



OpenLab EZChrom

# Workstation Installation and Configuration Guide

# Notices

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## In this Guide...

This installation guide provides instructions to install and configure the OpenLab EZChrom workstations. It is designed to help system administrators and other users install the software quickly and correctly.

**Table 1** Terms and abbreviations used in this document

<b>Term</b>	<b>Description</b>
CDS	Chromatography Data System
EZChrom	OpenLab EZChrom
Data Store	OpenLab Data Store; as of rev. 3.4, the product name is OpenLab Server 2.5
OpenLab Server	New product name, formerly known as OpenLab Data Store.
Content Management	Data storage component provided as part of OpenLab Server
ECM	OpenLab Enterprise Content Manager
AIC	Agilent Instrument Controller
Control Panel	OpenLab Control Panel
Microsoft Control Panel	Part of the Microsoft Windows operating system
Shared Services	Set of components and services for licensing, users and roles, instrument configuration, security policy and more. Installed on all computers; accessed via the OpenLab Control Panel.
OpenLab Shared Services Server	Server running the Shared Services. Formerly known as OpenLab Shared Services Server.

## **1 Configure your Workstation PC**

Agilent-delivered PC Bundle systems are delivered with the supported pre-installed Windows operating system and are configured for optimum performance. Non-Agilent PC Bundle systems require some manual configuration changes in order to provide optimum performance. This chapter describes how to configure a non-Agilent PC Bundle system.

## **2 Install the Software**

The installation is automated by the OpenLab EZChrom Master Installer. This tool installs the various components of EZChrom.

## **3 Post Installation Tasks**

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

## **4 Optional Procedures**

This chapter contains information on the Additional Drivers and Software wizard, on the Software Verification Tool, and other helpful procedures.

## **5 Licensing**

This chapter contains information on how to obtain and install a license.

## **6 Configure OpenLab EZChrom in the Control Panel**

This chapter describes the initial configuration steps after installing the software. Refer to the online help for more information.

## **7 Upgrade EZChrom Edition to Latest Version**

This chapter describes the upgrade from EZChrom Edition A.04.0x.

## **8 Uninstall the Software**

This chapter contains information on the uninstallation by using the OpenLab EZChrom Uninstallation Wizard. It also describes post uninstallation tasks that are essential if you plan to reinstall EZChrom on the same computer.

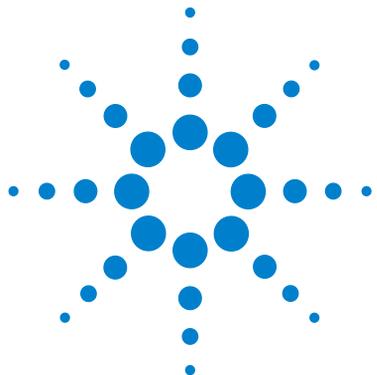
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# 1

## Configure your Workstation PC

Agilent-delivered PC Bundle systems are delivered with the supported pre-installed Windows operating system and are configured for optimum performance. Non-Agilent PC Bundle systems require some manual configuration changes in order to provide optimum performance. This chapter describes how to configure a non-Agilent PC Bundle system.



## About Configuration

Some changes within this document are mandatory for OpenLab EZChrom to work properly on a Windows system. Some changes will optimize application performance. Other changes will have a graphical or minor impact.

### NOTE

To indicate the relative importance of individual settings, each item is categorized as:

**MUST:** These changes must be applied.

**PERFORMANCE:** These changes will improve system performance.

**OPTIONAL:** Most of these changes will affect the graphical display of the application.

---

### NOTE

If User Account Control (UAC) is switched on, some configuration steps will require active confirmation to continue.

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## Installing Windows

### NOTE

Keep your PC disconnected from the internet until you have installed the appropriate security patches and hot fixes. Install the latest security fixes as supported from Agilent Technologies and virus definitions prior to connecting to a network.

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- 1 Install Windows from the Microsoft installation media. During the setup, provide the computer name, administrator password and network settings. Choose to either join an existing domain or set up the system in a workgroup mode.
- 2 To secure your system against viruses please install an antivirus program. Be sure to open the firewall ports listed in the Firewall Settings in the *OpenLab EZChrom Requirements* guide.

### NOTE

Running antivirus programs might influence the behavior and performance of your computer. Some virus scanners might cause issues when used with OpenLab EZChrom. The application has been tested with Symantic Endpoint Protection, Trend Micro, Microsoft Security Essentials, McAfee. Any of these antivirus software is recommended. However, the support is not limited to these antivirus software products. Each product may have specific language requirements and support.

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## Configuring Windows 10

- [MUST] 1 **System** (Microsoft Control Panel)<sup>1</sup>: Register Windows with Microsoft.
- [MUST] 2 **File Explorer Options** (Microsoft Control Panel): In the **View** tab,
- Select **Always show menus**.
  - Select **Display the full path in the title bar**.
  - Clear **Hide extensions for known file types**.
  - Clear **Use Sharing Wizard**.
- [MUST] 3 **Start > Settings > Update and Security**:
- a Click **Check for updates** to check for updates and apply all critical security patches.  
Before proceeding, ensure that all updates are downloaded and installed. Ensure that there is no reboot pending.
  - b Click **Advanced options**.
  - c Select the **Defer feature updates** check box.
  - d Click **Choose how updates are delivered**.
  - e Turn off **Updates from more than one place**.
- [MUST] 4 Settings for updates: **Windows Update** service MUST NOT be running during installation.
- [MUST] 5 **Indexing Options** (Microsoft Control Panel): Disable indexing.  
Click the **Modify** button. Clear all drives and locations.
- [MUST] 6 **Start > search for 'gpedit.msc'**: Windows logon options
- a Navigate to **Local Computer Policy > Computer Configuration > Administrative Templates > System > Logon**.
  - b Set **Hide entry points for Fast User Switching** and **Always use classic logon** to **Enabled**.

1 View the items by icon to see a list of all items.

- WHEN [MUST] 7 Start > Settings > System > Tablet Mode:** For **When I sign in**, select **Use desktop mode**.
- [MUST] 8 Power Options** (Microsoft Control Panel):
- a** As preferred plan select **High performance**
  - b** Click **Change Plan settings**
  - c** Set the option **Put the computer to sleep** to **Never**.
  - d** Click **Change advanced power settings**.
  - e** Open the nodes for **Hard disk > Turn off hard disk after**.
  - f** Set the Minutes to 0 (=Never).
- [MUST] 9 Start > Settings > System > Offline Maps:** Turn **Metered connections** and **Map updates** off.
- [MUST] 10 Administrative Tools** (Microsoft Control Panel): Configure security options:
- a** Double-click **Local Security Policy**.
  - b** Navigate to **Security Settings > Local Policies > Security Options**
  - c** Double-click the following policy listed in the right hand panel: **Network Access: Sharing and security model for local accounts**
  - d** In the displayed dialog select the following item from the drop-down list: **Classic - local users authenticate as themselves**
- [MUST] 11 Start > Settings > System and Security:**
- a** Click **Change Windows SmartScreen settings**.
  - b** Select **Don't do anything (turn off Windows SmartScreen)**.
- [MUST] 12 Date and Time** (Microsoft Control Panel): Choose the time zone of your machine's location.
- [MUST] 13 Network and Sharing Center** (Microsoft Control Panel):
- a** Select **Change adapter settings**. Right-click **Local Area Connection > Properties > Configure**.
  - b** On the **Power Management** tab, clear all check boxes.
- [MUST] 14 Programs and Features** (Microsoft Control Panel):
- a** Click **Turn Windows features on or off**.
  - b** Enable **.NET 3.5** by selecting the **.NET Framework 3.5 (includes .NET 2.0 and 3.0)** check box.  
This option requires an internet connection.

