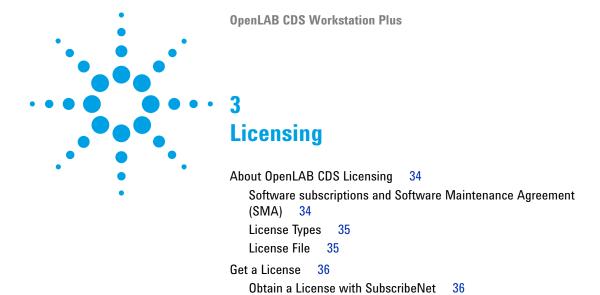
Your company's security policy may require that Windows updates not be automatically applied. Updates may need to be tested first, and then be distributed internally.

With Windows 10, automatic updates cannot be turned off in the Windows settings as in earlier Windows versions. Instead, you must disable the Windows Update service. As this service is required during installation, you can only disable it after finishing the installation.

- 1 In the Start menu, search for services.msc and press Enter to open the Services window.
- **2** Double-click the **Windows Update** service.
- **3** Set the startup type to **Disabled**.

NOTE

The computer will not be automatically updated anymore. Make sure you keep the computer up to date by other means.



Other Ways to Obtain a License

40

Install Your License

This chapter provides basic information on licensing. It describes how you generate a license file with SubscribeNet and install the license in the Control Panel.

38

## **About OpenLAB CDS Licensing**

# Software subscriptions and Software Maintenance Agreement (SMA)

Bundled into OpenLAB CDS is a one-year software subscription which provides access via SubscribeNet to new software updates, product upgrades, familiarization and media.

As a best practice, we recommend customers renew subscriptions annually so as to maintain their licenses and have full access to the newest updates, upgrades, media and familiarization. To manage software entitlements, order media or download software, log in to SubscribeNet by pasting this link in your browser: <a href="http://agilent.subscribenet.com/">http://agilent.subscribenet.com/</a>

Software subscriptions do not include installation services. Installation or upgrade services must be purchased by contacting your sales representative in your region.

## **License Types**

The license file is a collection of Product, Instruments and Add-on licenses (or activation keys), and is installed to your OpenLAB CDS System. Both the OpenLAB Workstation PC, or the OpenLAB Server in a Client/Server system will act as the license server.

The licenses or activation keys in the license file can either be Shared or Counted:

- 1 Shared licenses system computers and other components can have shared, or add-on, licenses because they share a core license.
- 2 Counted licenses these licenses are part of the OpenLAB CDS floating licensing strategy. They are not permanently assigned to any one component. Instead they are automatically assigned to components, such as AICs and instruments, while the components are starting up. The licenses are automatically returned when the component is closed. The license management program controls license issuance and retrieval.

In this case, the only requirement is that a component is licensed while running. You only need enough licenses for all components running concurrently, rather than for each installed component.

A startup license for the system allows you to run OpenLAB CDS for 60 days after the installation. In order to run the data system software after the 60-day period, you must install your core license file.

#### License File

A license file will contain your software license. This file is installed on the workstation. The license file is bound to this computer, and cannot be moved to another workstation without regenerating the license in SubscribeNet.

Information in the license file defines the number of instruments and other options that may be used concurrently with your system.

The most efficient way to manage and maintain your licensing is through the Internet.

## Get a License

#### Obtain a License with SubscribeNet

Use the following procedure to generate and download your license. In case you do not have internet access, skip to the section "Other Ways to Obtain a License" on page 38.

If you are a new user who has not registered with SubscribeNet, continue with the section *New Users*.

If you have registered with SubscribeNet, skip to the section *Users registered* with SubscribeNet.

#### **Prerequisites**

To generate, download, and install a final license for your product, you will need:

 The authorization code label provided in the lavender envelope containing your Software Entitlement Certificate.

If you have not received a lavender envelope for your product, contact your vendor or internal support.

- The URL for SubscribeNet from the Software Entitlement Certificate.
- The host name of the computer where the Control Panel is running.
- The MAC address.

To retrieve your MAC address from a computer where OpenLAB CDS is already installed, open the Control Panel and browse to the **Administration > Licenses** section. Use the **Copy MAC Address** or **Save MAC Address** function to obtain the MAC address for license generation.

During this process you will have to enter the MAC address of your license server. For workstations, this is the local computer. For client/server systems, this is the server.

#### NOTE

If any changes are made to the computer name or domain reference after the license is installed, remove the license. A new license will need to be created in SubscribeNet, downloaded, and installed.

#### NOTE

If the network adapter that provides the MAC address used during license creation is removed from the machine, your license will no longer be valid. A new license will need to be generated with a currently available MAC on the license server.

#### **New Users**

- 1 From a computer with Internet access, enter the URL provided in the Software Entitlement Certificate in an Internet browser (https://agilent.subscribenet.com/control/agil/AgilRegisterToAccount).
- **2** On the registration page, enter the authorization code from the label and complete the profile information (required fields are marked with an asterisk \*).
  - The email address you enter will become your login ID.
- **3** Click **Submit**. The system will generate and display an account name for you. SubscribeNet will send a welcome email with your login ID and password.
- **4** Log in to SubscribeNet using your login ID and password.

  Once you log in, you can use the online user manual link for help with any questions you have.
- **5** Select **Generate or View licenses** from the left navigation bar.
- **6** Follow the prompts to generate your new license.
  - You will be prompted for the HOST NAME of the computer. The host name you enter must match with the network name of the computer where the Control Panel is running. Do not include any DNS suffix (domain.com) references in the entered machine name.
- 7 When the system generated the license, view its details, then click **Download License File**. Save the license file to your computer and to a backup location (such as a portable storage device).
  - Use your login ID and password when you revisit the Agilent SubscribeNet site to regenerate a license file, add new authorization codes, or further configure the license for your system.

#### Users registered with SubscribeNet

- 1 Login to SubscribeNet with your e-mail address and password.
- **2** Select the SubscribeNet account associated with this authorization code, if you have more than one account.
- 3 From the SubscribeNet navigation pane, select Register Authorization Code.
  This will allow you to enter your new authorization code and make available the new license entitlements
- **4** Follow steps 7 through 9 in the previous procedure, *New Users*, to *generate* or *view* your new licenses.

## Other Ways to Obtain a License

If you are unable to generate a license, contact your nearest Agilent technical support office. A representative will tell you how to submit an OpenLAB CDS License Generation Form in your location.

#### **Offline Licensing**

If an internet connection is not available in your laboratory:

You or your local on-site service engineer will collect the necessary information from you to allow Agilent to create a license account on your behalf. For phone support in your region, call the sales and service number for your region. See the Appendix for a list of numbers for various countries.

Required Customer Information for Agilent License Support:

The following information must be provided to Agilent in order to enable us to create a licensing account on your behalf.

1 Collect Account Information:

Your account name will be your company name and Lab name separated by a comma. Employee information provided here will be used to define the first administrator of your account for future access to the system as required. Please prepare the following pieces of information prior to contacting your local Agilent sales and service center in order to expedite service:

- · Company Name
- · Lab/Department Name
- · First Name
- · Last Name
- E-mail address
- · Job Title
- Phone #
- Address, City, State/Province, Postal Code, Country
- **2** Collect Authorization Code(s):

The authorization code is an alpha-numeric code provided on a label which is enclosed in a lavender envelope. If you have received more than one code

you must provide all codes to ensure that all ordered licenses are granted to your account.

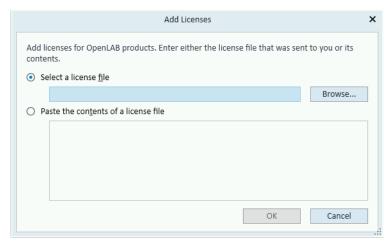
#### **3** Receiving your license:

Once the above information is provided Agilent will then work on your behalf to generate a license file through SubscribeNet. The license file will either be sent to your shipping address (on a CD), or your local FSE will deliver it in person (usually on USB media). Once your license is received follow the below section on "Install your License" to finish installing your license on your CDS system(s).

#### **Install Your License**

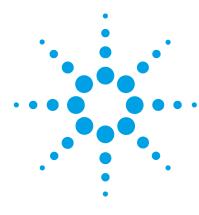
The license must be added to your system using the Control Panel.

- 1 Start the Control Panel shortcut on the desktop or go to Start > All Programs > Agilent Technologies > OpenLAB Shared Services > Control Panel.
- 2 Navigate to Administration > Licenses.
- 3 In the ribbon, click Add License +



- **4** Choose to install the license by:
  - Using the license file option to browse to and open the license file (.lic) saved from the license generation process in SubscribeNet.
  - Selecting the License Text option and copying the license text from a text file received into the provided field.
- 5 Click OK.

