OpenLab CDS ChemStation Edition

Workstation Installation Guide

Notices

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This guide is valid for revision C.01.10 of OpenLab CDS ChemStation Edition.

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In this Guide ...

This installation guide provides instructions to install Agilent OpenLab CDS ChemStation Edition workstations.

Table 1 Terms and abbreviations used in this document

Term	Description
AIC	Agilent's Analytical Instrument Controller
CDS	Chromatography Data System
ChemStation	OpenLab CDS ChemStation Edition
Control Panel	OpenLab Control Panel
Microsoft Control Panel	Part of the Microsoft Windows operating system
Secure Workstation	Secure Workstation for OpenLab CDS ChemStation Edition

1 Prepare your PC

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

2 Install OpenLab CDS ChemStation Edition

The installation is automated by the OpenLab CDS ChemStation Edition Installer. This tool installs all the components needed.

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 Upgrade ChemStation Edition to C.01.10

This chapter describes the upgrade from ChemStation C.01.07 SR3 or higher. If you upgrade from an older ChemStation revision, upgrade to C.01.07 SR3 first. For information on upgrading from ChemStation A.0x or B.0x, please refer to the migration guide (CDS_CS-data-Migration.pdf).

7 Uninstall the Software

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

8 Troubleshooting

The chapter contains some troubleshooting hints.

Contents

1 Prepare your PC

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Install and Update Windows

1. Install the Windows operating system from the Microsoft installation media or qualified PC image media provided by your IT department. 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. For Windows 10 Pro users: Update to the latest Windows 10 edition in accordance to the guidelines of your local IT department.
3. 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 CDS ChemStation Edition Hardware and Software Requirements* guide (CDS_CS_HW-SW-Requirements.pdf).

NOTE

Running antivirus programs might influence the behavior and performance of your computer. Some virus scanners might cause issues when used with OpenLab CDS. The application is tested with Symantec Endpoint Protection 14.0 MP2 and with Microsoft Security Essentials.

4. In the Microsoft Control Panel under **System> Windows activation**, click **Change product key**. Enter a valid value to activate Windows.
5. Under **Windows Update**, click **Check for updates** to check for updates and apply all critical security patches. Make sure that all Windows updates have been performed before installing ChemStation (update settings may be configured centrally by your IT department).

NOTE

This setting is important to avoid data loss due to system reboot during data acquisition.

6. Disable or defer Windows updates (update settings may be configured centrally by your IT department):
   - Windows 7:
     a. In the Microsoft Control Panel, select **Windows Update**.
     b. Select **Change settings**.

c In the **Important updates** section, select **Never check for updates**. Clear the other update options.

d Restart the computer after update.

- Windows 10:

a Under **Settings> Update & Security**, select **Advanced options**.

b Enter the number of days by which the update should be deferred.

7 Windows 10 and Windows 7 only: To configure remote settings: In the Microsoft Control Panel navigate to **System> Remote settings**. On the **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**.

8 In the Microsoft Control Panel under **Date and Time**: Choose the time zone of your regional location.

9 In the Microsoft Control Panel under **Region** (**Region and Language** for Windows 7):

a Regional format options should be set to **English (United States)** from the drop-down list.

b If regional format other than **English (United States)** is used, the following settings are mandatory. The settings can be defined by clicking on the **Additional settings...** button:

- Decimal symbol = . (point)
- Digit grouping symbol = , (comma)
- List separator =, (comma)

10 In the Microsoft Control Panel under **Region** (**Region and Language** for Windows 7), on the **Administrative** tab:

a In the **Language for non-Unicode program** section, click **Change system locale...**.

b From the drop down list, select **English (United States)**.

NOTE

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

Run the Site Preparation Tool

1. Run the installer from the USB medium or from a centralized folder. From the **Planning** screen, select **System Configuration Checker**.
2. The **Site Preparation Tool** opens. Select **OpenLab CDS ChemStation Edition C.01.XX** from the drop-down list.
3. Select **OK**.
4. Complete page 1 of the **Contact Information—System details** by typing in the fields provided.
   - System Location fields
   - System Information fields
   - Configuration fields
5. Review the system details and make any necessary entries. The system will follow the paths specified.
6. 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 and 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.

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

Install and Configure Third Party Tools

Certain third party tools must be installed and configured on your PC. Some of these tools can be installed directly from the **Installation** screen if you run the **OpenLab CDS ChemStation Edition Installer**.

Install and Configure Adobe Acrobat Reader

Check if an existing Acrobat Reader version must be uninstalled

1 If Acrobat Reader is already installed, check its version number.

   a Open Acrobat Reader.

   b Select **Help> About Adobe Acrobat Reader**.

2 The version number has several ranges. The *Continuous* or *Classic* track is indicated by the first two digits of the third range.

   20 = Continuous track

   30 = Classic track

NOTE

If an older version of Acrobat Reader (2016 or lower, XI or lower) or a Reader version from the *Continuous* track (even with Acrobat Reader 2017) is installed on your system, you must uninstall it first. Otherwise, the installation below would result in an Acrobat Reader version that pushes automatic updates.

Install Adobe Acrobat Reader 2017 (Classic Track):

1 Under **Third Party Tools**, select **Adobe PDF Reader**.

2 The Acrobat Reader setup screen appears. Click **Install** to continue.

3 If Acrobat Reader was successfully installed, click **Finish** to exist the setup screen.

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

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

4 Open the newly installed Adobe Acrobat Reader to confirm the Adobe Reader license agreement. You will be asked only this one time.

Configure Adobe Acrobat Reader in Windows:

1 Set Adobe Acrobat Reader as your default PDF viewer.

a *Windows 7:* In the Microsoft Control Panel, navigate to **Default Programs> Set default programs**, select Adobe Acrobat Reader from the list, and click **Set this program as default**.

OR

Windows 10: Navigate to **Settings> Apps> Default Apps**, select **Choose default apps by file type**. In the list, navigate to **.pdf** and select **Adobe Acrobat Reader** as default.

b Select Adobe Acrobat Reader as default PDF viewer.

2 Disable the Adobe Update Service.

a In the Windows Start menu, search for **Services**. In the results, click **services.msc**.

b Stop the **Adobe Acrobat Update Service**.

c In the service properties, set the startup type to **Manual**.

Ensure correct Adobe Acrobat Reader settings:

1 Click **Edit> Preferences** in Acrobat Reader.

2 Select the **General** category.

   a Ensure that the **Open documents as new tabs in the same window** check box is cleared. If it is selected, Acrobat Reader may interfere with the ChemStation **Report Viewer** feature.

   b Clear the **Show me messages when I launch Adobe Acrobat Reader** check box. If it is selected, Adobe messages may interfere with the ChemStation software.

3 Select the **Security (Enhanced)** category.

   a Ensure that the **Enable Protected Mode at startup** check box is selected.

   b Ensure that the **Enable Enhanced Security** check box is selected.

4 Select the **Tracker** category.

   Ensure that the **Show notification icon in system tray** check box is cleared.