**NOTE**

If this procedure does not work as expected, or the computer has no internet access, install .NET 3.5 from the Windows installation media (see details for Windows 10 under <https://support.microsoft.com/en-us/kb/2734782>). If you do not have installation media, create them as described under <https://www.microsoft.com/en-us/software-download/windows10>.

- c** To make sure that all the net.tcp components are properly initialized, Non-HTTP activation must be enabled. Expand the **.NET Framework 3.5 (includes .NET 2.0 and 3.0)** node and select the **Windows Communication Foundation Non-HTTP Activation** check box.
  - d** Select the **.NET Framework 4.6 Advanced Services** check box. Use the default values for sub items.
  - e** Select the **Internet Explorer 11** check box.
  - f** Select the **Telnet Client** check box.
  - g** Select the **TFTP Client** check box.
  - h** Reboot the PC.
- [MUST] 15 Start > Settings > System > Default Apps:** Select Internet Explorer as default Web browser.  
Do not use Edge, it is not supported. Unpin Edge from the task bar.
- [MUST] 16** Disable Compatibility View in Internet Explorer.
- a** Open Internet Explorer.
  - b** Click the Tools menu, and then click **Compatibility View Settings**.
  - c** Clear the **Display intranet sites in Compatibility View** check box.
- [MUST] 17** Enable the navigation pane:  
Open Windows Explorer, then select **View > Navigation pane** from the ribbon and make sure that **Navigation pane** is selected.
- [MUST] 18** Disable Admin Approval Mode for the Built-in Administrator account:
- a** On the **Start** screen, type **Local Security Policy**, and press **ENTER**.
  - b** Navigate to **Local Policies > Security Options**.
  - c** Double-click the **User Account Control: Admin Approval Mode for the Built-in Administrator account** policy.
  - d** Select **Disabled**, and click **OK**.

- [MUST] 19 Automatically detect intranet network:
- a Open Internet Explorer.
  - b Click the **Tools** menu, and then click **Internet Options**.
  - c On the **Security** tab, select **Local intranet**, and click **Sites**.
  - d Select **Automatically detect intranet network**.
  - e Click **Advanced**.
  - f Add the network path from where the EZChrom installer is mapped, and click **Close**.

- [PERFORMANCE] 20 **System** (Microsoft Control Panel): Change performance options:
- a Click **Advanced system settings**.
  - b On the **Advanced** tab > **Performance** click **Settings**.
  - c On the **Visual Effects** tab, select **Adjust for best performance**.
  - d Under **Custom**, select the following check boxes for better usability:
    - **Smooth edges of screen fonts**
    - **Show shadows under mouse pointer**
    - **Show shadows under windows**

- [PERFORMANCE] 21 **Start > Settings > Personalization > Colors**: Turn **Make Start, taskbar, and action center transparent** off.

- [PERFORMANCE] 22 **System** (Microsoft Control Panel): Change system properties:
- a Click **Advanced system settings**.
  - b On the **Advanced** tab > **Performance** click **Settings**.
    - **Advanced** tab > **Virtual Memory**: For optimum performance use the **Change** button to adjust the paging file size to a value of 2 to 3 times of the physical RAM on the PC. If possible locate the paging file on a drive different from the system installation drive.
    - **Data Execution Prevention** tab: Select **Turn on DEP for essential Windows programs and services only**.

- c Advanced > Startup and Recovery > Settings** button:
- **System startup** section:  
Change both **Time to display ...** fields from **30** to **3** sec.
  - **System failure** section:  
Select **Automatically restart**, in the **Write debugging information** section select **Kernel memory dump** from the drop-down list.
- d System Protection** tab
- Make sure that **Protection** is turned off. If required, click **Configure** and select **Disable system protection**.
- e Remote** tab
- In the **Remote Assistance** section, clear the check box **Allow Remote Assistance connections to this computer**.
  - In the **Remote Desktop** section, select **Don't allow connections to this computer**.

[OPTIONAL] **23 Start > Settings > Personalization:** Disable advertising info:

- a** On the **Lock screen** page:
- Under **Background**, select **Picture** or **Slideshow**.
  - Turn off **Get fun facts, tips, tricks, and more on your lock screen**.
  - Turn off **Show lock screen background picture on the sign-in screen**.
- b** On the **Start** page:
- Turn off **Occasionally show suggestions in Start**.

[OPTIONAL] **24 Start > Settings > Privacy:**

- a** On the **General** page, turn off the following:
- **Let apps use my advertising ID**
  - **Turn on SmartScreen Filter to check web content**
  - **Send Microsoft info about how I write**
- b** On the **Location** page, turn off **Location**.

[OPTIONAL] **25 Start > search for 'gpedit.msc':** Welcome Center:

- a** Navigate to **Local Computer Policy > Computer Configuration > Administrative Templates > System > Logon**.
- b** Set **Don't display the Getting Started welcome screen at logon** to **Enabled**.

## Configure your Workstation PC

### Configuring Windows 10

- [OPTIONAL] **26 Recycle Bin Properties:** (right-click on desktop icon **Recycle Bin**) Select the following options:
- **Custom size:** Select a size corresponding to approximately 10% of the complete disk space for the drive.
  - Select **Display delete confirmation dialog.**

Repeat these steps for all drives of your computer.

**27 Region** (Microsoft Control Panel): Language for non-Unicode programs:

On the **Administrative** tab, click **Change system locale....** From the drop down list, select **English (United States)**.

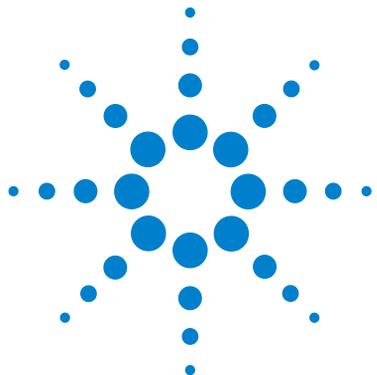
#### NOTE

Do not the change system locale if you are using an English, Portuguese, Japanese or Chinese Operating System.

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- [OPTIONAL] **28** Right-click the taskbar to open the **Taskbar and Start Menu Properties** dialog. In the **Taskbar** tab, under **Taskbar buttons** select **Combine when taskbar is full.**

This will simplify switching between open CDS instances.



## 2 Install the Software

The installation is automated by the OpenLab EZChrom Master Installer. Follow the wizzard to install all components you need to run OpenLab EZChrom.



## Before You Begin

To simplify installation of the software, it is helpful to decide on some configuration options before you begin the actual software installation.

### 1 Decide on a computer name.

The computer name will be reflected in the instrument configuration. To avoid considerable effort, it is recommend to keep the computer name unchanged after installing OpenLab EZChrom.

#### NOTE

To make sure that a DNS server can resolve the computer name, follow the internet standard for protocols (*RFC952*) and use only the following characters:

Letters (a-z, A-Z)

Digits (0-9)

Hyphen (-)

Do not use an underscore.

---

### 2 Decide on how audit trails shall be handled.

By default, audit trails are disabled and can be activated manually for each single project. The installation wizard offers a function to globally enable audit trails for all projects.

Once audit trails are enabled, they cannot be disabled again.

### 3 For installing EZChrom, you need to have administrator privileges for all servers and clients. Power user privileges are not sufficient (the installation does not start).

### 4 Decide on a directory location to store all files related to the data system software, including data, methods, sequences, and configurations. The directory must always be accessible to the PC running the software.

### 5 If you will be using OpenLab ECM with your system, obtain the ECM server name.

#### NOTE

Make sure you have administrator privileges for both ECM and OpenLab.