The **Administration** interface in the Control Panel will now display the status of installed licenses.



# **Configure OpenLAB CDS Workstation** with Content Management

```
Configure Authentication
                            42
                            43
Configure Security Policy
Configure users, roles, and privileges
                                        44
   Create or import users
                             44
   Groups
             45
   Roles and Privileges
   Add users or groups to a role
   Specific Roles for Individual Instruments or Projects
                                                           47
Configure Initial Project
                          48
Configure Initial Instrument
Other settings in the Control Panel
                                      49
```

This chapter describes the initial configuration steps after installing the software. For more details, refer to the Control Panel section in OpenLAB Help & Learning.

# **Configure Authentication**

OpenLAB CDS supports the following authentication providers:

#### Internal

In this mode, the user's credentials are stored in the OpenLAB CDS system. You are asked to create an administrator account for OpenLAB CDS before setting up other users. This is the only mode in which you can create new users within the system; in all other modes you can only map to users that exist in a different system.

#### **Windows Domain**

You import existing Windows users into OpenLAB CDS system. The authentication is done either by Windows Active Directory domain or NT 4.0 Domain within the Enterprise. OpenLAB CDS only uses the identity and password of the mapped users; roles and privileges for OpenLAB CDS are still configured in the Control Panel.

After the installation, internal authentication is configured by default. If you want to use internal authentication, nothing needs to be done. The following procedure describes how to configure domain authentication instead.

- 1 Launch the Control Panel. Log in with the username admin and the password you provided during installation.
- 2 Navigate to Administration.
- 3 In the navigation pane, select System Configuration.
- 4 In the ribbon, click Edit System Settings  $^{6}$  .



Select the authentication provider **Windows Domain** from the drop-down list, then click Next.

#### NOTE

Do not change the storage type.

- Select the check box to use a domain user, and provide user credentials with the rights to obtain user and group information. Then click Select **Account** to open the **Search Users** dialog and select an administrator account.
- 7 Confirm your settings. When complete, the Control Panel will restart.

# **Configure Security Policy**

If you need to comply with specific standards (for example, Part 11), adjust the security policy as required.

With the authentication provider **Internal**, you can set all parameters in the Control Panel. With an external authentication provider (Windows Domain), you can only set the inactivity time in the Control Panel; all other parameters are defined by the external system.

- 1 Launch the Control Panel and navigate to **Administration**.
- 2 In the navigation pane, select Security Policy.
- 3 In the ribbon, click Edit Security Policy.

NOTE

To meet 21 CFR Part 11 requirements, set the **Password expiration period** to 180 days or less. Do not change the other default values, they comply with 21 CFR Part 11.

#### 4 Configure OpenLAB CDS Workstation with Content Management

Configure users, roles, and privileges

# Configure users, roles, and privileges

With internal authentication, you create the required users in the Control Panel. With Windows domain as an external authentication system, you import the Windows domain users.

To define what users are allowed to view or do, OpenLAB CDS offers predefined roles and allows you to define your own specific roles. Roles are equipped with numerous specific privileges.

Each user can be member of multiple groups. You must assign one or more specific roles to each group. You can also assign roles to single users; however, for the sake of clarity, it is strongly recommended to assign roles only on the group level. Every member of a group automatically has all roles of this group.

- 1 Launch the Control Panel and navigate to **Administration**.
- 2 In the navigation pane, select Users, Groups, or Roles.
- **3** Create new items, or edit the existing ones.

## **Create or import users**

Use the Control Panel to manage the roles and privileges. You can create custom roles, or assign one or more of the predefined roles to give users varying degrees access.

#### Add users (Internal Authentication only)

- 1 From the navigation pane, click **Administration > Users**.
- 2 In the ribbon, click Create User.
- **3** In the **Create User** dialog, provide the relevant parameters:
  - Enter the name and password for the new user.
  - By default, the new user will need to change the password at next logon.
     If this is not required, clear the User must change password at next logon check box.
  - In the Role Membership tab, assign the user to an appropriate role. You
    can use the default roles, or prepare your own roles in the Control Panel
    under Administration > Roles.
- 4 Click OK.

#### Import users (Windows Domain Authentication only)

To add users to your system, you must have privileges to obtain user and group information from the domain.

- 1 From the navigation pane, click Administration > Users.
- 2 In the ribbon, click **Import**.
- **3** In the **Search Users** dialog box, enter search string for the Windows domain username.
- 4 From the **Search Results** list, select the user you want to import, and click **Add**. The user is added to the **Selected Users** list.
- **5** Repeat steps 2 through 4 until you have added all the user names that you want to import to the **Selected Users** list, then click **OK**.

## **Groups**

If you use an external authentication provider, you can either import the names of groups that exist in the external system, or create new internal groups. There is no limit on the number of groups that can be mapped or created.

Assign users to groups either in the external system or in the Control Panel. If you need additional user assignments that are relevant only for OpenLAB CDS, create them in the Control Panel. Otherwise it is sufficient to only import the groups and assign the required roles to the groups.

If you delete or unmap a group, the users who were members in this group remain unchanged.

# **Roles and Privileges**

Roles are used to assign privileges to a user or a user group globally or for a specific instrument, project, project group or location. The system contains a list of predefined roles which are installed as part of the system installation (for example, **Instrument Administrator**, **Instrument User**, or **Everything**). Each role has certain privileges assigned.

#### 4 Configure OpenLAB CDS Workstation with Content Management

Configure users, roles, and privileges

Privileges are grouped according to the three main role types (Project role, Instrument role, and Administrative role). When you assign privileges to a role, you first select the required role type and then select the privileges related to this role type. Each role can only have privileges of one specific role type; the only exception is the predefined role **Everything**, which has all privileges of all role types. Users or groups may require multiple roles to perform system functions. For example, a user with the role *Chemist* may need another role such as *Instrument User* with the privilege to run an instrument.

You can create a tree of different locations in the Control Panel, and add instruments to the relevant locations. For each instrument or instrument group, you can assign different Instrument roles (see also "Specific Roles for Individual Instruments or Projects" on page 47). For example, a user can have the role Instrument Administrator for one instrument, and Instrument User for another instrument.

You can also create a tree of different projects or project groups in the Control Panel, and assign different Project roles for different projects (see also "Specific Roles for Individual Instruments or Projects" on page 47). For example, a user can have the role **Project Administrator** in one project, so that he can manage the settings in the Control Panel. In a second project, he may have a role that allows him to edit the content of a project, but not to change the project settings.

For more information on privileges, see the Appendix.

**Table 3** Description of role types

Role Type	Description
Administrative privileges	These privileges are globally assigned to a user or group and cannot be changed on the instrument/location level. They are the typical administration privileges such as <b>Backup and restore</b> , <b>Manage security</b> , <b>Manage printers</b> etc.
Instrument privileges	These privileges can be assigned globally or on the instrument/location level. Privileges for instruments are, for example View instrument or location and Run instrument.  Users need the View instrument or location privilege on the global level to see the locations and instruments tree in the Control Panel.
Project privileges	Privileges for accessing or modifying different levels of data. You can assign these privileges globally or on project or project group level.

## Add users or groups to a role

- 1 From the navigation pane, click Administration > Roles.
- 2 In the Roles window, select the role you want to assign to users or groups.
- 3 In the ribbon, click Edit Role.
- 4 In the Edit Role dialog box, click the Members tab.
- 5 Click Add user or group.
- **6** In the **Search Users and Groups** dialog box, enter the name of a user or group, and click **Search** to view a list of all users and groups that meet the search criteria.
- 7 Under Search Results, select a user or group, and click Add.
- 8 Click OK.

# **Specific Roles for Individual Instruments or Projects**

By default, the roles of users or groups are globally set for all locations, instruments, project groups, or projects. The role settings are inherited from the root node <code>Instruments</code> or <code>Projects</code> respectively. In order to assign a different role to a user or group for one specific node, you can deselect the <code>Inherit privileges from parent</code> check box in the <code>Edit Privileges</code> dialog for the required node. Afterwards, you can assign a different role that will be valid only for the specific node.

You can assign Instrument roles to individual locations or instruments.

If you use projects, you can assign **Project** roles to individual project groups or projects.

**Administrative** roles are always set globally.

# 4 Configure OpenLAB CDS Workstation with Content Management Configure Initial Project

# **Configure Initial Project**

- 1 Launch the Control Panel and navigate to **Projects**.
- **2** Create and configure a project:

On the CDS Settings tab:

- Enter the locations for Methods, Sequences, Results, Sequence Templates and Report Templates.
- · Consider the required audit trail settings for this project.

To access the data from outside the OpenLAB software, use the local FTP host (ftp://localhost/).