Update Acrobat Reader regularly

1 Update Adobe Acrobat Reader on a regular basis to avoid push notifications from Adobe.

   We recommend to include Acrobat Reader updates in a regular update schedule. Acrobat Reader updates usually come on a quarterly basis.

2 To update, open Acrobat Reader, and click **Help> Check for Updates...**.

3 After an update, ensure that the **Adobe Acrobat Update Service** is still stopped.

Install the .NET Framework

Install .NET 3.5

If .NET 3.5 is not installed on your system, its installation will automatically be triggered by the installation wizard. Follow the procedure below to install it in advance.

1 Go to the Microsoft Control Panel.

In the Windows Start menu, enter "Control Panel" in the **Search programs and files** field (alternatively, press [Win+R] and enter "Control panel"). To view all items in the Control Panel view, select **Small icons** in the **View by** field.

2 Go to **Programs and Features**.

3 Enable .NET 3.5 as follows:

This requires an internet connection.

- For Windows 10: Expand the **.NET Framework 3.5 (includes .NET 2.0 and 3.0)** node,
- For Windows 7: Expand the **Microsoft .NET Framework 3.5.1** node,

in both cases select the **Windows Communication Foundation Non-HTTP Activation** check box.

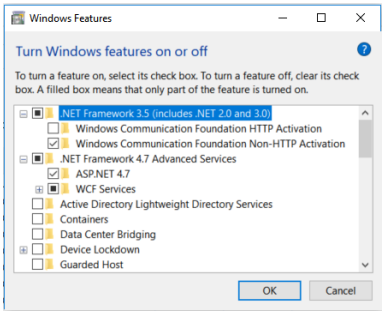


Figure 1 Enable .NET 3.5 (Win 10)

NOTE

If this does not work as expected, or the computer has no internet access, install .NET 3.5 from the Windows installation media. For Windows 10, see details 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**.

Install .NET 4.7

If .NET 4.7.2 is not installed on your system, its installation will automatically be triggered by the installation wizard. When manually installing .NET 4.7.2, Windows requires write access to the installation files. Direct installation from USB media is therefore not possible.

1. Copy the folder Disk1\Tools\DotNet4.7 to a local disk.
2. Run dotNetFx_Full_x86_x64.bat.
3. Follow the installation wizard.
4. Restart the computer.

Install Keysight IO Libraries Suite

IO Libraries are required only for LC/MS and CE/MS instruments.

To install IO Libraries:

1. From the installer, select **Installation**.
2. Under **Third Party Tools**, select **Keysight IO libraries**.The Keysight IO libraries setup screen opens.
3. Click **Install** to continue.
4. When Keysight IO libraries have been successfully installed, click **Finish** to exit the setup screen.

Configure a Printer

Physical Default Printer

Make sure that a default printer is configured in Windows. Every Windows user who runs ChemStation needs a default printer configured in the user profile. The printer driver must be for a physical printer, even if the printer is not connected. Configuring a to-file printer such as a PDF or XPS writer is not sufficient.

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

PDF XChange printer

During the installation of ChemStation C.01.10, a PDF XChange 6 printer driver is installed (revision 6.0.317.1).

Print Limitations

The maximum number of pages for one print job is 1500; for example, a sequence summary report is one print job.

When printing Multi-Page chromatograms (specified in the **Specify Reports** dialog box), the maximum number of pages that can be printed properly depends on the resolution of the printer. 300 dpi allows ten pages per chromatogram, 600 dpi allows up to six pages per chromatogram.

Add a Network Printer as a Local Printer

Use *physical* printers to ensure correct function. Follow the steps below to add a network printer as a local printer. In OpenLab CDS ChemStation Edition, you will be able to choose this printer as a default printer when configuring instruments.

1. In the Microsoft Control Panel, navigate to **Devices and Printers**.
2. Click **Add a Printer**.
3. Click **The printer I want isn't listed**, then select **Add a local printer** and click **Next**.
4. Select **Create a new port**, then select **Local Port** for the port type and click **Next**.
5. For **Port Name**, enter the network path to the printer. The network path consists of two slashes, the computer name or local IP address of the PC sharing the printer, and the share name of the printer. For example, *PTPRINT\PG5-B* or *192.168.1.100\hpprinter*.
6. Select the appropriate printer driver and click **Next**. If the exact model is not listed, try the closest model number or a generic printer.
7. Follow the rest of the wizard.

NOTE

The print quality of graphics and pictures depends on the printer hardware, maintenance state, configuration, printing options, and paper quality. Resizing pictures and graphics during the print process may lead to a reduced print quality. Choose paper format and page margins that are suitable for your printer.

Before You Begin the Installation of OpenLab CDS ChemStation Edition

Before you begin installing the OpenLab CDS ChemStation Edition, make sure that the following steps have been performed. With these configuration options you ensure that the PC is well prepared before you start with the specific configuration and 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 CDS ChemStation Edition.

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 Make sure that you use only the following characters for user names:

A-Z, a-z, 0-9, _ (underscore), - (hyphen)

3 For installing OpenLab CDS, 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 CDS ChemStation Edition.

6 Decide on the software delivery approach you want to use:
   - *Install directly from the USB medium* — Insert the USB medium directly at the workstation computer. (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, and run the installation from that location. However, some networks may interfere with installation (see "Copy Installation files to a Centralized Folder for Installation" on page 54).

7 Before you install the software, check that your computer meets all requirements. You can access the *OpenLab CDS ChemStation Edition Requirements* guide (CDS_CS_HW-SW-Requirements.pdf) from the *Documentation and Learning* platform.
   a On the installation media, go to Disk1\DOCS\ and open welcome.html to access *Documentation and Learning*.
   b Select your language.
   c On the **Welcome** page, navigate to **Site Preparation> Site Preparation and Requirements**, and select **CDS ChemStation Edition Hardware and Software 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.

8 Install all required hardware, including any A/D connections, interfaces, instrument detectors, and communication cables.

9 Ensure that the latest graphic card driver is installed. Install the latest vendor-specific driver. Do not use any generic driver.

10 Disable hardware acceleration. Ensure that the following registry key is present and correctly set:
   [HKEY_CURRENT_USER\SOFTWARE\Microsoft\Avalon.Graphics]
   "DisableHWAcceleration"=dword:00000001

11 Make sure .NET 3.5 and .NET 4.7 are activated as Windows features.
   For installation instructions, see "Install .NET 3.5" on page 14 and "Install .NET 4.7" on page 15.

12 Check the Agilent Service Notes for software updates for your installation package and software products. Service Notes are available from your Agilent support representative.

Configure the Operating System

NOTE

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

Windows Configuration Checker for OpenLab CDS ChemStation Edition

The OpenLab CDS ChemStation Edition configuration check tool helps to prepare or troubleshoot the Operating System configuration and to prevent computer problems.

This tool offers two types of configuration checks:

- Mandatory: It checks and repairs all *mandatory* settings which should be applied before installing OpenLab ChemStation Edition.
- Optional: It checks the settings for performance and usability. The configuration settings are user-specific and must be set separately for each user.