---

### 6 Decide on the software delivery approach you want to use:

- *Install directly from the DVDs* – Load the disks as required directly to the workstation disk drive.. (Recommended)
  - *Copy installation files to a centralized location* – You can use the utility to copy the installation files, for example, to a network share folder or USB drive, and run the installation from that location. However, some networks may interfere with installation.
- 7** When you launch the application, you will be able to review the following PDFs in the installer **Planning** menu before you install the software.
- *OpenLab EZChrom Requirements* – Use this PDF to check that your settings comply with the network requirements, and to determine whether your hardware and software will support the system.
  - *OpenLab EZChrom Workstation* – An electronic copy of this installation guide is provided in PDF format for your convenience.
- 8** Install all required hardware, including any A/D connections, interfaces, instrument detectors, and communication cables.
- 9** Make sure that a default printer is configured in Windows.

This is done via the Microsoft Control Panel. If no default printer is configured the following problems may occur:

- Printing of a report preview will fail
- the **Copy To Clipboard** menu will have an error
- the **Custom Report View** will have problems with new templates

## NOTE

During the installation of the EZChrom, a PDF XChange 6 printer driver is installed. This printer has the following limitations:

- The maximum number of pages for one print job is 1500. For example sequence summary report is one print job.
- When printing Multi Page chromatograms, the maximum number of pages which can be printed properly depends on the resolution of the printer. 300 dpi allows 10 pages, 600 dpi allows up to 5 pages per chromatogram.

- 10** Make sure .NET 4.7.2 is activated as Windows features.

The .NET 4.7.2 installation files are available on disk 1 (Disk1\Tools\DotNet4.7). To install .NET 4.7.2, copy the files to a local disk.

**NOTE**

Run the .NET 4.7.2 installation from a local disk. Windows needs write access to the installation files.

- 11** Make sure that the antivirus software is disabled during the installation.
- 12** Make sure that no upgrades will run for any software during the installation.
- 13** Make sure that no system reboot is pending.

Pending reboots are indicated in the Site Preparation Tool (see [“Step 4: Run the System Configuration Checker”](#) on page 24).

## Antivirus exclusions

The following are antivirus exclusions for EZChrom installer programs.

- <Installer Path>\Disk1\Setup\Agilent.OpenLAB.CDSInstaller.exe
- <Installer Path>\Disk1\Setup\Agilent.OpenLAB.InstallerChecksum.exe
- <Installer Path>\Disk1\Setup\Agilent.OpenLAB.MasterInstaller.exe
- <Installer Path>\Disk1\Setup\Agilent.OpenLABCDSChangeWizard.exe
- <Installer Path>\Disk1\Setup\  
Agilent.OpenLABCDS CSAICRegistrationTool.exe
- <Installer Path>\Disk1\Setup\  
Agilent.OpenLABCDSRegistrationWizard.exe
- <Installer Path>\Disk1\Setup\Agilent.OpenLABCDSSetupFromDVD.exe
- <Installer Path>\Disk1\Setup\  
Agilent.OpenLABCDSUninstallationWizard.exe
- <Installer Path>\Disk1\Setup\Agilent.OpenLABCDSWizard.exe
- <Installer Path>\Disk1\Setup\Agilent.OpenLABiDAWizard.exe
- <Installer Path>\Disk1\Setup\OpenLABCDSUtility.exe
- <Installer Path>\Disk1\Setup\Bin\IQT\_Checksum\IQT.exe
- <Installer Path>\Disk4\RegisterEE\registreee.exe
- %temp%\Disk1
- <InstallationDirectory>\SitePrepStartExe

## Step 1: Prepare for Installation

To prepare for an installation on your workstation:

- 1 For the direct DVD approach, insert the OpenLab EZChrom Installation disk (Disk1).
- 2 For the shared file approach, copy all DVDs to a centralized folder as described below.
- 3 For the portable data storage device approach, insert the new device in a computer USB port.

To begin installation, navigate to Disk1\Setup.bat. Right-click the file and run it as administrator to proceed to the **Planning** screen.

## Step 2: Install Third Party Tools

The **OpenLab EZChrom Master Installer** offers a list of tools that can be installed directly from the **Installation** screen.

### Install Adobe PDF Reader

You need *Adobe Reader DC Classic* to ...

- view site prep or administrative reports (such as system reports)
- use the **Report Viewer** feature
- view Software Verification Reports

#### NOTE

If an older version of Acrobat Reader (11 or earlier) is installed on your system, you must deinstall it first. Adobe updates would raise those versions to Acrobat Reader DC Continuous, which pushes automatic updates on a regular basis.

## Install the Software

### Step 2: Install Third Party Tools

#### To install Adobe Reader DC Classic:

- 1** Select **Third Party Tools** and then **Adobe PDF Reader**.
  - a** The Adobe Reader setup screen appears. Click **Install** to continue.
  - b** If Adobe Reader was successfully installed, click **Finish** to exist the setup screen.

Alternatively, you can install Adobe Reader from the installation media. It is available under Disk1/Tools/Adobe Reader.

Run `AcroRdr_Installer.bat` and follow the instructions of the Adobe Reader Setup wizard.

#### NOTE

If you install Adobe PDF Reader directly from the installation medium: When OpenLab EZChrom users open a PDF file for the first time, they will be asked to confirm the Adobe Reader license agreement. This dialog will appear for each newly configured instrument.

---

## Install .NET 4.7.2

For Windows 10: If .NET 4.7.2 is not installed on your system, it can be installed by clicking **Net Framework 4.7.2** on the installation wizard. However, Windows requires write access to the installation files. Installing directly from the DVDs will therefore not be possible.

- 1** Copy the folder `Disk1\Tools\DotNet4.7` to a local disk.
- 2** Run `dotNetFx47_Full_x86_x64.bat`.
- 3** Follow the installation wizard.

#### NOTE

Microsoft .NET Framework 4.7.2 (Offline Installer) supports the following operating systems: Windows 10, Windows Server 2016, and Windows Server 2019.

---

## Step 3: Copy Installation files to a Centralized Folder for Installation (Optional)

Completing this step will enable you to run an installation from a network share.

- 1 From the OpenLab EZChrom Installer **Planning** screen, select **Installation** from the sidebar menu.
- 2 Select **Preparation of an Installation from Network Share**.
- 3 At the **Network Share** screen, browse to a directory and create a destination folder as follows:

**NOTE**

Installations into the root of a drive may cause problems during operations and are not supported.

- a Select the button with the three dots.
  - b Navigate to the directory where you want to create the folder.
  - c Select **Make New Folder**.
  - d Type in the folder name.
  - e Select **OK**. The system will return you to the **Network Share** screen, with the path displayed.
  - f Select the content you want to copy to the folder, corresponding to the required installation scenario.
  - g Select **Start**.
- 4 When processing is complete, copy the files to the local drive or map the location to a network drive.
  - 5 Close the application and navigate to the directory and folder you created. Open the folder.
  - 6 Select the Disk 1 folder, then execute Setup.bat to run the application.  
The system will display the installer **Planning** screen.

## Step 4: Run the System Configuration Checker

- 1 Run the OpenLab EZChrom Installer from DVD, portable device, or from a centralized folder. From the **Planning** screen, select **System Configuration Checker**.
- 4 The **Site Preparation Tool** opens. Select **OpenLab EZChrom A.04.10** from the drop-down list:
- 5 Select **OK**.
- 6 Complete page 1 of the **Contact Information—System details** by typing in the fields provided.
  - System Location fields
  - System Information fields
  - Configuration fields
- 7 Review the system details and make any necessary entries. The system will follow the paths specified.
- 8 Select the green check mark icon in the top left corner of the screen to begin the software check. A summary report is displayed showing the results for each check category. Results are expressed as **Pass**, **Warning**, **Critical Warning**, or **Fail**.

**Fail** results must be corrected before continuing with the installation. Agilent recommends investigating and correcting any **Critical Warnings** and **Warnings** whenever possible before proceeding.