For more details, refer to the Control Panel section in OpenLAB Help & Learning.

# **Configure Initial Instrument**

- 1 Launch the Control Panel and navigate to **Instruments**.
- **2** Click **Create** in the ribbon to create a new instrument.
- 3 Select the new instrument, and click **Configure Instrument** in the ribbon.
- 4 It is recommended that you use Auto Configuration to configure your instruments: Select a module, click **Auto Configuration**, and provide the instrument's IP address or hostname.

For more details, refer to the Control Panel section in OpenLAB Help & Learning.

# **Other settings in the Control Panel**

Consider also other settings in the Control Panel, such as:

- · changing the instrument status reporting frequency, or
- · changing audit trail settings for a project,
- editing signature levels for a project (only accessible from an OpenLAB CDS Workstation or Client).

For more details, refer to the Control Panel section in OpenLAB Help & Learning.

4	Configure OpenLAB CDS Workstation with Content Management
	Other settings in the Control Panel



This chapter describes the installation or upgrade of additional instrument driver software. It also contains information on the installation of OpenLAB Help and Learning only, and on performance improvement on offline machines.

# **Install OpenLAB Help and Learning Only**

Use this option to install OpenLAB Help and Learning content without installing OpenLAB CDS applications.

Do not use this option on a machine where OpenLAB CDS is, or will be, installed.

- 1 Insert the USB media, right-click the setup.exe file, and run it as administrator.
- 2 On the start screen, select OpenLAB CDS, and click OK.
- 3 In the OpenLAB CDS Installer, click **Documentation**.
- 4 Click Install OpenLAB Help and Learning Only.
- 5 Select your language, and click Next.
- 6 On the welcome screen, click Next.
- 7 Confirm Agilent terms and conditions, and click Next.
- **8** Review the installation directory. If desired, click **Change...** to specify a different directory.
- 9 Click Install.
- **10** When the installation is complete, click **Finish**.
- 11 If you plan to use Internet Explorer to view the content, set the Internet Options as described under "Configure Internet Explorer for OpenLAB Help and Learning" on page 32.

Without these settings, you will need to click **Allow blocked content** when opening the help.

No settings are required for Google Chrome.

You can uninstall or repair OpenLAB Help and Learning from the same link in the installer (see "Uninstall OpenLAB Help and Learning Only" on page 97).

# **Improve Performance on Offline Machines**

Computers running OpenLAB CDS may exhibit slow performance when they are not connected to the Internet.

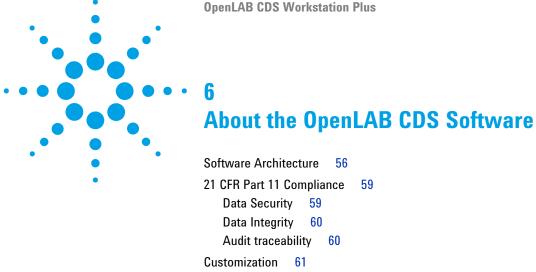
The windows operating system has routines built into its operation that causes it to continuously search for an online connection in order to update to all the latest Windows security certificates when using secure software.

Use the following system settings on all workstations to remedy this problem.

- 1 Open Internet Explorer and select **Tools > Internet Options**. In the **Advanced** tab, clear the following check boxes:
  - Security > Check for publisher's certificate revocation
  - Security > Check for server certificate revocation
- **2** Change the following registry keys:
  - [HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Microsoft\ SystemCertificates\AuthRoot]
    - "D is able Root Auto Update" = dword: 00000001
  - [HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\Policies\ Microsoft\SystemCertificates\AuthRoot]
    - "DisableRootAutoUpdate"=dword:00000001
- **3** Document that you turned off the Root Certificates, as this can prevent users from installing other applications.

# **5** Optional Procedures

**Improve Performance on Offline Machines** 



This chapter contains an overview of the basic software features.

Customization via custom calculations Customization via report templates

Customize application to start external programs

62



# **Software Architecture**

OpenLAB CDS is a data system solution for analytical workflows that controls a wide variety of instruments including the industry-leading GC and GC/MS-SQ instruments, along with best-in-class LC and LC/MS-SQ. By combining chromatography and single-quad mass spectrometry into a single scalable solution with centralized system administration, you can streamline your laboratory workflows and maximize productivity. A tailored and simplified user interface with a new state-of-the-art user experience, along with e-learning tools, to help you to get up to speed and productive as fast as possible.

The Agilent OpenLAB CDS software is provided on read-only USB media that contain all required installables and documents. This includes:

- Acquisition
- · Data Analysis and Reporting
- · Shared Services
- · Content Management
- · Custom Calculation Editor
- · Help and Learning Platform
- · User documentation
- Instrument driver software for Agilent LC, GC, LC/MS, GC/MS, or A/D
- Instrument driver software for virtual instruments (Data Player)
- · Agilent Parts Finder
- Third party tools

*Workstation*: All components on a single PC; results are stored in the local file system; the system supports up to four instrument connections.

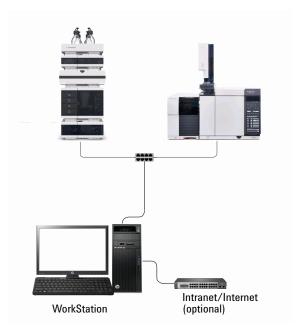


Figure 1 OpenLAB CDS Workstation

#### 6 About the OpenLAB CDS Software

**Software Architecture** 

Workstation Plus (with Content Management): All components on a single PC; results are stored in a database provided by the Content Management component; Users have no access to the data via the local file system; supports up to four instrument connections.

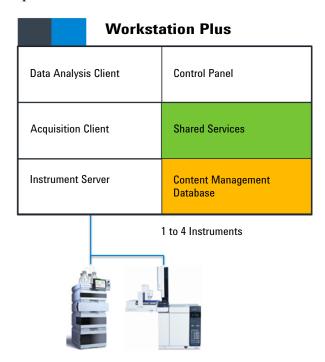


Figure 2 Components on a Workstation Plus

# 21 CFR Part 11 Compliance

To fulfill the FDA rules and guidelines for compliant electronic records and computerized systems, it is important to understand the basic aspects of secure data handling.

- Data security: physical protection of data by limiting access to the system and preventing unauthorized access.
- Data integrity: protecting raw data and metadata and preventing these from unauthorized modification, and linking raw data and results to reproduce the original results at any time, for example, in an audit situation, and document each new result copy.
- *Audit traceability:* documenting who did what to the results and when, and tracing the user adding new reanalyzed versions to the original raw data.

# **Data Security**

The Shared Services functionality related to security includes the following (see "Control Panel" on page 64 for details):

- System Activity Log
- Selection of authentication provider
- Management of users, groups, roles, and privileges
- · Security Policy

#### **CAUTION**

Data integrity risk

Customers subject to regulations from US FDA or similar organizations are cautioned that FTP services are enabled by default. This may be considered as a data integrity risk.

→ Impacted customers are advised to disable or block FTP services when not needed. Please refer to the section on FTP administration in the OpenLAB Server Administration Guide. 21 CFR Part 11 Compliance

# **Data Integrity**

OpenLAB CDS stores data in a manner that ensures compliance with 21 CFR Part 11. It provides secure data storage with access control and an audit trail. Data files are versioned to ensure data integrity and traceability. In addition, OpenLAB CDS provides electronic signatures allowing users to sign off on data.

# **Audit traceability**

There are different types of audit trails:

- The *sequence audit trail* is a record of changes made to the sequence when acquiring the data.
- The *method audit trail* provides a detailed list of modifications to a sample preparation method, an acquisition method, or a processing method.
- The *injection audit trail* is the record of a single injection that lists all modifications during the run and in Data Analysis.
- The *result set audit trail* is a superset of injection audit trails for all injections that are contained in a sequence/result set.

The specific behavior of an audit trail depends on the project settings in the Control Panel.

# **Customization**

OpenLAB CDS can be customized to support various workflows and applications. Customizing capabilities are available via different approaches.

For more information on how to use custom calculations and report templates, refer to OpenLAB Help & Learning.

#### **Customization via custom calculations**

Data Analysis can be enriched by calculating additional values. The calculations are done with the Custom Calculator Designer and referenced by or embedded in a processing method.

These calculations can be quite complex. The calculation results are directly visible in Data Analysis, no report generation is needed.

Custom calculations are processed on result set level. They are only computed if all injections of the result set are processed together.

#### **Customization via report templates**

In a report template you can call calculation results from a method-specific custom calculation, or define additional, template-specific calculation expressions. The template-specific values are only visible in the report preview or the final report.

Reports are generated on either injection level, result set level, or across multiple result sets. Reports can be used for automated result evaluation on all the mentioned levels.