The tool comes as .diagcab file, which is a file format used with the Microsoft Windows Troubleshooting Platform (WTP) program. The Microsoft Windows Troubleshooting Platform (WTP) is a platform to locate and fix hardware and software settings in Windows. It is used specifically for diagnosing and repairing computer settings.

In general, .diagcab files are useful for deploying troubleshooting packs because they are self-contained and require no installation. The .diagcab file name extension is a registered file name extension that can be executed by WTP.

Depending on whether it is a configuration check for mandatory or optional settings, different .diagcab files must be executed:

- To perform the configuration check for mandatory settings, you must use the file *Agilent.Wtp.ChemStation.WindowsConfiguration.diagcab*. This file is located in Disk1\Tools\Windows Configuration Tools\Mandatory Settings.
- To perform the configuration check for optional settings, you must use the file *Agilent.Wtp.ChemStation.WindowsConfiguration.diagcab*. This file is located in Disk1\Tools\Windows Configuration Tools\Optional Settings.

1 Before starting the configuration check, copy the .diagcab files to a local disk.
2 Run the tool as administrator to ensure all settings will be applied: On the start page, select **Advanced**, then click **Run as administrator**.

   After the settings have been applied, you can generate a report to see which settings have been changed.
3 To create the report:
   a On the **Troubleshooting Complete** page, click **View details**.
   b Click on the print button to generate the report.
4 Reboot the PC after running the configuration tool.

NOTE

While using the Configuration Checker:

- Ensure that this computer is not turned off by another user.
- Win 7: Ensure that the menu bar is enabled (click **Organize> Layout**, and select **Menu bar**).
- It is very important that you reboot the PC after running the configuration tool.

Manual Configuration Steps

Some Windows changes within this document are mandatory for OpenLab CDS ChemStation Edition to work properly on a Windows system. Some changes will optimize application performance. Other changes will have an impact on usability.

The configuration settings are grouped according to their relevance for the Windows system in the Mandatory, Performance, and Usability categories. Depending on your operating system, some special configuration steps may be required.

The following sections describe the configuration steps for each category separately. Configure your Windows system accordingly. Alternatively, run the OpenLab CDS configuration check tool (see "Windows Configuration Checker for OpenLab CDS ChemStation Edition" on page 20).

NOTE

The following Windows 10 descriptions apply to Windows 10 Build 1809. The settings for other builds may differ slightly.

NOTE

For Windows 7 users:

Ensure that Windows hotfix KB2999226 (**Update for Universal C Runtime in Windows**) is installed on your system before installing ChemStation. See **https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows**.

Mandatory Configuration Steps

About Mandatory Configuration Steps

The following procedures of this section contain all the configuration steps required for installation and necessary to ensure proper installation and avoid data loss.

Configure Mandatory Settings

In the Microsoft Control Panel:

In the Windows Start menu, enter "Control Panel" in the **Search programs and files** field (alternatively, press [Win+R] and enter "Control panel"). To view all items in the Control Panel view, select **Small icons** in the **View by** field.

1 **Administrative Tools**: 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**.

2 **Network and Sharing Center**:
   - **a** Select **Change adapter settings**. Right-click your Ethernet Adapter, then select **Properties**. On the **General** tab, click **Configure**.
   - **b** On the **Power Management** tab, clear all check boxes.

3 **Power Options**:
   - **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).

4 **Programs and Features**:

a Click **Turn Windows features on or off**.

b Select the **Telnet Client** check box.

c Select the **TFTP Client** check box.

d Reboot the PC if necessary.

5 Windows 7 only:

Administrative Tools: Disable Services.

- Double-click **Services**.
- For the following services, set the startup type to **Disabled**:
  - **Application Experience**
  - **Desktop Window Manager Session Manager**

Other Windows settings:

1 To configure Windows logon options, right-click **Start**, select **Run** from the context menu, then type **gpedit.msc** in the **Run** field.

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**.

2 Windows 10 only: **Start> Settings> Update & Security> Windows Security**:

a Under **App & browser control**:

Turn off SmartScreen under **Check apps and files**, **SmartScreen for Microsoft Edge**, and **SmartScreen for Windows Store apps**.

b Under **Virus & threat protection**:

Ensure that a protection tool is turned on.

If you want to use Windows Defender: Enable and configure it in the Windows Control Panel under **Windows Defender Firewall> Advanced Settings**.

3 Windows 10 only: **Start> Settings> Devices> Printers & scanners**: Choose default printer.
   a Turn off **Let Windows manage my default printer**.
   b Click the printer that you want to set as default, then click **Manage**.
   c In the printer settings, click **Set as default**.
4 Windows 10 version 1903 only:

   If the Net.TCP Port Sharing Service is disabled, enable it by running the PowerShell command:
   ```
   Enable-WindowsOptionalFeature -online -All -FeatureName
   WCF-TCP-Activation45
   ```

Performance Configuration Steps

About Performance Configuration Steps

The following procedures of this section contain all the configuration steps that improve system performance. These settings are optional.

Configure Settings to Improve Performance

In the Microsoft Control Panel:

1 **System**: Change system properties:
   a Click **Advanced system settings**.
   b On the **Advanced** tab under **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**.

      Click **OK** to close the **Performance Options** dialog.
   c For Windows 10 and Windows 7 only: On the **System Protection** tab:

      Make sure that **Protection** is turned off. If required, click **Configure** and select **Disable system protection**.
2 Windows 10 and Windows 7 only: **Indexing Options**: Disable indexing.

   Click the **Modify** button. Select **Show all locations**, and clear all drives and locations.

Other Windows settings:

1 Windows 10 only: **Start> Settings> Personalization> Colors**: Turn **Transparency effects** off.

Usability Configuration Steps

About Usability Configuration Steps

The following procedures of this section contain all the configuration steps that improve the usability of the Windows application. These settings are optional.

Configure Settings to Improve Usability

In the Microsoft Control Panel:

1 **File Explorer Options** (**Folder Options** for Windows 7): 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**.

2 **System**: Change system properties:

a Click **Advanced system settings**.

b On the **Advanced** tab under **Startup and Recovery**, click **Settings**.
- In the **System startup** section:

  Change both **Time to display ...** fields from **30** to **3** sec.
- For Windows 10 and Windows 7 only: In the **System failure** section:
  - a Select **Automatically restart**.
  - b In the **Write debugging information** subsection, select **Kernel memory dump** from the drop-down list.

Click **OK** to close the Startup and Recovery dialog.

c On the **Advanced** tab under **Performance**, click **Settings**. On the **Visual Effects** tab:

- Select **Adjust for best performance**, then click **Apply**.

  Select **Custom**, then select the following check boxes for better usability:

  - **Show shadows under mouse pointer**
  - **Show shadows under windows**
  - **Smooth edges of screen fonts**

Click **OK** to close the Performance Options dialog.