### NOTE

If the firewall is controlled by security software, the Site Preparation Tool cannot read the firewall settings because of security limitations. As a consequence, the Site Preparation Tool will display **Status "Fail"** for the firewall settings.

In this case, make sure the firewall is disabled and enter the status in the Site Preparation Tool report manually.

- 9 To view details of the report, select the appropriate link: **System Hardware Details**, **Operating System and Software Details**, or **Manual Verification Required**.
- 10 To save the report, select the **Save** icon at the top left of the screen.
- 11 E-mail the saved report to your Agilent Service Representative for evaluation, and for validation of your personal computer for Agilent Software Systems Installs.

## Step 5: Run the Installation Wizard

### License Agreement Screen

- 1 From the OpenLab EZChrom Master Installer screen, select **Installation**.
- 2 Select **OpenLab EZChrom**.
- 3 The **OpenLab EZChrom Wizard** opens. Read the terms of the **License Agreement**. OpenLab EZChrom Installer provides a printable PDF of the license agreement under the **Resources** option of the main menu.
- 4 Select **I agree with the terms and conditions**. You cannot proceed with installation unless you agree to these terms.
- 5 Select **Next** to proceed to the **Installation Folder** screen.

### Installation Folder Screen

- 1 Type the folder name or browse to the directory where you want to store the application components. Folders must have English names.

#### NOTE

Installations into the root of a drive may cause problems during operation and are not supported.

- 2 To run an installation verification as part of this installation, select **Run Software Verification**. The Software Verification Tool provides documentary evidence that your system has been built and installed correctly, and that all design specifications have been met. You can run the Software Verification Tool at a later time if you prefer (see [“Run a Software Verification after Software Installation”](#) on page 42).
- 3 Select **Next** to proceed to the **Installation type** screen.

## Installation Type Screens

- 1 Under **Installation Type**, select **Standalone Workstation**.
- 2 Select **Next** to proceed to the **OpenLab EZChrom** screen.

The OpenLab Print Server is automatically installed as part of the EZChrom installation. The Print Server manages unattended printing during acquisition and reprocessing. It monitors a queue folder for PDF files which are then sent to a printer.

- 3 Select **Next** to proceed to the **Additional items** screen.
- 4 If you want to use *OpenLab ECM* with your data system:
  - a Depending on your repository, select the **OpenLab Server/OpenLab ECM XT Server** or **ECM 3.x Server** option button.
  - b Type in a server name and press the **Test Connection...** button.
  - c The system will perform a connectivity check to verify access to a functional OpenLab ECM server. If the connectivity check is successful, the message **Connection succeeded** appears. Click **OK** to continue. If the connectivity test fails, you will be returned to the **Additional items** screen. From here you can select **Next** to run the test again. If the test is still unsuccessful:
    - Enter a new OpenLab ECM server and try another test.
    - Call internal support for assistance if you cannot connect to an OpenLab ECM server.
    - You can uncheck the box and run the installation without OpenLab ECM at this time. You will be able to add it to your data system at a later time, when a server is determined
  - d Select **Next** to proceed to the **Global Audit Trail Enforcement (GATE) Settings** screen.

### NOTE

To disable Global Audit Trail Enforcement feature, run the installation or repair procedure again and uncheck the GATE option.

- 5 In the **GATE Settings** screen, choose whether audit trails shall be automatically enabled on this Workstation. If required, select the **Global Audit Trail Enforcement** check box.  
Once enabled, the audit trails option cannot be turned off again.
- 6 Select **Next** to proceed to the **Summary** screen.

## Summary Screen

- 1 Review the installation settings that you have selected in the preceding steps. Select **Back** as necessary to change installation settings, or **Cancel** to cancel the installation.
- 2 Before starting or canceling the installation, you can save an XML file with your installation settings. This XML can then be used for a scripted installation (see “[Scripted Installation](#)” on page 28).

To save the XML file, click the file symbol in the **Summary** screen.

- 3 Select **Start** to begin installation.
- 4 The system performs an automated system check before it proceeds with the listed activities.

If a *system check passed* message appears, installation continues.

If a *system check failed* message appears, you can either:

- Decline to view the system report, and continue installation.
- Decline to view the system report and postpone installation.
- View the system report, and decide to continue installation.
- View the system report and postpone installation until the problem is fixed.

### NOTE

To view the system report as PDF file, Adobe PDF Reader must be installed (see “[Install Adobe PDF Reader](#)” on page 21).

- 5 If an installation verification was completed as part of this installation, review the *Software Verification Report*. If the report indicates failure, verify the computer requirements and reinstall the data system. Do not use the system until the Software Verification Report gives a ‘pass’ result.
- 6 Click **Next** to proceed to the **Installed Features** screen.
- 7 Click **Finish** to close the installation wizard.

## Scripted Installation

The OpenLab EZChrom Installer supports a command line mode for installation, the *scripted installation*. This mode supports installation, upgrade, repair, and uninstallation. You can execute scripted installations either manually or as part of software management systems such as LANDesk or HP CM. With the corresponding parameter (-q), the scripted installation completes unattended.

### Export as XML

The OpenLab EZChrom Installer supports a feature to export the installation parameters into an XML file which you can then use for the scripted installation.

This feature is also supported for upgrade and repair. However, for these cases the exported installation XML file is not appropriate. For scripted repair and upgrade, you must prepare specific XML files using the respective OpenLab EZChrom Installer wizards.

- 1 Launch the OpenLab EZChrom Installation Wizard.
- 2 Follow the instructions as described under *Install the Software* in this manual.
- 3 When you have reached the **Summary** screen, click the icon  on the top right corner to export the installation parameters to XML. Save the file on a physical drive.

#### NOTE

Installation file and XML file must not be in the same file path.

---

You can now use the XML file for the scripted installation.

## Parameters and Return Codes

### Parameters

You can call Agilent.OpenLab.CDSInstaller.exe in command line mode with the following parameters:

- *-i*  
Installation, upgrade
- *-r*  
repair
- *-u*  
Uninstallation
- *-q*  
Silent mode – no installation or uninstallation wizard will be shown.
- *-reboot*  
Reboot automatically after successful installation, repair, upgrade, or uninstallation. The system will reboot if the return code is either 0 or 17. A warning message will be shown in the command prompt 10 min before the system is rebooted. In addition, a Windows dialog opens 2 min before reboot.

## Install the Software

### Scripted Installation

- *KeepComponents*

Optional parameter for the uninstallation process, which can contain one or more shared components that should stay on your system. Without this parameter, all EZChrom components will be removed from your system. To keep certain shared components, list the corresponding IDs from the table below in double quotes and separated by comma.

Component Name	Id
Software Verification Tool	IQT
Microsoft SQL Server	SQLServer
IO Library	IOLibraries

- *ConfigurationXML="<ConfigurationXMLFilePath>"*

The XML file contains all required inputs of the OpenLab EZChrom Installer to install, upgrade, or repair a certain topology (see [“Export as XML”](#) on page 28). Replace <ConfigurationXMLFilePath> with the correct file path and XML file name.

#### NOTE

Do not enter a blank before or after the equals (=) sign. The scripted installation and uninstallation mode will not work as expected.