Example report templates for typical petrochemical or pharmaceutical applications are provided with the application and can be imported in Data Analysis (see *Import default templates* in OpenLAB Help & Learning).

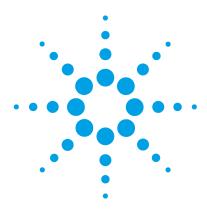
# **Customize application to start external programs**

The customization capabilities allow to add ribbon groups and icons in the **Data Selection** and **Data Processing** views of OpenLAB Data Analysis.

It is possible to start an external program via an icon and to hand over the project data path and the path of the current injection as parameters to the program.

The customization is based on a file CustomToolsConfiguration.xml at C:\ ProgramData\AgilentTechnologies\OpenLAB DataAnalysis\ that needs to be created by the user. An example CustomToolsConfiguration.xml file is included on the media at Setup > Tools > UCL > Support > UCL > Customization folder.

For more information, refer to OpenLAB Help & Learning.



# System Setup and Maintenance

```
Control Panel
               64
   Instrument Management / Lab Status at a Glance
                                                    64
   License Management
                         65
   System Activity Log
   Diagnostics
   Administrative Reports
   Authentication Provider
                            68
   Security Policy
   User Management
Shared Services Maintenance
                              69
Maintenance Procedures
   Introduction
                70
   Software backup procedure
                               71
   Data Backup Procedure
   Software Restore Procedure
   Data Recovery Procedure
   Routine Maintenance
```

This chapter contains information on the Control Panel and Shared Services Maintenance. In addition, it describes various maintenance procedures.

# **Control Panel**

Using the Control Panel, you can access Shared Services control features such as security policy, central configuration, or lab status at a glance.

## **Instrument Management / Lab Status at a Glance**

The **Instruments** view in the Control Panel offers an overview of all instruments in the network or on the workstation. You can see the following information for all instruments, summarized on one page:

- · Status of the instrument with related color code
- · Instrument name
- · Instrument location
- Instrument type
- · Last change of configuration

Depending on the configuration, this information may be accessed from a single workstation PC or from multiple clients in a network.

You can create a tree of different locations in the Control Panel, and add instruments to these locations. Using locations, you can organize your instruments for example by department, by laboratory, or by lab bench. For each instrument, you can provide basic information such as the name, description, and instrument type.

Depending on your privileges in OpenLAB CDS, you can perform several operations on the instruments:

- View instrument information (instrument status, instrument details, activity log)
- View the locations and instruments tree
- Edit the instrument information
- · Configure the instrument

The instrument configuration is stored in the Shared Services database. You access the configuration tool from the Control Panel.

· Launch the instrument

On a Workstation, you can only launch instruments that are configured on this PC.

With a Client/Server system, you can launch instruments remotely from any OpenLAB CDS client in the network.

Your privileges can differ for the different locations and instruments (see "Specific Roles for Individual Instruments or Projects" on page 47).

# **License Management**

This service includes the administration of all licenses that are required for your system.

Before adding a license file, you must first purchase the license and generate the license file using SubscribeNet. For more information on generating new license files, see "Obtain a License with SubscribeNet" on page 36.

License Management in the Control Panel provides the following functions:

- You can add license files to the license server.
- You can navigate to the license monitor and view the properties of all licenses installed on a given license server.
- You can remove license files from the license server. This may be useful if an
  invalid license file has been added.
- · You can view or change the license server.
- You can view, copy, or save the MAC Address of the license server.
- You can navigate to the Agilent Electronic Software and License Delivery web page to obtain a license.

#### 7 System Setup and Maintenance

**Control Panel** 

The following properties are shown for installed licenses:

- **Feature**: This indicates the type of license used.
- **Version**: If a license is versioned, you can see the version number. For licenses that are not versioned, the version is always shown as 1.0.
- In Use (Available): This indicates the number of licenses that are currently in use and, in brackets, the total number of licenses. With the OpenLAB CDS licensing strategy, a license is only in use as long as a software instance is running (see "License Types" on page 35).
- **Expiration**: If the license is only valid for a certain period of time, the expiration date is displayed.

In the **Alerts** pane, you are informed if the number of available licenses has gone down to zero for a specific feature, or if you have started a software instance which requires a license that is unavailable.

For more information on adding license files and viewing the license properties, refer to the Control Panel section in OpenLAB Help & Learning.

# **System Activity Log**

The System Activity Log allows you to centrally access all system activities. It contains information on the various events associated with Shared Services or with specific instruments. You can filter the list in order to view only events of a specific type, in a specific time range, created by a specific user, or containing a specific description.

The following types of events are recorded:

- System
- · Instrument Management
- Instrument
- Project Management
- · Instrument Controller
- User
- Group
- Security
- Printer
- License

The messages can come from other components, such as the user management, or from an instrument module. Instrument messages include error messages, system messages, or event messages. The System Activity Log records these events irrespective of whether you have been alerted to them or not. To get more information on an event, expand the line of interest in the activity logbook viewer.

# **Diagnostics**

The **Diagnostics** view allows you to access several reports and tools for diagnostic purposes:

- · Ping the server.
- Create a report, either for the local system or for the server, with information on the operation system, processors, disk drives, processes, network, and connections.
- Centrally access and download all the log files, trace files, etc. that are created by the registered modules.

## **Administrative Reports**

In the **Administrative Reports** view, you can additionally create and export various XML or PDF reports related to the system configuration:

#### **Instrument Controllers Report**

Detailed information of all Instrument Controllers. When this report is generated on a Workstation, the information presented relates to the local system. When this report is generated on a client-server system, all Instrument Controllers are included.

#### **Instruments Report**

Provides detailed information about configuration and access privileges for all instruments on the system. On client-server systems, this report includes all instruments on all Instrument Controllers.

#### 7 System Setup and Maintenance

**Control Panel** 

#### **Projects Report**

Provides detailed information about configuration and access privileges for all projects on the system.

#### **Roles and Privileges Report**

Describes all roles defined on the system, including details of all privileges included in each role.

#### **System Report**

This report provides a consolidated view of the system, which includes all information about instrument controllers, instruments, projects, roles, users, and groups.

#### **User's and Group's Role Assignment Report**

This report provides an overview of all users and groups with their assigned roles.

#### **Authentication Provider**

The authentication provider is described under *Configure OpenLAB CDS*. For details, see "Configure Authentication" on page 42.

## **Security Policy**

The security policy is described under *Configure OpenLAB CDS*. For details, see "Configure Security Policy" on page 43.

# **User Management**

The user management is described under *Configure OpenLAB CDS*. For details, see "Configure users, roles, and privileges" on page 44.

#### **Shared Services Maintenance**

The **Shared Services Maintenance** program is automatically installed with your OpenLAB software to help administrators manage the system.

To open the utility, select Start > All Apps > Agilent Technologies > OpenLAB Shared Services > Shared Services Maintenance<sup>1</sup>. A user must have Windows administrator rights to access this utility.

# Windows Domain tab

In this utility, the **Windows Domain** tab is relevant if you use windows domain authentication to identify your OpenLAB users.

OpenLAB CDS must be given access to the server where these credentials are stored. In the **Windows Domain** tab, you specify or change the credentials that OpenLAB CDS will use to access your windows domain server.

For client/server systems: This feature can only access credentials that are stored on the computer where you launched the **Shared Services Maintenance** program. To specify or change the **Domain**, **User name**, or **Password** for the windows account that will be used to access your windows domain server, use the **Shared Services Maintenance** program that is installed on the server.

#### Server Settings tab

The **Server Settings** tab can be used to manage different server connections. In a workstation configuration, there is typically only the connection to the local machine.

# Activity Log Export tab

The settings on this tab do not apply to a workstation with Content Management.

#### Backup and Restore tab

The settings on this tab do not apply to a workstation with Content

ore tab Management.

In Windows 7 or 8.1: Start > All Programs > Agilent Technologies > OpenLAB Shared Services > Shared Services Maintenance

#### **Maintenance Procedures**

#### Introduction

#### **Disaster Recovery Planning**

Prepare a recovery plan for the unlikely case of OpenLAB CDS becoming inoperable due to a hardware or software failure. This plan must include information and procedures for completely restoring the operating system, the software, and data. Make sure that the disaster recovery plan has been tested and confirmed to be working.