Other Windows settings:

1 Enable the navigation pane:

- Windows 10: Open Windows Explorer, then select **View> Navigation pane** from the ribbon and make sure that Navigation pane is selected.
- Windows 7: Open Windows Explorer, then select **Organize> Details> Layout** and make sure that Navigation pane is selected.

2 Windows 7 only: Configure general layout of the Start Menu: (right-click **Start> Properties**)

a **Start Menu** Tab: In the **Privacy** section select both items

b **Start Menu** Tab > **Customize** button: In **Customize Start Menu** dialog:

- Clear the following option:
  - **Favorites menu**
- Select the following options:
  - Computer **Display as a link**
  - **Connect To**
  - Control Panel: **Display as a menu**
  - **Default Programs**
  - **Devices and Printers**
  - Documents: **Display as a link**
  - **Enable context menus and dragging and dropping**
  - Games: **Don't display this item**
  - **Help**
  - **Highlight newly installed programs**
  - Music: **Don't display this item**

- **Network**
- **Open submenus when I pause on them with the mouse pointer**
- Personal folder: **Display as a link**
- Pictures: **Display as a link**
- **Run command**
- Search other files and libraries **Search with public folders**
- **Search programs and Control Panel**
- **Sort All Programs menu by name**
- System administrative tools: **Display on the All Programs menu and in the Start menu**
- **Use large icons**

3 Windows 10 and Windows 7 only: Configure Windows logon options: Right-click **Start**, select **Run** from the context menu, then type **gpedit.msc** in the Run field.

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**.

4 **Recycle Bin Properties**: (right-click on desktop icon **Recycle Bin**, then select **Properties**) 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.

5 Select Internet Explorer as default Web browser:

- Windows 10 only:
  a Under **Start> Settings> Apps> Default Apps**, select the Internet Explorer as default Web browser.
- Windows 7 only:
  a In the Microsoft Control Panel under **Default Programs> Set your default programs**, select Internet Explorer from the list.
  b Click **Set this program as default**.

6 Windows 10 only: **Start> Settings> System> Tablet Mode**:

a For **When I sign in**, select **Use desktop mode**.

b For **When this device automatically switches tablet on or off**, select **Don't ask me and don't switch**.

7 Windows 10 only: **Start> Settings> Apps> Offline Maps**: Turn **Metered connections** and **Map updates** off.

8 Windows 10 only: **Start> Settings> Privacy**:

   a On the **General** page, turn off the following:

      - **Let apps use advertising ID to make ads more interesting to you based on your app usage (turning this off will reset your ID)**
      - **Let website provide locally relevant content by assessing my language list**
      - **Let Windows track app launches to improve Start and search results**

   b On the **Location** page, make sure Location for this device is off. If not, click **Change** to turn it off.

9 Windows 10 only: **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**.

10 Windows 10 only: **Start> Settings> Personalization**: In the **Taskbar** tab, under **Taskbar buttons** select **Combine when taskbar is full**.

   This will simplify switching between open CDS instances.

Editing the Security Settings for LC/MS and CE/MS Systems

The following sections summarize all security settings required for LC/MS and CE/MS. All other security settings are set automatically by the OpenLab CDS ChemStation Edition Installer.

OpenLab CDS ChemStation Edition needs to be installed using an operating system Administrator user account. To run the system with the configured options outlined in this document, all users and power users should use the same settings.

Firewall

On PCs controlling LC/MS or CE/MS systems, it is recommended that you turn off the firewall.

Advanced Network Settings

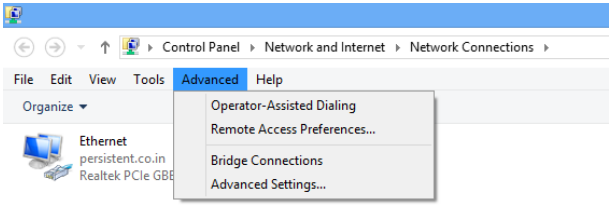
The communication with the MS is sensitive to the order NICs in the **Adapters and Bindings** dialog.

1 Go to **Start> Control Panel**.

Go to **Network and Sharing Center**[1].

2 Click **Change adapter settings**.

3 Press **ALT** to bring up the menu.



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

4 Select **Advanced Settings...**.

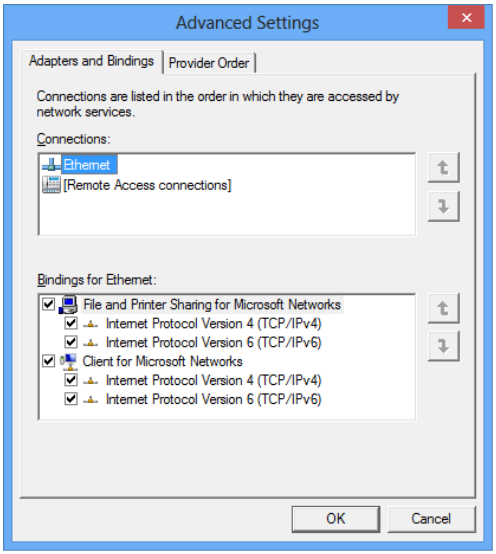


Figure 2 Advanced Settings dialog, Adapters and Bindings tab

5 In the **Adapters and Bindings** tab (see Figure 2 on page 30):

a Make sure that the Local Area Connection pertaining to the **LC/MS** or **CE/MS** NIC is the first item in the list of connections

NOTE

The names of your LAN cards may differ from those shown in the example. You can tell which LAN card is the Instrument LAN by comparing the IP addresses assigned to the LAN cards.

The LAN pertaining to the company intranet > internet will typically have an IP address assigned by organizations Static IP policy or by a DHCP server. Check with your network administrator.

2 Install OpenLab CDS ChemStation Edition

The installation is automated by the OpenLab CDS ChemStation Edition Installer. This tool installs all the components needed.

Prepare for Installation

1. Make sure that the antivirus software is disabled during the installation.
2. Do not run the Windows Update Service during installation. Make sure that no Windows updates are performed during the installation of ChemStation.
3. Make sure that no system reboot is pending.

   Pending reboots are indicated both in the Configuration Checker (see "Windows Configuration Checker for OpenLab CDS ChemStation Edition" on page 20) and in the Site Preparation Tool (see "Run the Site Preparation Tool" on page 10).
4. To begin installation, navigate to \Disk1\Setup.bat. Right-click the file and run it as administrator to proceed to the **Planning** screen.

Run the Installation Wizard

License Agreement Screen

1 From the OpenLab CDS ChemStation Edition Installer, select **Installation**.

2 Select **OpenLab CDS ChemStation**.

3 The **OpenLab CDS Installation Wizard** opens. Read the terms of the **License Agreement**. The 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 (typically this is in the programs folder). Folders must have English names.

NOTE

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

2 To install e-familiarization documents during installation, select **Include e-familiarization**. This will extend the installation time considerably.

3 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 49).