## 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
Unknown (default)	-1
Success	0
CoreComponentFailure	1
NonCoreComponentFailure	2
TestConnectivityFailure	3
ExpectedWindowsInstallerNotInstalled (WI 4.5 missing)	4
ParameterMismatchError	5
CannotProceedWithFreshInstallation	6
CannotProceedWithUpgrade	7
CannotProceedWithUninstallation	8
CannotProceedWithRepair	9
CannotProceedWithReRegistration	10
ReRegistrationNotSupported	11
IncompleteTopologyFound	12
InvalidUNCPath	13
MissingInstallable	14
NotAStrongPassword	15
DowngradeNotSupported	16
RestartRequired	17
RegistryCleanupError	18
InvalidInputXML	19
InvalidMode	20

**Table 2** Return codes

<b>Error/Return Code</b>	<b>Return value</b>
SitePrepFailure	21
DatabaseConnectionFailed	22
DotNetFramework4NotInstalled	23
OLSSConnectionFailed	24
PDFReaderNotInstalled	25
AllComponentsInstallationFailed	26
SomeComponentsInstallationFailed	27
Failed	28
AddOnListEmpty	29
EULANotAccepted	30
ScriptedNotSupported	31

## Installation, Upgrade, or Repair

In installation mode, the OpenLab EZChrom Installer checks if .Net Framework is present on your system. If not, it will automatically be installed. Select **Accept** to agree with the license agreement.

The OpenLab EZChrom Installer evaluates the products already installed on your system. Depending on the installed components, the OpenLab EZChrom Installer will offer one of the following options:

- Start a fresh installation
- Upgrade
- Repair

If a required installable is missing, the OpenLab EZChrom Installer will create an entry in a log file, and, depending on the component type, will continue or rollback the installation. A corresponding error code will be returned in such scenarios.

### Preparations

You must have copied all disks to a centralized folder (see [“Step 3: Copy Installation files to a Centralized Folder for Installation \(Optional\)”](#) on page 23). This step is mandatory for scripted installation.

- 1 Right-click the executable of the command prompt or Power shell prompt, and run it as administrator.

You will get a return code for the scripted installation only if you start it as administrator.

- 2 Navigate to the drive where you have saved the disks.

For example: C:\CDS\_DVD

- 3 To start the installation, call Agilent.OpenLab.CDSInstaller.exe with the following syntax:

```
Agilent.OpenLab.CDSInstaller.exe -i ConfigurationXML="<path to xml file>" -q -reboot
```

For example:

```
Agilent.OpenLab.CDSInstaller.exe -i ConfigurationXML="c:\settings\  
ConfigurationXML.xml" -q -reboot
```

With this command, you start the installation wizard without a user interface, and automatically reboot the system.

## Uninstallation

- 1 Right-click the executable of the command prompt or Power shell prompt, and run it as administrator.

You will get a return code for the scripted uninstallation only if you start it as administrator.

- 2 Navigate to the drive where you have saved the disks.

For example: C:\CDS\_DVD

- 3 To start the uninstallation, call Agilent.OpenLab.CDSInstaller.exe with the following syntax:

*Agilent.OpenLab.CDSInstaller.exe -u KeepComponents="*<list of components>*" -q -reboot*

For Example:

Agilent.OpenLab.CDSInstaller.exe -u KeepComponents="IQT,IOLibraries" -q -reboot

With the KeepComponents parameter, you can specify a list of shared components that you want to keep on the system (see “Parameters” on page 29). With the command given in the example, the EZChrom components Software Verification Tool (IQT) and IO Library (IOLibraries) will be kept.

## Logging and Tracing

All exceptions, errors and information messages are logged in the following locations:

- During installation, upgrade, or repair: under <BaseInstallDirectory>\Logs
- During uninstallation: under <User's Temp>\<Company Name>\Logs\<Log folder>\<Wizard Name>.txt

## Install Additional Software and Drivers

OpenLab EZChrom offers a wizard to help you installing additional software, such as drivers for third-party instruments. To open the wizard, go to **Start > All programs > Agilent Technologies > OpenLab > OpenLab Additional Software and Drivers**. Follow the wizard to install the required software.

### Prepare Network Drives

If the additional software is located on a network drive, you must prepare the network drive to make it accessible by the wizard. Without this preparation, Windows security prevents the wizard from accessing those drives.

- 1 Map the drive to a letter.

For example, map the drive as **Z:** using the shared path "\\<machine-name>\OpenLabCDS".

This maps the drive for the logged-in user.

- 2 Open the command prompt in elevated mode (run as administrator), and map the drive using the **net use** command.

For example,

```
net use Z: "\\<machine-name>\OpenLabCDS"
```

This maps the drive for the local administrator account. The mapped drive is now visible to both logged-in user and administrator, and can be selected in the wizard.

### Configure Third-Party Instruments

For details on the configuration of third-party instruments with OpenLab EZChrom, please refer to the documentation of the respective driver.

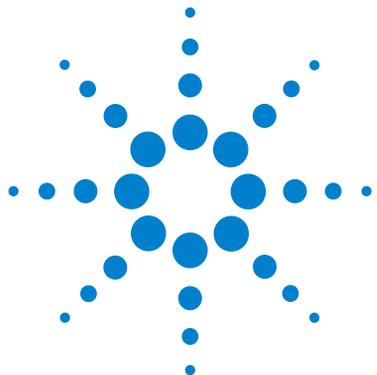
## What to do Next

The basic installation of the data system software is complete.

There is a *60-day Startup License* for this system, and the expiration period starts with your first launch of an application.

To request and download your *final software license*, and add the *license file* to your system, see the *Licensing* chapter in this guide.

After you have acquired and installed your *final software license*, you will continue to prepare your data system for operation by end users by configuring projects, users, and instruments. This is accomplished through the *OpenLab Control Panel*.



### 3 Post Installation Tasks

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



## Configure the Antivirus Program

Be sure to open the firewall ports listed in the Firewall Settings in the *OpenLab EZChrom Requirements* guide.

### NOTE

Running antivirus programs might influence the behavior and performance of your computer. Some virus scanners might cause issues when used with OpenLab EZChrom. The application has been tested with Symantec Endpoint Protection, Trend Micro, Microsoft Security Essentials, McAfee. Any of these antivirus software is recommended. However, the support is not limited to these antivirus software products. Each product may have specific language requirements and support.

### NOTE

With Symantec Endpoint Protection, do not use the Aggressive Scan Mode. It may lead to false positive virus detection.

In order for the OpenLab software to function correctly, you should configure any antivirus real time protection software with the following list of folder exclusions. These folders should only be scanned while the instruments are idle and no data acquisition takes place. Refer to your specific antivirus software documentation on how to configure folder exclusions.

- The path that you use to store your data
- C:\programdata\chromatography system\recovery data
- C:\programdata\agilent
- %programfiles%\agilent
- %programfiles(x86)%\agilent
- %programfiles%\common files\agilent
- %programfiles(x86)%\common files\agilent
- %programfiles%\agilent technologies
- %programfiles(x86)%\agilent technologies
- %programfiles%\common files\agilent technologies
- %programfiles(x86)%\common files\agilent technologies
- %programfiles%\common files\agilent shared

- %programfiles(x86)%\common files\agilent shared

Process	Directory	File name
ECM upload/download (if applicable)	%temp% for Windows users (=Users' temp directory)	*.sszip
Standard reports	%temp% for Windows users (=Users' temp directory)	~p3d*.tmp ~job*.tmp Hpspl00.que
CDS intelligent reports	%LOCALAPPDATA% %APPDATA% %PROGRAMDATA%	Files on: <ul style="list-style-type: none"> <li>• Agilent</li> <li>• Agilent Technologies</li> <li>• Agilent_Technologies,_Inc</li> <li>• IsolatedStorage</li> <li>• Temp</li> </ul> e.g.: C:\Users\xxxxx\AppData\Local\Agilent Technologies\Intelligent Reporting\ RawDataFileCache

If your antivirus software includes program or executable deny execution settings, ensure that the following program files are not denied execution. You can use the windows search feature to find the specific folder each program file is located in.

- agilentlibrarieservice.exe
- apg\_top.exe
- iprocsvr.exe
- iproc8491.exe
- msinsctl.exe
- httpdmsd.exe
- epcsetup.exe

**NOTE**

Depending on your specific configuration, some of the listed folders or files may not exist on your system.