The Disaster Recovery Plan must include the following:

- Hardware information: CPU, Memory, and Hard disk configuration information.
- · Computer identity: Name, IP, domain, URI, etc.
  - Computer administrator information: username and passwords for logging in to the server
  - If applicable, usernames and passwords for the database
- · Software information: OS version, Patch level.
- Installation parameters:
  - Installation folder
  - Installation log file
  - Content Management content folder
  - Content Management indexes folder
  - Shared Services language
  - Shared Services database name
  - Installed licenses
  - Registered applications
- 3rd party software information: applications and their revisions and install paths.
- Backup procedures (see "Data Backup Procedure" on page 78)

- · Backup media location and organization details.
- Restore procedures (see "Software Restore Procedure" on page 87)

#### **Backup and Restore Procedure Overview**

The backup procedure for an OpenLAB CDS Workstation with Content Management includes all software and data. It describes how to create an image of the current system on a portable USB hard drive and a Windows system repair disc. The USB drive and repair disc are used together to restore your system to the original state, if needed.

It is mandatory that every workstation is backed up regularly. Periodic full backups and differential backups between the full backups must be created by administrators. These backups are the only way to restore a system in the event of a hardware or software failure.

It is also mandatory that a disaster recovery plan and restore procedures are tested to confirm that the backups are sufficient to restore your system.

The data backup procedure does not cover other products or databases, such as the GC Column Database. Create a new system image after changing other products or databases.

This procedure requires that the user has administrative rights on the workstation.

#### Software backup procedure

#### **Stop Acquisition**

Before the backup, make sure that the Run Queue on all active instruments is in idle state (no active run items in the queue) and all Acquisition client application are closed. Use **Close Connection** in the Control Panel to close any acquisitions that may still be running.

#### **Stop Windows Services**

Open Windows Services and Stop the following services in the order listed below. See Microsoft Management Console help for more information on stopping these services.

- 1 Agilent OpenLAB Instrument Service
- 2 alfrescoTomcat
- 3 Agilent OpenLAB Shared Services
- 4 postgresql-x64-9.3

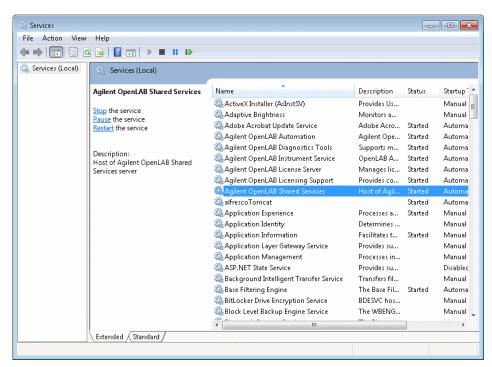


Figure 3 Stop Services

## **Create an Image of the Current System**

Create a new system image after any change in your instrument configuration.

1 Connect a portable USB drive to a (blue) 3.0 USB port on the computer.

NOTE

The AutoPlay window displays the first time the drive is connected to the PC. Close the AutoPlay window.

- **2** Use the appropriate Windows program to create a system image. See Windows Help for more information.
  - In Windows 7, click Backup and Restore in the Microsoft Control Panel.

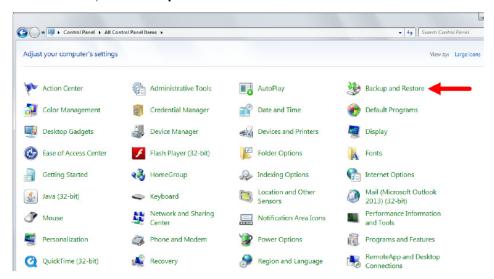


Figure 4 Windows 7 Backup and Restore

#### 7 System Setup and Maintenance

**Maintenance Procedures** 

• In Windows 8.1 or Windows 10, click File History in the Microsoft Control Panel, then click System Image Backup.

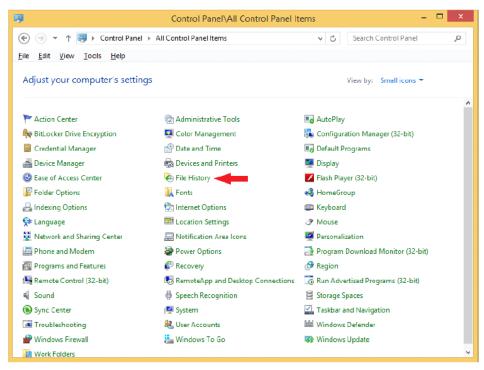


Figure 5 Windows 8.1 File History

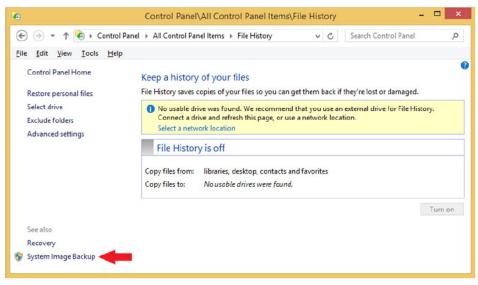


Figure 6 Windows 8.1 System Image Backup

- 3 Click Create a system image.
- 4 Click Next.
- 5 Select the drives you want to include in the backup.

  If the OpenLAB product was installed in a location other than C:\ drive, you must select that particular drive when asked Which drives do you want to

include in the backup?

# 7 System Setup and Maintenance

**Maintenance Procedures** 

#### 6 Click Next.

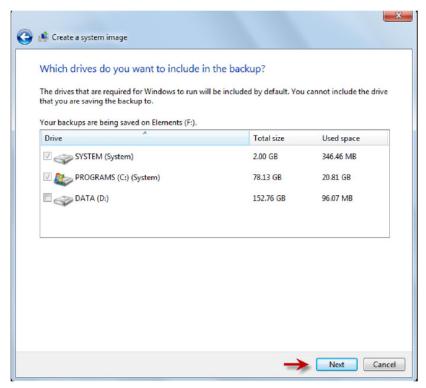


Figure 7 Drives included in the backup

## 7 Click Start backup.

**8** If you are using *Windows 7*, create a system repair disc according to the Windows instructions.

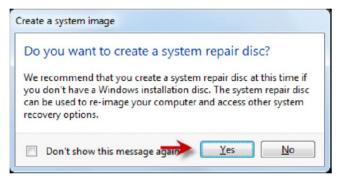


Figure 8 Create a system repair disc

If you are using *Windows 8.1* or *Windows 10*, use the **Recovery** program from the Microsoft Control Panel and create a recovery drive according to the Windows instructions.

- **9** Close all remaining windows.
- **10** Eject the newly created Windows Recovery disc.
- 11 Disconnect the USB drive.
- **12** Complete the backup Solution Checklist.
- **13** Keep the USB drive, Windows Recovery disc, completed Backup Solution checklist, Backup Guide, and Backup Solution Recovery checklist in a safe place.

#### Start Windows Services

Open Windows Services (services.msc) and Start the services in the order listed below. See Services Microsoft Management Console help for more information.

- 1 postgresql-x64-9.3
- 2 Agilent OpenLAB Shared Services
- 3 alfrescoTomcat
- 4 Agilent OpenLAB Instrument Service

You will need to wait a couple of minutes for the services to fully start.

# **Data Backup Procedure**

The software for an OpenLAB CDS Workstation with Content Management includes a batch script to back up your data.

The backup script performs both incremental and full data backup. When the backup script is used for first time for a particular backup destination directory, a full backup is performed. All subsequent backups performed with the backup script where the same backup destination is used, will result in a differential backup.

The script can be used three ways.

- From the .bat file in your directory To enter your folder locations consecutively. Administrator rights required.
- From the Windows Administrator Command Prompt Window To enter your folder locations at one time. Administrator rights required.
- From the script using the Windows Task Scheduler program To schedule automatic data backups. Once the automated task is set up by an administrator, the backups will occur even if the user logged in at the scheduled time does not have administrator rights.

This data backup procedure does not back up other products or databases, such as the GC Column Database. Create a new system image after changing other products or databases.

#### To run the script from the .bat file:

- 1 Navigate to the Content Management scripts folder (i.e., ...\Agilent Technologies\OpenLAB Data Store\Backup Scripts).
- 2 If the Windows **User Account Control** settings are configured to notify the user before programs make changes to the computer, right click Secure OpenLABCDS backup, and select **Run as administrator**.
  - If the Windows **User Account Control** settings are configured to never notify the user before programs make changes to the computer, double click **Secure OpenLABCDS backup**.
- **3** At the prompt, enter the data backup destination directory folder where you want to save your data and press **Enter**. The destination directory may reside in the same machine, a network location, or in an external USB drive. The destination path must be a valid Windows directory name in quotes.