4 Select **Next** to proceed to the **Installation type** screens.

Installation Type Screens

1 Under **Installation type**, select **Standalone Workstation.**

2 Under **OpenLab CDS ChemStation Edition**, provide the following folder paths:

- **Installation folder**: directory where you want to store the ChemStation application components. Typically this is in the programs folder. Folder names must be entered without spaces.
- **Instrument data folder**: Instrument specific data such as methods, sequences, and results. The default data path is the public documents folder. If you plan to activate the Secure File I/O feature, this folder must not be shared at a later point in time. If your PC is equipped with a second disk drive, it is recommended to change the default data path to this alternative drive. Using a second disk drive increases the performance.

3 Select **Next** to proceed to the **Additional items** screen.

4 If you want to use OpenLab ECM 3.4, 3.5 or 3.6 with your data system:

a Select **ECM 3.x Server**. Type in a server name and press the **Test Connection...** button.

b 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.

NOTE

The storage type **OpenLab Server/OpenLab ECM XT Server** is only available for a Networked Workstation or a Distributed System.

5 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 "About Scripted Installation" on page 37).

   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 and Configure Adobe Acrobat Reader" on page 11).

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.

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 the installation.

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 users and instruments. This is accomplished through the *OpenLab Control Panel*, see the *OpenLab CDS ChemStation Edition Configuration Guide* (CDS_CS_configure.pdf).

Scripted Installation

About Scripted Installation

The OpenLab CDS ChemStation Edition 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 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 installer wizards.

1 Launch the OpenLab CDS ChemStation Installation Wizard.

2 Follow the installation instructions.

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*

  Install or 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.
- *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 OpenLab CDS 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 installer to install, upgrade, or repair a certain topology (see "Export as XML" on page 37). 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

Table 2 Return codes

Error/Return Code	Return value
RegistryCleanupError	18
InvalidInputXML	19
InvalidMode	20
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 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 installer evaluates the products already installed on your system. Depending on the installed components, the installer will offer one of the following options:

- Start a fresh installation
- Upgrade
- Repair

If a required installable is missing, the 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 installation files to a centralized folder (see "Copy Installation files to a Centralized Folder for Installation" on page 54). 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 location where you have saved the installation files.

   For example: C:\CDS
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 location where you have saved the installation files.

For example: C:\CDS

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 38). With the command given in the example, the OpenLab CDS 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

3 Post Installation Tasks

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

Allow ChemMain Through Firewall

Carry out the following procedure to prevent ChemStation from functioning incorrectly due to firewall restrictions. Consider using a second network card to isolate the instrument's data traffic, and carry out the following procedure for that second network card only.

Alternatively, ensure that all required firewall ports are open. For details, refer to the *OpenLab CDS ChemStation Edition Hardware and Software Requirements* guide (CDS_CS_HW-SW-Requirements.pdf).

1. In the Microsoft Control Panel, click **Windows Defender Firewall**[1].
2. Click **Allow an app or feature through Windows Defender Firewall**.
3. Click **Change settings**.

   The **Allow another app...** button becomes active.
4. Click **Allow another app...**.
5. Click **Browse...** and navigate to C:\Program Files (x86)\Agilent Technologies\ChemStation\CORE.
6. Select ChemMain.exe and click **Open**.
7. Click **Add**.
8. In the list of allowed apps and features, find **ChemStation ChemMain**, and select the check boxes for all three network types.
9. Confirm your changes.
10. Repeat the procedure for ChemMainAcq.exe.

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

Configure the Antivirus Program

Be sure to open the firewall ports listed in the Firewall Settings in the *OpenLab CDS ChemStation Edition Hardware and Software Requirements* guide (CDS_CS_HW-SW-Requirements.pdf).

NOTE

Running antivirus programs might influence the behavior and performance of your computer. Some virus scanners might cause issues when used with OpenLab CDS ChemStation Edition. The application is tested with Symantec Endpoint Protection 14.0 MP2 and with Microsoft Security Essentials.

In order for the OpenLab software to function correctly, you should configure any antivirus real time protection software with the following folder exclusions. They 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.

Process	Directory	File name
Data acquisition	%public%\Documents\ChemStation (or the corresponding folder for instrument data that you provided during installation)	Data, methods, sequences, reports etc.
ECM upload/download (if applicable)	%temp% for Windows users (=Users' temp directory)	*.ssizip
Standard reports	%temp% for Windows users (=Users' temp directory)	~p3d*.tmp ~job*.tmp Hpspl00.que
CDS intelligent reports	%LOCALAPPDATA% %APPDATA% %PROGRAMDATA%	Files on: • Agilent • Agilent Technologies • Agilent_Technologies,_Inc • IsolatedStorage • Temp 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.

- agilentiolibrariesservice.exe
- chemmain.exe
- chemmainacq.exe
- apg_top.exe
- iprocsvr.exe
- iproc8491.exe
- msinsctl.exe
- httpdmsd.exe
- epcsetup.exe
- AcroRd32.exe
- Acrobat.exe

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

4 Optional Procedures

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

Install Additional Software and Drivers

OpenLab CDS ChemStation Edition offers a wizard to help you installing additional software, such as the ADFExport Plug-in, or drivers for third-party instruments. To open the wizard, go to **Start> All programs> Agilent Technologies> 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.

Run a Software Verification after Software Installation

The Software Verification Tool (SVT) provides documentary evidence that your system has been built and installed correctly, and that all design specifications have been met. You do not need to run the software verification again if it has run successfully at the end of the installation.

1. Using your Windows operating system, go to **Start> All Programs> Agilent Technologies> Software Verification Tool**.
2. Select the components to qualify.
3. Select **Qualify**.

   The system will run the application and generate a Software Verification Report.
4. 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.

Transform a Workstation to a Networked Workstation

With Networked Workstations, you use a separate server to control the system. You can access all information provided by the Shared Services component 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 Shared Services server.

NOTE

- You must already have installed one of the following:
  - OpenLab CDS Shared Services Server (see *OpenLab CDS ChemStation Edition Networked and Distributed System Installation*, CDS_CS_Install_NwWS-DS.pdf on disk 1), or
  - A Content Management system (OpenLab Server, OpenLab ECM XT, OpenLab ECM 3.x).
- Make sure that the Shared Services versions on the workstation and the server are identical. If not, upgrade your system before doing the transformation. See "Planning the Upgrade" on page 64.

  For more information on temporary support of mixed version systems during an upgrade phase, refer to the *OpenLab CDS ChemStation Edition System Topologies and Architectural Concepts* (CDS_CS_Topologies.pdf).

1. Before starting the transformation: Copy the data, methods, and sequences from the instruments to a local backup folder. Then delete the instrument on the Workstation.
2. From the OpenLab CDS ChemStation Edition Installer, select **Maintenance**.
3. Select **Transformation of an OpenLab Standalone Workstation into a Networked Workstation**.
4. 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.
5. Start the transformation.
6. After the transformation, configure a new instrument, and copy back the data from the local folder.

Improve Performance on Offline Machines

Computers running OpenLab CDS ChemStation Edition 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:
   - [HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\SystemCertificates\AuthRoot]

     "DisableRootAutoUpdate"=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.