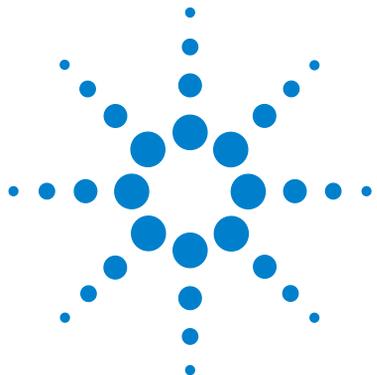
## Setup the Print Server in the Operating System

- 1 Browse to the **Agilent OpenLab Print Server** in **Services**.
- 2 Change the **Log On As** user to a domain user that has access to your printers.
- 3 Login to the operating system as the user that is logged into the **Agilent OpenLab Print Server** in **Services**.
- 4 Install your printers while logged in as this user.
- 5 Create a folder on the local machine. The user logged into the **Agilent OpenLab Print Server** service needs to have full access to this location. This is the folder that the Print Server will monitor for PDF files. Every printer needs to have its own queue folder.

### NOTE

Inside each queue folder, there will be a *quarantine* folder. If the connection to the printer fails, print jobs will be added to this quarantine folder. The print jobs be copied back to the queue folder manually, once the connection to the printer has been restored. By default, files are deleted from the quarantine folder after 24 hours.

---



## 4 Optional Procedures

This chapter contains information on the Software Verification Tool, and other helpful procedures.



## Run a Software Verification after Software Installation

The Software Verification Tool provides documentary evidence that your system has been built and installed correctly, and that all design specifications have been met.

**1** Using your Windows operating system, go to **Start > All Programs > Agilent Technologies > Software Verification Tool**.

**2** Select **Qualify**.

The system will run the application and generate a Software Verification Report.

**3** If the report indicates failure, verify the computer requirements and reinstall the data system.

Do not use the system until the Software Verification Report gives a 'pass' result.

## Configure Advanced File Security (AFS)

Advanced file security is an optional configuration for OpenLab EZChrom networked systems. It provides enhanced security on the enterprise path in order to prevent any unauthorized access to project data outside of the data system. This configuration sets the appropriate Windows sharing and security settings to allow only a defined group to access the enterprise data from Windows Explorer. This may *only* be configured if your system is configured to use Windows Domain as the Shared Services authentication provider.

## Enable Advanced File Security

- 1 Prepare your system.
  - a Verify that your system is configured to use Windows Domain as the authentication provider. (See **Configure Security and Storage > Set the authentication provider and the storage system** in the online help.)
  - b Verify that your system is configured to use a storage path that is directly beneath the defined enterprise path.
  - c Create or define a Windows Domain group that will have access to the enterprise path outside of the data system.
  - d Define a minimum of two users who are members of the group defined above.

### NOTE

Non-expiring passwords are recommended. For details on changing the password in a running system, refer to the *EZChrom Administration* chapter in the *OpenLab EZChrom Guide for Administrators*.

- e Under **Local Security Policy > Local Policies > User Rights Assignment**, grant the users or the group the following rights:
    - **Act as part of the operating system**
    - **Allow log on locally**
  - f Close all connections to the OpenLab EZChrom system (i.e. clients, instrument runs, control panels).
  - g Obtain the login credentials of a domain user that has administrative rights to edit the enterprise path in its current state.
  - h Obtain the administrative login credentials of the OpenLab Control Panel that were defined during the configuration of domain authentication.
- 2 On any OpenLab EZChrom client, browse to the directory where the software was installed.  
(by default: C:\Program Files\Agilent Technologies\EZChrom)

## Optional Procedures

### Configure Advanced File Security (AFS)

- 3** Launch EnterpriseConfig.exe.
- 4** An **Enterprise Setup Login** dialog will display:
  - a** In the **OpenLab Control Panel Login** section enter the user name, password, and domain of the OpenLab Control Panel Administrator.
  - b** In the **Windows User Information** section enter the user name and password of the user with edit permission to the enterprise path.
    - If this is a domain user account, select **Logon from Windows Domain** and enter the domain name (recommended).
    - If this is a local PC account, select **Windows Local PC**. This may only be an account local to the machine where the EnterpriseConfig.exe program is being run.
  - c** Click **OK**.
- 5** The system will process the above credentials. If they are valid, a warning will display to advise that once this process is completed, it cannot be reversed.

Click **OK** if you are prepared to proceed.
- 6** An Enterprise Service Account dialog will display:
  - a** Enter the user name, password, and domain of a user defined to be a member of the AFS group.
  - b** Enter the group name that will have access to the enterprise path under the restrictions of AFS.
  - c** Click **OK**.

## Transform a Workstation to a Networked Workstation

With Networked Workstations, you use a separate OpenLab Shared Services server to control the system. You can access all information provided by OpenLab Shared Services from any Networked Workstation. For example, you can see on each workstation which instruments are available and which status (Online, Offline, Error, In Run, Not Ready, etc.) the instruments currently have. Also licenses and user accounts are managed centrally on the OpenLab Shared Services server.

### NOTE

- You must already have installed an OpenLab Shared Services server. See *Networked and Distributed System Installation and Configuration* (CDS\_NWSDS-Installation.pdf on disk 1).
- Make sure that the versions of Workstation and OpenLab Shared Services Server are identical. If not, upgrade your Workstation before doing the transformation. See “[Upgrade EZChrom Edition to Latest Version](#)” on page 65.

For more information on temporary support of mixed version systems during an upgrade phase, refer to the *OpenLab EZChrom Administration Guide* (CDS\_Admin.pdf on Disk 1).

### CAUTION

Conflict of multiple instruments having the same name

Check if the instruments used on the Workstation have a name that already exists in the network. If this is the case, or if you are not sure:

- Before starting the transformation: Copy the data, methods, and sequences from the relevant instrument to a local backup folder. Then delete the instrument on the Workstation.
- After the transformation, configure a new instrument, and copy back the data from the local folder.

- 1 From the OpenLab EZChrom Master Installer screen, select **Maintenance**.
- 2 Select **Transformation of an OpenLab Standalone Workstation into a Networked Workstation**.
- 3 Enter the server name and the authentication service used by the server.  
If the server requires authentication, you will be asked for the credentials of an OpenLab Shared Services administrator.
- 4 Start the transformation.  
All instruments will be registered on the OpenLab Shared Services Server.

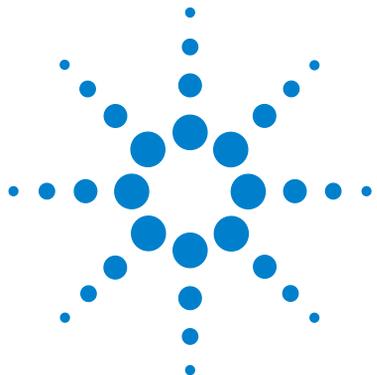
## Improve Performance on Offline Machines

Computers running OpenLab EZChrom 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, clients, AICs, and servers 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:
  - On 32bit and 64bit systems:  
[HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Microsoft\SystemCertificates\AuthRoot]  
"DisableRootAutoUpdate"=dword:00000001
  - On 64bit systems:  
[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 Licensing

This chapter contains information on how to obtain and install a license.



## About OpenLab EZChrom Licensing

### License Types

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

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

- Shared licenses – system computers and other components can have shared, or add-on, licenses – because they share a core license.
- Counted licenses – these licenses are part of the OpenLab EZChrom 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 EZChrom 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. 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.
- The URL for SubscribeNet from the Software Entitlement Certificate.