- 4 At the prompt, enter the Content Management content folder path in quotes that was specified during installation and press **Enter**. To find out the Content Management content folder path, use the Server Configuration page located at C:\ProgramData\Agilent\Installation\configuration.xml.
- **5** At the prompt, enter the Content Management index folder path in quotes, and press **Enter**. To find out the Content Management index folder path, use the Server Configuration page located at C:\ProgramData\Agilent\Installation\configuration.xml.
- **6** At the prompt, enter the PostgreSQL data file directory path in quotes, and press **Enter**.
  - The default location is <ProgramData>\Agilent\PostgreSqlData-9.3. In a default Windows installation, <ProgramData> is a hidden folder at C:\ProgramData.
- 7 At the prompt, enter the Agilent root installation path and press **Enter**.

```
"Backup is indexed "Backup is indexed "Backup is indexed piece of the plant of the
```

Figure 9 Running the script from the .bat file

#### To run the script using Windows Administrator Command Prompt Window:

- 1 Open a Windows Administrator: Command Prompt window.
- **2** Enter the command shown in the figure below with your locations in quotes, where:
  - "D:\Destination" represents the data backup destination where you want to save your backup.
  - "C:\DSData\DsContent" represents your Content Management content folder specified at installation.
  - "C:\DSData\DsSIndex" represents your Content Management index folder.
  - "C:\ProgramData\Agilent\PostgreSqlData-9.3" represents the folder that contains the PostgreSQL data files.
  - "C:\Program Files (x86)\Agilent Technologies" represents the root installation folder specified at installation.

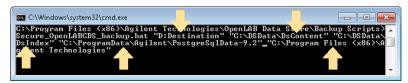


Figure 10 Running the script from the Windows Administrator Command Prompt Window

#### To run the script using the Windows Task Scheduler program:

1 Start the Windows Task Scheduler program. See Windows Help for detailed information on using this program.

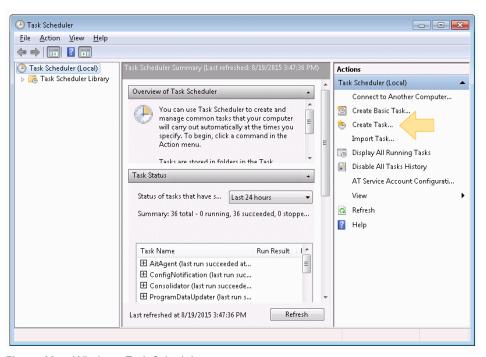


Figure 11 Windows Task Scheduler program

#### Tips for using this program for OpenLAB

- 1 Create a task according to your needs using:
  - To execute the data backup irrespective of the current logged-in user, use Change User or Group to set the task running account to System.

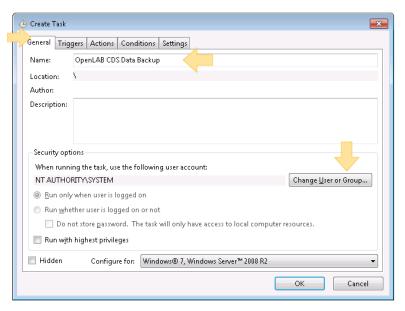


Figure 12 Change Users or Group

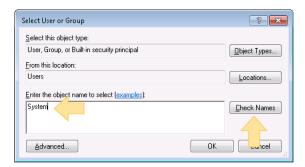


Figure 13 Select User or Group

• Schedule the data backup process as needed from **Triggers > New**. Agilent recommends that you do not schedule the backup task and the full virus scan to be executed at the same time.

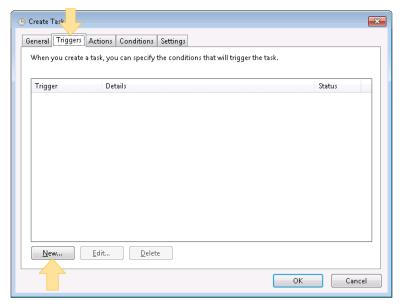


Figure 14 Triggers

• On the **Actions** tab, create a new action to start a program.

Under *Program/script:* Browse to <InstallLocation>\OpenLAB Data Store\ Backup Scripts\Secure\_OpenLABCDS\_Data\_Backup\_TaskScheduler.bat.

#### Add arguments:

Enter the following directory paths consecutively, in quotes, and separated by a space: Data backup destination, Content Management content folder, Content Management index folder, PostgreSQL data file, PostgreSQL program file.

## 7 System Setup and Maintenance

**Maintenance Procedures** 

#### For example:

"D:\Destination" "C:\DSData\DSContent" "C:\DSData\DSIndex" "C:\ProgramData\Agilent\PostgreSqlData-9.3" "C:\Program Files (x86)\Agilent Technologies"

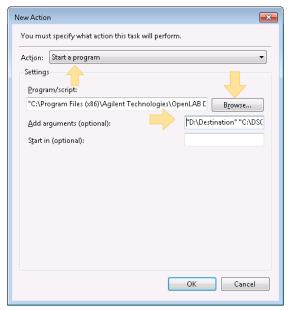


Figure 15 Example arguments

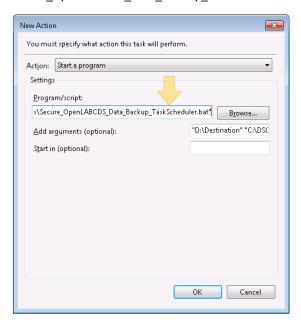


Figure 16 Windows 8.1 directory path

#### 7 System Setup and Maintenance

**Maintenance Procedures** 

2 To speed up the backup process, assign a higher priority to your task. Export the task XML file from Task Scheduler > Task Scheduler Library > task name > Export. Update the XML tag < Priority > with any number between 4 to 6 (normal priority) and import the updated XML file back into the Task Scheduler.

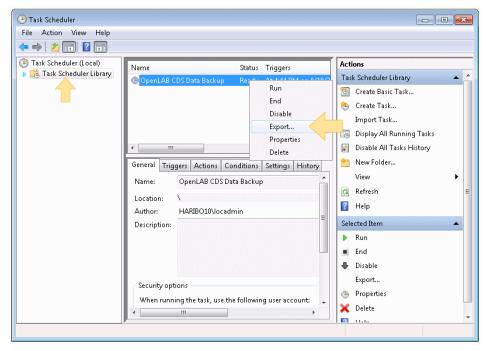


Figure 17 Export task

**3** When the **Windows Task Scheduler** begins the backup, the logged on user is notified. The user cannot use OpenLAB or antivirus software during the backup process. The backup starts 10 minutes after the time shown in the header of the message window.

## **Software Restore Procedure**

Use this procedure to restore your system from an existing backup system image. See the Windows Installation documentation for detailed information.

- 1 Connect the recovery USB drive to a (blue) USB 3.0 port and insert the Windows Recovery DVD in the DVD drive.
- 2 Start or restart the PC and watch the PC monitor carefully during the restart process for the message **Press any key to boot from CD or DVD....** Press the space bar or any other key when the message appears.

The PC will boot from the DVD.

- **3** Enter the appropriate information to start the **Install Windows** program.
- 4 Select Repair your computer.
- **5** Specify system recovery options.
  - If you are using Windows 7, select the system recovery options according to the Windows instructions.



Figure 18 System recovery options

If you are using Windows 8.1, click Troubleshoot > Advanced Options > System Image Recovery > Choose a target operating system.

#### 7 System Setup and Maintenance

**Maintenance Procedures** 

- 6 In the Select a system image backup screen, Use the latest available system image is selected by default.
  - · If the auto-filled information is correct, click Next.
  - If no image match is found,
    - a Select Select a system image and click Next
    - **b** Select the appropriate image and click **Next**.
    - c Select the date and time and click Next.
- 7 Select Format and repartition disks and click Next.
- 8 Click Finish.
- **9** When the re-image process is complete, restart the system to finish the restoration.

# **Data Recovery Procedure**

Use this procedure to restore data to your system from your saved backup files.

- 1 See "Stop Windows Services" on page 72, and stop the services in this order:
  - a alfrescoTomcat
  - **b** Agilent OpenLAB Shared Services
  - c PostgreSQL
- 2 Navigate to your backup destination folders containing your backed up:
  - DSContentDir
  - DSIndexDir
  - PostgreSQLDataDir
  - Installation
- 3 Copy the contents from your backup content folder and paste it into the Content Management content folder of the currently installed OpenLAB CDS Workstation. Only move folder contents. Copying, pasting, and renaming entire folders from your backup into the new installation may cause errors in your subsequent performance of your new installation.

- For example, if the Content Management content folder of the currently installed OpenLAB CDS Workstation is C:\DSData\DsContent, then paste the contents of your backup content folder into the C:\DSData\DsContent folder.
- **4** Copy the contents from your backup index folder and paste them into the Content Management index folder of the currently installed OpenLAB CDS Workstation.
- **5** Copy the contents from your backup PostgreSQLDataDir folder and paste them into the Content Management PostgreSQL data folder of the currently installed OpenLAB CDS Workstation.
- **6** Restore the installation folder to C:\ProgramData\Agilent\Installation.
- 7 Navigate to <Agilent Home>\OpenLAB Data Store\Configuration, and run DatastoreConfigurationFinalizer.
  - This reapplies all security settings and restarts the system.