NOTE

If you connect the computer to the internet again, you must remove the registry keys.

Protect ChemStation Folders with Secure File I/O

ChemStation files such as data, methods, or sequences are stored in various local folders. To ensure data integrity, ChemStation offers the *Secure File I/O* function. If you enable this function, all folders will be protected against modifications from outside ChemStation or in **Open** or **Save As** dialogs.

For more information, refer to the *Folder Protection with Secure File I/O* chapter in the *OpenLab CDS ChemStation Edition Configuration Guide* (CDS_CS_configure.pdf).

Change the PC Name

A change of the PC name may be scheduled to avoid duplicate names in a network or can be due to a policy change. Internally, the software components use *localhost* for the Workstation, so no additional action is required to continue running the software. However, if you need to change a PC name *after* installation, the license file for the PC will be no longer valid.

Instruments are licensed by installing files that are specifically created for a given configuration. The text of the license files contains references to the *computer name* and the *hardware address* of the network card. If one of the parameters is changed, the license no longer applies.

You will need to generate and install a license file with the new PC name (host name).

Copy Installation files to a Centralized Folder for Installation

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

1 From the 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 **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.

Add Shortcut to Public Folder

By default, user data such as master methods, sequence templates, report templates, raw data etc. is located in the public documents folder C:\Users\Public\Documents\ChemStation. You define this folder during the installation. The system creates a shortcut to the defined folder under **Instrument Data** in the Windows Start menu.

In Windows 7, a shortcut to public documents is automatically available in the Windows Explorer.

In Windows 10, the Windows Explorer is organized differently. To provide easy access to that folder, we recommend that you pin the Instrument Data folder to the Start menu.

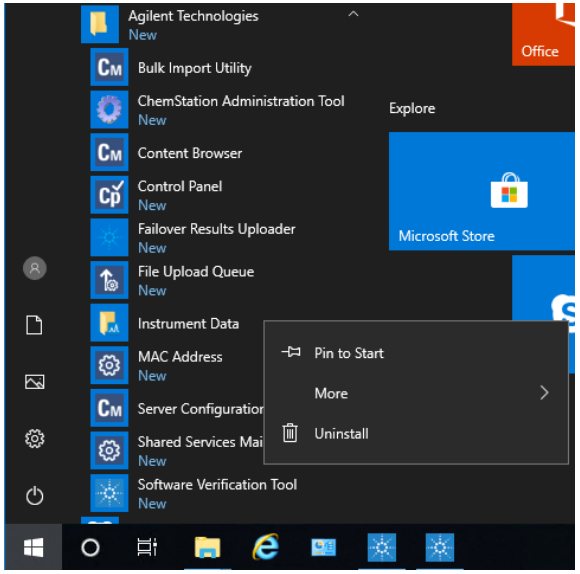


Figure 3 **Windows Start menu in Windows 10**

1 Navigate to the **Instrument Data** shortcut in the Start menu.

2 Right-click the icon, then select **Pin to Start**.

5 Licensing

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

About OpenLab Licensing

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.

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 CDS ChemStation Edition 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 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 60.

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 ChemStation Edition 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. Go to **https://agilent.subscribenet.com/control/agil/AgilRegisterToAccount** to register the product with SubscribeNet.
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 If you already have a SubscribeNet account, use **https://agilent.subscribenet.com/**.

   Lost your SubscribeNet password? Use **https://agilent.subscribenet.com/control/agil/password** to have it emailed to you.

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 5 through 7 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 contact information.

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).

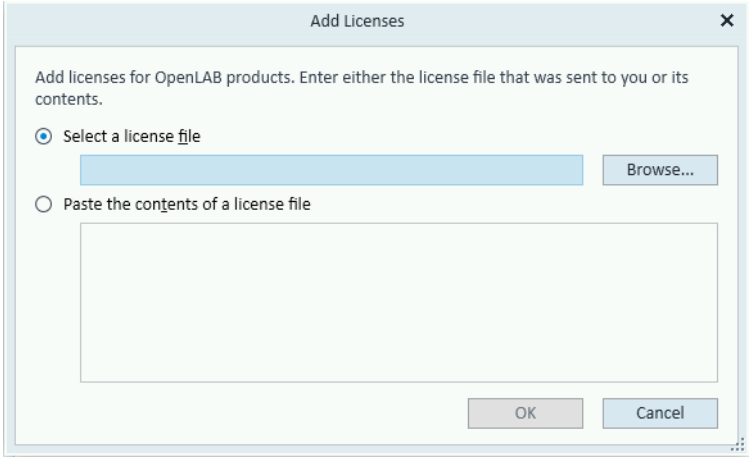
Install Your License

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 Upgrade ChemStation Edition to C.01.10

This chapter describes the upgrade from ChemStation C.01.07 SR3 or higher. If you upgrade from an older ChemStation revision, upgrade to C.01.07 SR3 first. For information on upgrading from ChemStation A.0x or B.0x, please refer to the migration guide (CDS_CS-data-Migration.pdf).

Planning the Upgrade

A direct upgrade, using the Upgrade Wizard, is supported from ChemStation *C.01.07 SR3 or higher*. Older ChemStation revisions or OpenLab Control Panel components must first be upgraded to C.01.07 SR3 or higher in a separate step.

If you upgrade from C.01.07 SR3, ensure that you are using the OpenLab Control Panel component rev. 2.1, which was the version included with ChemStation C.01.07 SR3. You use the correct Control Panel version if it looks like this:

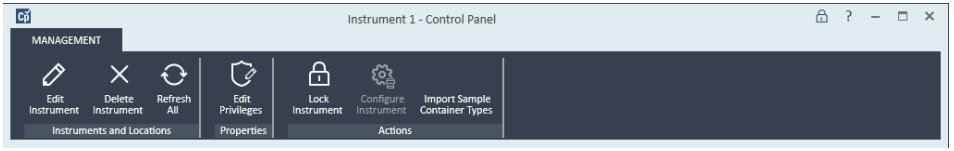


Figure 4 Control Panel rev. 2.1 layout

Note that C.01.10 is supported on *Windows 7 SP1 64 bit* or *Windows 10* only. An in-place upgrade from Windows 7 or 8.1 to Windows 10 on an existing ChemStation Workstation is not supported. Before upgrading a system, make sure that the Windows configuration meets all requirements. See "Prepare your PC" on page 7.

OpenLab CDS ChemStation Edition no longer controls the Agilent 5890 GC instrument. Do not upgrade to rev. C.01.10 if using the 5890 GC.

Note that the M8370AA OpenLab Data Analysis Add-On is no longer supported. It must be uninstalled manually.

The functions related to ADF Export will be available as an Add-On for ChemStation starting from revision C.01.10. To use the latest version, install the ADFExport Add-On separately (see "Install Additional Software and Drivers" on page 48). ADF Export functions have been included in ChemStation C.01.09. Therefore, if you upgrade ChemStation from C.01.09, always install the latest ADFExport Add-On onChemStation revision C.01.10 in order to upgrade the outdated ADF Export functions.