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

## Get a License

### Obtain a License with SubscribeNet

If you have Internet access, use the following procedure to generate and download your license for your OpenLab EZChrom system.

If you do not have Internet access, skip to the section [“Other Ways to Obtain a License”](#) on page 52.

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*.

#### New Users

- 1 From a computer with Internet access, enter the URL provided in the Software Entitlement Certificate in an Internet browser.
- 2 At the bottom of the login page, click **click here** to register.
- 3 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.

- 4 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.
- 5 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.

- 6 Select **Generate or View licenses** from the left navigation bar.
- 7 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.

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.

To retrieve your MAC address from a computer where OpenLab EZChrom 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.

**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.

- 8 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 6 through 8 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 EZChrom 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.

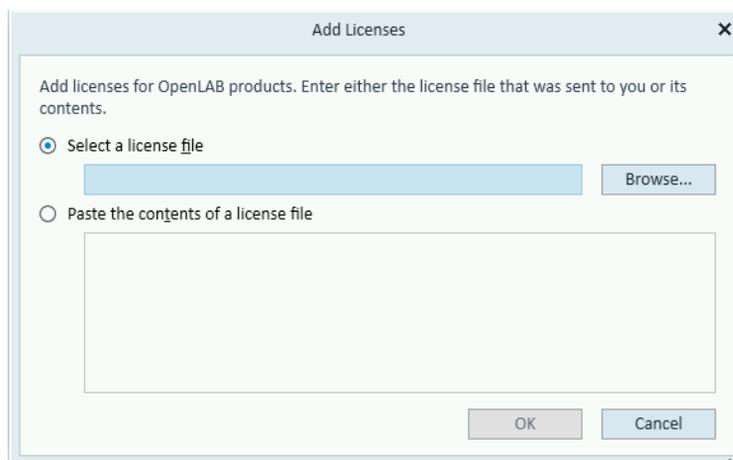
**3** Receiving your license:

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).

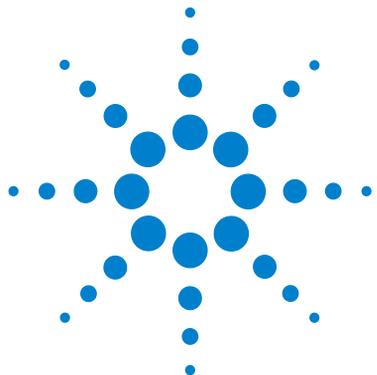
## Install Your License

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.



## 6 Configure OpenLab EZChrom in the Control Panel

This chapter describes the initial configuration steps after installing the software. Refer to the online help for more information.



## Authentication

### Authentication Provider

Authentication providers are used to prove the identity of users that log in to the system. OpenLab Shared Services support the following Authentication providers:

- **None**

In this mode, no login screen is shown when you access the OpenLab Control Panel. The user is automatically logged in to the application with security disabled. All log entries record the user as "Anonymous". With the authentication provider **None**, the Security Policy and User Management nodes are unavailable in OpenLab Control Panel.

#### NOTE

With the authentication provider **None**, any activity logs will display a generic **System** operator with no additional identification. This is not recommended for regulated environments.

---

- **Internal**

In this mode, the user's credentials are created and stored in the OpenLab Shared Services database. You are asked to create an administrator account for OpenLab Shared Services before setting up other users. This is the only mode in which you can create new users within the system.

- **Windows Domain**

- You import existing Windows users into OpenLab Shared Services. The authentication is done either by a Windows Active Directory domain or NT 4.0 Domain within the Enterprise. Shared Services only use the identity and password of the mapped users; roles and privileges for OpenLab EZChrom are still configured with the Shared Services.

- **ECM**
  - In this mode, an OpenLab ECM system is responsible for authentication. When you start the OpenLab Control Panel, the application will prompt for ECM credentials to validate a user. You must choose an existing ECM user as an administrator for the Shared Services. The Search function helps you to find specific ECM users. The Shared Services only use the identity and password of the mapped users; roles and privileges for OpenLab EZChrom are still configured with the Shared Services.

## Configure Authentication

- 1 Launch the Control Panel.
- 2 Navigate to **Administration**.
- 3 In the navigation pane, select **System Configuration**.
- 4 In the ribbon, click **Edit System Settings**.
- 5 Select the required authentication provider from the drop-down list, then click **Next**.
- 6 Provide user credentials:
  - a For **Windows Domain**: 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.
  - b For **Internal**: Click **Create Account** to create a new administrator account for OpenLab EZChrom.
- 7 Confirm your settings. When complete, the Control Panel will restart.

## Configure Security Policy

If you need to comply with specific standards, 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, 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**.

## Configure Users/Groups/Roles

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

To define what users are allowed to view or do, OpenLab EZChrom 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 OpenLab 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 **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**.
- 3 Click **OK**.

### Import users

**To add Windows domain 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 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 EZChrom, 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 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.

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](#)” on page 62). 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](#)” on page 62). 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.

**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, Manage security, Manage printers</b> etc.
Instrument privileges	These privileges can be assigned globally or on the instrument/location level. Privileges for instruments are, for example, <b>View instrument or location</b> and <b>Run instrument</b> . Users need the <b>View instrument or location</b> 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 level.

## Specific Roles for Individual Instruments

By default, the roles of users or groups are globally set for all locations or instruments. The role settings are inherited from the root node **Instruments**. In order to assign a different role to a user or group for one specific node, you can deselect the **Inherit privileges from parent** check box in the **Edit Privileges** 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.

**Administrative** roles are always set globally.

## Configure Initial Project

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

On the *EZChrom Settings* tab:

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

For more details, refer to the Control Panel online help.

## Configure Initial Instrument

- 1 Launch the OpenLab Control Panel and navigate to **Instruments**.
- 2 Click **Create** in the ribbon to create a new instrument.
- 3 Provide the information on the instrument, and click **OK**.

### NOTE

Agilent 1120 and 1220 instruments are configurable under the instrument type **Agilent Compact LC** only. They can be combined with other selected LC modules. Please see the *Supported Instruments and Firmware Guide* (CDS\_SupportedInstFirmware.pdf) for more details.

The drivers for 1120 and 1220 instruments come with the instruments and are not included by default with OpenLab EZChrom.

- 
- 4 Select the new instrument, and click **Configure Instrument** in the ribbon.
  - 5 It is recommended that you use Auto Configuration to configure your instruments: Select a module, click **Auto Configuration**, and enter the **Number of Detectors** and **Number of Pumps**. Select **Autosampler** if necessary.

Alternatively, configure the devices manually:

- a Select a module from the **Available** modules, and click the arrow to move it under **Configured** modules.
  - b Double-click a **Configured** module to open a dialog box pertaining to that module.
  - c Select **Options**.
  - d In the **Configuration Options** dialog box, select from the following general options: System Suitability, SEC, PDA, and Baseline check.
- 6 Confirm your settings

For more information on the number of supported instrument connections, please refer to the *Requirements guide*.

## Configure the Print Server in OpenLab

If you installed the Agilent OpenLab Print Server:

- 1 Log in to the Control Panel, and click on the **Printers** icon in **Administration**.
- 2 Click **Add** in the **Printers** menu.
- 3 Click the **Add Monitor** button.
- 4 In the **Add New Printer** dialog, add the following:
  - **Monitoring Folder:** Enter the UNC or local path to the queue folder (see “[Setup the Print Server in the Operating System](#)” on page 40).
  - **Printer:** Select a printer that is installed on the operating system.
  - **Display Name:** – Enter the display name for the print monitor
  - **Comment:** Enter a comment
- 5 Click **OK**.
- 6 In the Print Server, select the printer that you just added.
- 7 Click **Monitor On**, and set **Set to Monitor** for this printer to **yes**. This will enable the print server to monitor the queue folder.