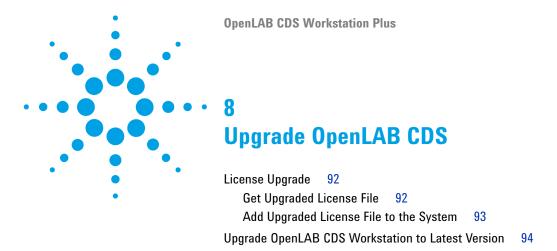
## **Routine Maintenance**

Routine maintenance procedures should be carried out on a regular basis. They are related to the Content Management database, which is also provided by OpenLAB Server. Please refer to the *OpenLAB Server Administration* guide for more information on the following topics:

- · Monitor resource usage
- Update database statistics
- · Additional best practices

# 7 System Setup and Maintenance

**Maintenance Procedures** 



This chapter describes the upgrade of the software.

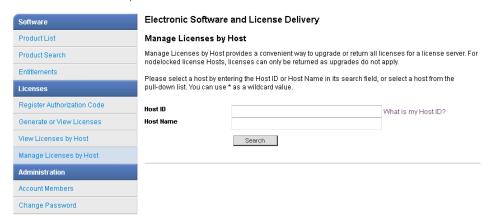
# License Upgrade

# **Get Upgraded License File**

You will need to upgrade your licenses in SubscribeNet prior to upgrading to the next version of OpenLAB CDS. We strongly recommend upgrading your workstation licenses *before* upgrading the core software. Standalone workstations which are upgraded to the new core software version, without a new workstation license, will not work until the new workstation licenses are added to the OpenLAB Control Panel.

If you are under SMA subscription, proceed as follows to upgrade your licenses:

- 1 During the following process, you will be prompted in SubscribeNet for the host name or MAC address of the workstation where OpenLAB CDS is already installed.
  - To retrieve this hostname and MAC address, open the Control Panel and browse to the **Administration > Licenses** section. Note down the host name and use the **Copy MAC Address** or **Save MAC Address** function to obtain the MAC address.
- 2 Log into the Agilent Electronic Software and License Delivery (https://agilent.subscribenet.com/).
- 3 Navigate to Manage Licenses by Host. In the Host ID field, enter the previously noted MAC address, and click Search.



If the relevant host name does not appear, you may be managing your licenses in multiple SubscribeNet accounts. You will need to log into those accounts to upgrade those workstation licenses.

- 4 If your license(s) are eligible for an upgrade, you will see the **Upgrade All** button. Otherwise you will need to contact your Agilent Sales Representative to renew your Software Maintenance Agreement (see "Sales and Support Assistance" on page 113). To proceed with generating your upgrade license, click the button.
- 5 On the Upgrade All Licenses for License Host page, review the data, and confirm by clicking Upgrade All.
  - This upgrades the license file to the most current version. SubscribeNet will send you an email with a new license file.
- **6** Put the new license file on your system (see "Add Upgraded License File to the System" on page 93.

If you have multiple standalone Workstations, repeat this step for each individual workstation.

Note that each workstation's MAC address is the file name. This helps identify the correct license file to import into the workstation's Control Panel.

# Add Upgraded License File to the System

If you have purchased new options, such as additional instrument controls or client license and regenerated your license in SubscribeNet, the upgraded license file must be re-applied to the system.

- 1 Start the Control Panel from any machine connected to the system you want to install the license for.
- 2 Navigate to Administration > Licenses.
- 3 In the ribbon, click Remove License imes .
- 4 In the ribbon, click Add License +.
- **5** Browse to and open the license file saved from the license generation process in SubscribeNet.
- **6** Restart the following Windows services:
  - Agilent OpenLAB License Server
  - Agilent OpenLAB Licensing Support

# **Upgrade OpenLAB CDS Workstation to Latest Version**

You can upgrade an OpenLAB CDS standalone workstation to the latest version using the OpenLAB CDS Installation Wizard.

- 1 Run the Setup.exe file from the installation medium as a user with administrative rights.
- 2 Select OpenLAB CDS.
- 3 In the OpenLAB CDS Installer, select the **Installation** screen.
- 4 Click Install/Upgrade.
- **5** Provide your OpenLAB CDS credentials.
- 6 Click Upgrade.
- 7 In the **Upgrade** screen, click **Next** to start the reconfiguration.
- 8 In the Configuration screen, click Next to start the upgrade.
- **9** On the **Finish** page, keep the **Reboot** check box selected, and click **Finish**.
- 10 If you use a GC/MS instrument: Upgrade the GC/MS firmware to the latest revision. The upgrade is required for the GC/MS software to work properly with OpenLAB CDS 2.2.

For more information on driver upgrades, see "Install or Upgrade Driver Software" on page 25.

It is recommended that you reconfigure the instrument in the Control Panel.





Uninstall OpenLAB Help and Learning Only

This chapter describes the uninstallation of the software.

# **Uninstall OpenLAB CDS**

- 1 Log in as an administrator.
- 2 In the Microsoft Control Panel, open Programs and Features.
- **3** Uninstall the following programs:
  - a OpenLAB CDS

Double-click Agilent OpenLAB CDS.

X Agilent OpenLAB CDS

Agilent Technologies

The Agilent Uninstallation Wizard opens. In the wizard, click Uninstall.

b PostgreSQL

Double-click PostgreSQL.

PostgreSQL

Agilent Technologies

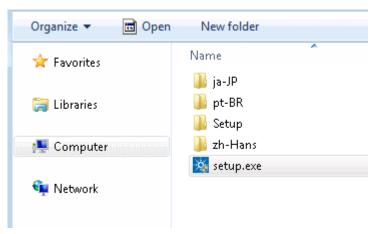
A warning will be shown that the data directory has not been removed. If you want to remove it, manually delete the folder that you defined during installation (for example, C:\DSData).

4 Reboot.

# **Uninstall OpenLAB Help and Learning Only**

If you installed OpenLAB Help and Learning only, follow this procedure to uninstall it.

1 Insert the USB media, right-click the setup.exe file, and run it as administrator. Alternatively, copy the content of the USB media to a network share, and run the setup.exe file from there.



NOTE

If User Account Control (UAC) is switched on, this step requires active confirmation to continue.

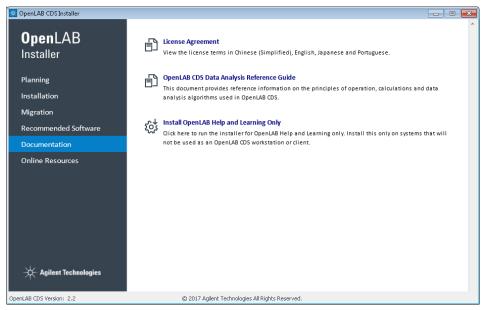
## 9 Uninstall OpenLAB CDS With All of its Components

Uninstall OpenLAB Help and Learning Only

2 On the start screen, select OpenLAB CDS, and click OK.



3 On the Documentation page, select Install OpenLAB Help and Learning Only.

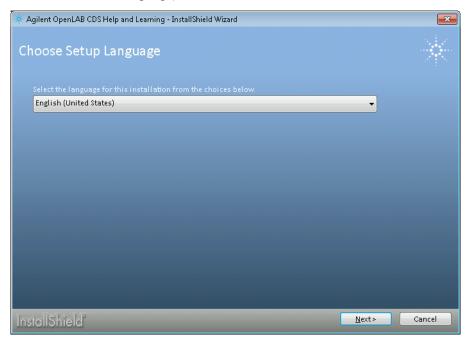


The Agilent OpenLAB CDS Help and Learning wizard opens.

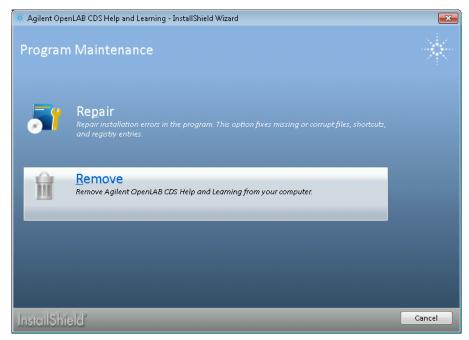
## 9 Uninstall OpenLAB CDS With All of its Components

**Uninstall OpenLAB Help and Learning Only** 

4 Select the correct language, then click **Next**.



#### 5 Click Remove.



The wizard removes OpenLAB Help and Learning from your system.