If you protect ChemStation files with Secure File I/O, you must temporarily disable Secure File I/O.

The upgrade procedure depends on the revision of your currently installed ChemStation Edition:

- *C.01.07 SR3 or SR4 with outdated OpenLab Control Panel*

  Your OpenLab Control Panel may still look as shown below. In this case, update the Control Panel separately. Afterwards continue as described for upgrading from C.01.07 SR3.

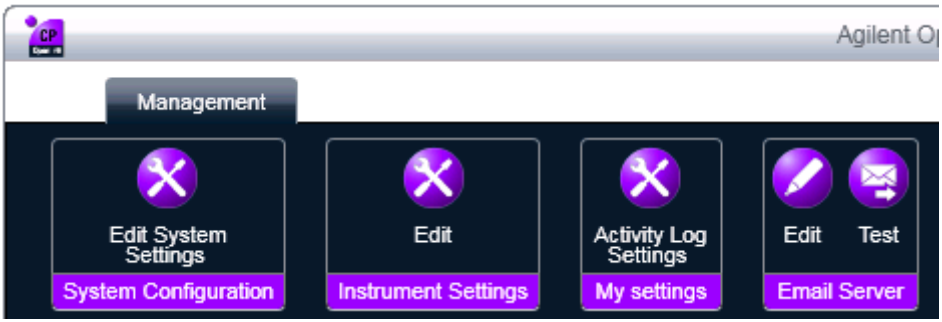


Figure 5 Outdated OpenLab Control Panel

  To upgrade the Control Panel: Run the installation wizard. On the **Maintenance** tab, click **OpenLab Control Panel Upgrade**. Follow the wizard.

- *C.01.07 up to SR2, C.01.06, C.01.05*

  If the M8370AA OpenLab CDS Data Analysis Add-On is present, uninstall it using the Microsoft Control Panel.

  Run the C.01.07 SR3 upgrade wizard. For details, please refer to the C.01.07 SR3 installation guide.

  If your system is configured to use one of the following ELSD drivers (G7102A, G4261A/B or G4260A/B), refer to the latest ReleaseNotes for ELSD_RC.NETDriver for upgrade instructions. A current version is supplied in the folder Disk3\Docs\en\Manuals on the install media.

- *C.01.04–C.01.01*
  - **a** Uninstall the old ChemStation.
  - **b** Uninstall specific drivers or Add-Ons.

    If your system is configured to use one of the following drivers or Add-Ons, uninstall them using the Microsoft Control Panel:
    - ELSD (G7102A, G4261A/B or G4260A/B).

      ELSD drivers will be supplied with a separate installer.
    - Agilent Cirrus GPC software for ChemStation (G7818A), versions earlier than 3.4.2; uninstall Cirrus Operational Qualification first, then uninstall Cirrus.

      Version 3.4.2 of the Cirrus Add-On is required for ChemStation C.01.08.
    - M8370AA OpenLab CDS Data Analysis Add-On.
  - **c** Install C.01.10

- *A.0x or B.0x*

  For information on upgrading ChemStation A.0x or B.0x, please refer to the migration guide (CDS_CS-data-Migration.pdf).

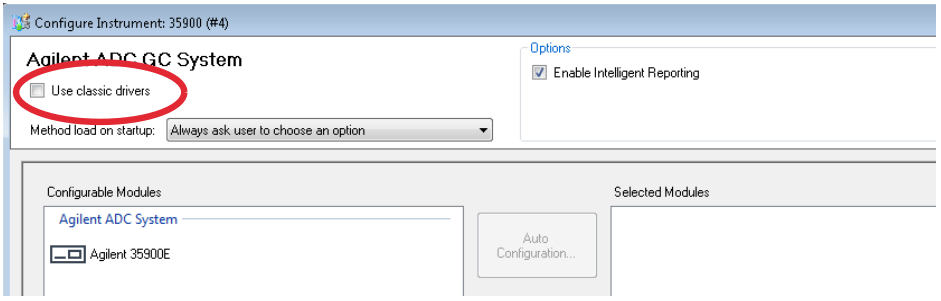
Classic instrument drivers, with exception of LC/MS instrument drivers, are no longer supported. It is recommended that you convert the corresponding instruments and methods to RC.NET driver prior to the upgrade (see "Convert Classic Instrument Drivers to RC.NET" on page 67).

Convert Classic Instrument Drivers to RC.NET

With C.01.10, only RC.NET drivers are available (with exception of MSD instrument drivers). Instruments using the classic driver must be reconfigured to use the RC.net driver. Agilent recommends to do this before upgrading to C.01.10.

To determine which instruments are using the classic driver, go to the OpenLab Control Panel and select the instrument. Select **Configure Instrument** in the ribbon. The instrument is using the classic driver if the **Use classic drivers** check box is selected. Perform the following steps to reconfigure the instrument to use RC.NET.

1. Record the IP address for each classic driver instrument.
2. Verify there is a backup of the methods and data to another location.
3. For your reference: Print the classic driver method settings or save the method listing to disk.
4. To reconfigure the instrument, select the instrument in the **OpenLab Control Panel**.
5. In the ribbon, click **Configure Instrument**.
6. In the configuration dialog, clear the **Use classic drivers** check box.



The instrument is moved from the **Selected Modules** panel to the **Configurable Modules** panel.

7 Select the instrument in the **Configurable Modules** panel, then click the arrow to add the instrument to the **Selected Modules** panel again.

NOTE

- If a current RC.NET driver is not yet available, you must install it manually before upgrading OpenLab CDS ChemStation.
- For example, follow these steps to install the 35900E ADC RC.NET driver:
  - **a** Run the installer.
  - **b** Go to Installation and open OpenLab Additional Software and Drivers.
  - **c** When asked for the Add-on software, browse to Disk3 of the installation media, and to the Agilent 35900E RCNet folder to find the Agilent OpenLab CDS ChemStation 35900 AtoD Drivers.msi file. The corresponding software will then be listed in the installer.
  - **d** Select the software in the list, and continue to install. The installation verification will automatically follow and should complete without errors.

8 Double-click the instrument under **Selected Modules**, and configure the previously recorded IP address. Click **Get Serial Number and Firmware** to get the corresponding entries.