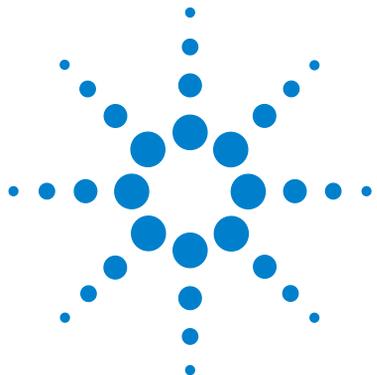
If you set **Set to Monitor** to **no**, then the print server will not monitor this folder and send files to the printer.

- 8 Set the print server status **Running**.

If you click **Stop Print Server**, the print server service will shut down and the print server will stop functioning. None of the printers will be working at this point.

### NOTE

To print to the print server on a workstation: Select your printer in the **Print Hardcopy** section of the screen when starting a single run, starting a sequence, or reprocessing.



## 7 Upgrade EZChrom Edition to Latest Version

This chapter describes the upgrade from EZChrom Edition A.04.0x.



## Planning the Upgrade of EZChrom A.04.0x

Before upgrading, make the following basic decisions.

### **Do you intend to run EZChrom on Windows 10?**

An in-place upgrade from Windows 7 or 8.1 to Windows 10 on an existing EZChrom Workstation is not supported.

Implications are:

- You will have to install OpenLab EZChrom A.04.10 on your new Windows 10 PC. See [“Post Installation Tasks”](#) on page 37.
- You will have to move your data to the new system.

### **Upgrade on Windows 10**

See [“Upgrade EZChrom to A.04.10”](#) on page 67.

## Upgrade EZChrom to A.04.10

The procedure to upgrade to EZChrom A.04.10 depends on the revision of your currently installed EZChrom Edition. A direct upgrade is only supported from A.04.09 or higher.

- *Rev. A.04.09:* Run the upgrade wizard. EZChrom will be upgraded to A.04.10.

If your system is configured to use one of the following ELSD drivers (G7102A, G4261A/B, or G4260A/B), the ELSD driver will be updated to version A.01.08.

- *Rev. A.04.08 or lower:*
  - 1 Run the upgrade wizard from the A.04.09 media. EZChrom will be upgraded to A.04.09.
  - 2 Run the upgrade wizard from the A.04.10 media. EZChrom will be upgraded to A.04.10.
- *Rev. A.04.0SR2 or lower:* Uninstall the old EZChrom, and install A.04.10.

If your system is configured to use one of the following ELSD drivers (G7102A, G4261A/B, or G4260A/B), uninstall the ELSD driver using the Add/Remove programs option from the Windows Control Panel.

## License Upgrade

### Get Upgraded License File

You will need to upgrade your licenses in SubscribeNet prior to upgrading to the next version of OpenLab EZChrom. 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 EZChrom 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. 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 69).
  - 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**.
- 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**

## Run the Upgrade Wizard

- 1 From the OpenLab EZChrom Installer **Planning** screen, switch to the **Installation** screen.
- 2 Select **OpenLab EZChrom**.  
If OpenLab EZChrom is already installed, this automatically opens the **OpenLab EZChrom Upgrade Wizard**.
- 3 The workstation license must be upgraded see [“License Upgrade”](#) on page 68.  
Acknowledge that the license has been upgraded and click **Next** to continue.
- 4 Select **I agree with the terms and conditions**. You cannot proceed with the upgrade unless you agree to these terms. Click **Next**.
- 5 If an Authentication Provider has been configured: Enter the username and password of a user with system administration privileges in the **OpenLab Shared Services Settings for Registration** screen. Click **Next**.
- 6 In the **GATE Settings** screen, choose whether audit trails shall be automatically enabled on this Networked Workstation. If required, select the **Global Audit Trail Enforcement** check box. Click **Next**.  
Once enabled, the audit trails option cannot be turned off again.
- 4 In the **Summary** screen of the Upgrade Wizard, the components for the upgrade are listed. Click **Start** to proceed with the upgrade.  
If an error occurs during the upgrade, an error message appears.
- 5 After the upgrade is finished, select **Finish** to close the **OpenLab EZChrom Upgrade Wizard**.  
Existing instrument configuration can remain unchanged after the upgrade.

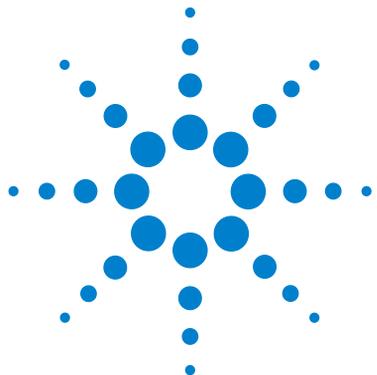
### NOTE

For 35900 instruments, *classic* driver is automatically installed by OpenLab EZChrom Installer. If you need to use RC.NET drivers (for example, to split channels between two instruments on an AIC), you must first install the new drivers, and then reconfigure the instruments.

Note that methods created with the classic drivers cannot be used anymore. You will have to create new methods the with RC.Net drivers.

### NOTE

Starting with A.04.08 classic drivers for fraction collectors are not supported. You must change your instrument configuration and create new methods with RC.NET drivers.



## 8 Uninstall the Software

This chapter contains information on the uninstallation by using the OpenLab EZChrom Uninstallation Wizard. It also describes post uninstallation tasks that are essential if you plan to reinstall EZChrom on the same computer.



# About Uninstallation

#### NOTE

If the OpenLab EZChrom Installer was not used for installation, any manually installed additional software such as Headspace, PAL, or third party drivers must be uninstalled using the Windows Control Panel before the OpenLab EZChrom can be uninstalled.

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Like the installation, the uninstallation of OpenLab EZChrom is automated by the OpenLab EZChrom Installer.

For your convenience, the OpenLab EZChrom Installer uses the same user interfaces for the software uninstallation of all configurations (standalone or networked workstation). The **OpenLab EZChrom Uninstallation Wizard** under the **Maintenance** section of the OpenLab EZChrom Installer guides you through the uninstallation steps.

#### NOTE

Do not use the Windows uninstallation tool for uninstalling OpenLab EZChrom.

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## Run the OpenLab EZChrom Uninstallation Wizard

**1** Select **Start > OpenLab > Uninstall OpenLab EZChrom**.

**2** Select **OpenLab EZChrom Uninstallation**.

The **OpenLab EZChrom Uninstallation Wizard** opens.

**3** In the **Shared Components** screen, check the **Uninstall Software Verification** check box.

*Note:* Software Verification Tool needs to be uninstalled if you wish to re-install OpenLab EZChrom at a later time

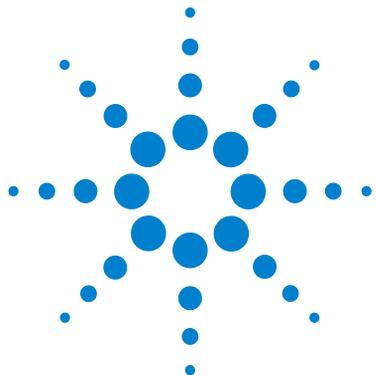
**4** In the **Summary** screen under **Uninstallation of OpenLab EZChrom Components**, there is a list of the components you want to uninstall.

**5** Select **Start** to start the uninstallation.

If you want to abort the uninstallation, select **Cancel**. If you want to change any settings, select **Back**.

All listed components are automatically uninstalled, one after another.

**6** When the uninstallation has finished, click **Finish** to close the uninstallation wizard.



## 9 Sales and Support Assistance

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

<https://www.agilent.com/en-us/contact-us/page>



[www.agilent.com](http://www.agilent.com)

## In This Book

This installation guide provides instructions to install and configure the Agilent OpenLab EZChrom workstations.

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