9 Uninstall OpenLAB CDS With All of its Components

Uninstall OpenLAB Help and Learning Only

# OpenLAB CDS Workstation Plus 10 Appendix Privileges in the Control Panel 104 Project Privileges 104 Instrument Privileges 111 Administrative Privileges 112 Sales and Support Assistance 113

# **Privileges in the Control Panel**

The privileges described in the following can be associated with different roles in the Control Panel. The following roles are available:

- · Everything
- System Administrator
- Instrument Administrator
- Project Administrator
- · Instrument User
- Technician

- Chemist
- Archivist
- · Content Management Approver
- · Content Management Contributor
- · Content Management Reader
- Content Management PDF Template Manager

In the Control Panel under **Administration > Roles**, you can view or change the associated privileges, or create your own roles.

# **Project Privileges**

Table 4 **Project Management** 

Name	Description
Manage project or project group	User can create or edit project properties and can move the project but cannot view or edit the project access settings.
Manage project or project group access	User can view and edit the project access settings.
View project or project group	User can see a project and project details but cannot edit.  Note: This privilege is required for all users.
Access content using web client	User can view the data via the Content Management web interface.
Edit content of project	User can create new versions of documents (e.g. data, methods, or templates).

Table 5 E-Signature

Name	Description
E-Signature Sign Data Files	User can sign data files
Revoke E-Signature	User can revoke the e-signature.

#### Table 6 Sample Prep

Name	Description
Create and modify sample prep	View, edit, and save an autosampler sample prep file

Table 7 **Acquisition Method** 

Name	Description
Create and modify acquisition method	Create, edit and save an acquisition method file (*.amx)

 Table 8
 Processing Method

Name	Description
Create processing method	Create a new processing method (*.pmx), or save a method under a new name.
Save master method	Save changes to a processing method in the Methods folder.
Save result set method	Save changes to a processing method in the result set folder.
Edit sample information	Edit information in the Injection List window.
Edit integration parameters	View and edit the parameters in the <b>Integration Events</b> section of a method.
Edit method override parameters	Override parameters in a predefined acquisition method.
Edit identification parameters	View and edit the parameters in the <b>Compounds &gt; Identification</b> section of a method.
Edit chromatogram extraction parameters	View and edit the parameters in the <b>Extraction</b> > <b>Chromatogram</b> section of a method.
Edit spectrum extraction parameters	View and edit the parameters in the <b>Extraction</b> > <b>Spectrum</b> section of a method.
Edit MS library search parameters	View and edit the parameters in the MS Library Search > Properties section of a method.
Edit calibration parameters	View and edit the parameters in the <b>Compounds &gt; Calibration</b> section of method.
Edit spectra parameters	View and edit the parameters in the <b>Compounds &gt; Spectra</b> section of method.
Edit system suitability parameters	View and edit the parameters in the <b>Compounds &gt; System Suitability</b> section of method.
Edit custom calculation parameters	View and edit the parameters in the <b>Tools</b> > <b>Custom Calculation</b> section of a method.
Edit signal parameters	View and edit the parameters in the <b>General</b> > <b>Signals</b> section of a method.

Table 8 **Processing Method** 

Name	Description
Edit sample purity parameters	View and edit the parameters in the MS Sample Purity section of a method.
Edit reporting parameters	View and edit the parameters in the <b>Reports</b> > <b>Injection Report</b> section of a method.
Edit general parameters	View and edit the parameters in the <b>General</b> > <b>Propertiess</b> section of a method.
Load older master method	With Content Management, load an older version of a master method.

Table 9 Report Template

Privilege	Description
Unlock/lock report template items	Lock and unlock report template items (tables, chromatograms, groups of items,) to control who is allowed to modify those.
Validate report template	Confirm usage of report templates that have been modified outside OpenLAB CDS.
Create report template	Create and edit report templates in the Reporting view.

 Table 10
 Sequence Template

Name	Description
Create and modify sequence template	Create, edit and save sequence creation templates (*.stx).

# **10** Appendix

108

**Privileges in the Control Panel** 

Table 11 Sequence

Name	Description
Edit any users running sequence	Edit any user's running sequence (status <b>Acquiring</b> in the Run Queue).
Create and modify sequence	Create, edit and save sequences (*.sqx)
Edit users own running sequences	Edit your own running sequences (status <b>Acquiring</b> in the Run Queue).

Table 12 Audit Trail

Name	Description
Change method audit trail settings	Edit and save method audit trail settings (project properties in the Control Panel).
Review audit trail	Confirm that you reviewed a changed audit trail.
Add manual audit trail entry	Add a manual entry to document your own actions in the audit trail.

Table 13 Control

Name	Description
Abort any running sample	Abort any running sequence or single run.
Manual control (in run)	Access manual control functions while the instrument is running.
Manual control (only when instrument idle)	Access manual control functions while the instrument is idle.
MS autotune and manual tuning	Access all MS tune and maintenance functionality, including manual tune, autotune, and check tune.
Delete any pending run	Remove pending runs from the Run Queue.
MS autotune	Perform MS autotune and check tune.

 Table 14
 Data Processing

Name	Description
Reprocess data	Reprocess injections or result sets.
Do manual compound identification	Manually assign a compound to a peak.
Do manual integration	Activate manual integration in the <b>Chromatograms</b> window.
Do manual chromatogram extraction	Manually extract UV wavelength chromatograms or MS (TIC-SIM/TIC-SCAN) chromatograms from your data.
Do manual spectrum extraction	Manually extract UV or MS spectra from your data.
Do manual MS library search	Manually search for matches in an MS library.
Update master processing method	Save changes from a result set method to the corresponding master processing method in the Methods folder.
Create new result set	Combine single samples or sequences from different sources in a new, self-assembled result set.
Print results reports	Create reports for your methods or results.
Launch Custom Calculation Editor	Start the Custom Calculation Editor from Data Analysis.

 Table 15
 File and Folder Operations

Name	Description
Delete report templates	Delete report templates (*.rdl) in the <b>Data Selection</b> view of Data Analysis.
Delete sequence templates	Delete sequence templates (*.stx) files in the <b>Data Selection</b> view of Data Analysis.
Delete methods	Delete processing methods (*.pmx) or acquisition methods (*.amx) in the <b>Data Selection</b> view of Data Analysis.

# **10** Appendix

**Privileges in the Control Panel** 

Table 16 Data

Name	Description
Export data	Export data into an OpenLAB archive (*.olax).
Import data	Import data from OpenLAB archives (*.olax) into the OpenLAB system.
Save reports to disk	Save or export a report to a location on a disk or network share.

### Table 17 Lock

Name	Description
Lock Results	Lock a result set to protect it from being changed.
Unlock Results	Unlock a locked result set.

## Table 18 Custom Tools

Name	Description
Access Custom Tools section	Start external programs that were added to the application via the customization tool

Table 19 Snapshot

Name	Description
Review snapshot results	From Acquisition, open a currently running sample in Data Analysis.

# **Instrument Privileges**

 Table 20
 Instrument Management

Name	Description
View instrument or location	User can view and access a location in the tree, but not edit access security, can view properties.
Manage Instrument or location	User can create and move locations and edit properties (name, description, etc).
Manage instrument or location access	User can view and edit the location access settings.
Run instrument	User can start an instrument session.
Service instrument	User can lock or unlock an instrument (to service it).

# **Privileges in the Control Panel**

# **Administrative Privileges**

 Table 21
 System Administration

Name	Description
Manage printers	Can add/remove printers and print server.
Edit activity log properties	Can change the Activity log Settings in the Control Panel (that is, can turn logging on for the System Activity Log).
Create administrative reports	Can create any of the system admin reports.
Manage system components	Can install/remove components (applications).
Manage security	Can change security settings and assign security roles. Can edit (add, change etc) users, groups and roles. Can move and delete files and folders in the Content Management database. Note: A user with this privilege can grant himself access to all settings in Shared Services. Be careful who you grant the Manage Security privilege.
Manage instrument controllers	Can edit Instrument Controllers in the Control Panel.
Unlock any locked UI	Can log in to another user's locked session.

 Table 22
 Content Management

Name	Description
Archive content	User can archive the content of the Content Management data repository.

# **Sales and Support Assistance**

Please check the following web site for your local sales and support contact:

http://www.chem.agilent.com/en-US/Contact-US/page

#### www.agilent.com

# In This Book

This document provides instructions for installation, configuration, administration, and maintenance of an OpenLAB CDS Workstation with Content Management (OpenLAB CDS Workstation Software Plus). It includes information on the license generation with SubscribeNet.

The manual describes the following:

- Install OpenLAB CDS Workstation with Content Management
- Generating and Downloading Your Software License
- Configure OpenLAB CDS Workstation with Content Management
- · Optional Procedures
- Customization
- · About the OpenLAB CDS software
- · System Setup and Maintenance

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Printed in Germany 06/2017



M8410-90002