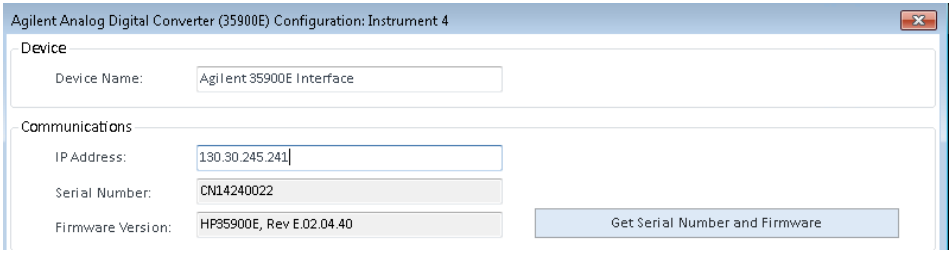
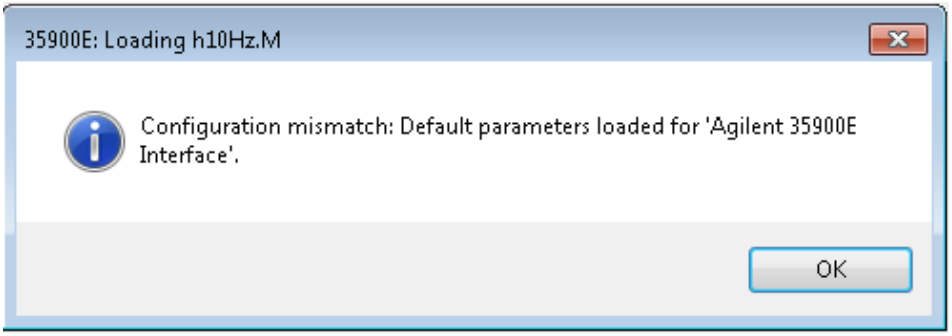


Figure 6 Example for 35900 configuration

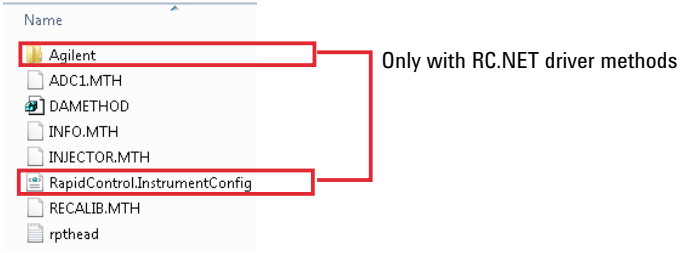
9 Launch the newly configured instrument.

10 To convert a method to RC.NET driver, load the method. If a dialog like the following opens, click **OK**.



Review the method, and if no updates are needed, add a comment such as "Updated to RC.NET" to the method when saving it.

Methods are converted to RC.NET when loaded. After saving to disk, converted methods have an additional Agilent folder and RapidControl.InstrumentConfig file.



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 ChemStation Edition. 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.

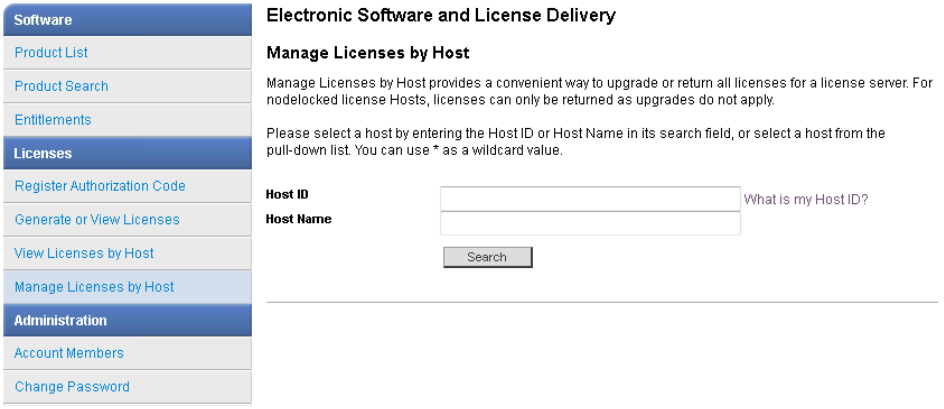
If you are under SMA subscription, proceed as follows to upgrade your licenses:

1 During the following process, you will be prompted in SubscribeNet for the host name or MAC address of the workstation where OpenLab CDS ChemStation Edition 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 82). 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 71.

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**

Upgrade the Workstation

Prerequisites

You are using OpenLab CDS ChemStation Edition rev. C.01.07 SR3 or higher. Older revisions must first be upgraded to C.01.07 SR3 in a separate step.

For AICs and Networked Workstations: To preserve the instrument's column table during the upgrade, go into each of the existing instrument folders (C:\ProgramData\Agilent Technologies\ChemStation\1\, C:\ProgramData\Agilent Technologies\ChemStation\2\, ...) and rename the file **Config.reg** into **Config.bak**. This step is *not* required if you use LC column tags to store the LC column information, or if GC column injection counts are irrelevant.

1. If you protect your folders with Secure File I/O: disable Secure File I/O during the upgrade.
   a. Shut down all ChemStation sessions.
   b. Click **Start> All Programs> Agilent Technologies> ChemStation Administration Tool** to open the ChemStation Administration Tool.
   c. In the ChemStation Administration Tool, clear the **enable secure file IO** check box.
2. Run the installer from the same media type (for example, USB or network share) as you used to install the current version.
3. From the installer **Planning** screen, switch to the **Installation** screen.
4. Select **OpenLab CDS ChemStation**.

   If OpenLab CDS ChemStation Edition is already installed, this automatically opens the upgrade wizard.
5. The workstation license must be upgraded, see "Get Upgraded License File" on page 70.

   Acknowledge that the license has been upgraded and click **Next** to continue.
6. Select **I agree with the terms and conditions**. You cannot proceed with the upgrade unless you agree to these terms. Click **Next**.
7. 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**.
8. 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.

9 Select **Finish** to close the upgrade wizard.

10 After the upgrade, check if the settings in the **ChemStation Administration Tool** still match your original system settings before the upgrade.

11 If you disabled it before, enable Secure File I/O again after the upgrade is finished.

   a Click **Start> All Programs> Agilent Technologies> ChemStation Administration Tool** to open the ChemStation Administration Tool.

   b In the ChemStation Administration Tool, select the **enable secure file IO** check box.

As of rev. C.01.08, the Control Panel layout is upgraded for all installations. The new user interface is shown in the following figure:

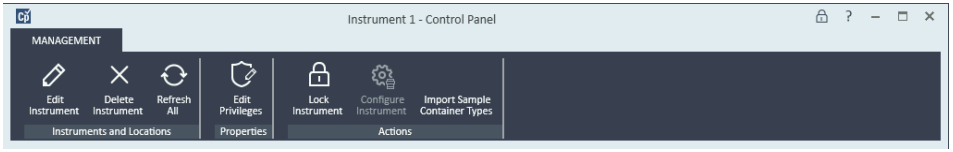


Figure 7 Control Panel user interface

Existing instrument configuration can remain unchanged after the upgrade.

NOTE

The classic drivers are not supported with ChemStation C.01.08 and later. Please check section "Convert Classic Instrument Drivers to RC.NET" on page 67 for details.

7 Uninstall the Software

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

About Uninstallation

NOTE If the 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 OpenLab CDS ChemStation Edition can be uninstalled.

Like the installation, the uninstallation of OpenLab CDS ChemStation Edition is automated by the OpenLab CDS ChemStation Edition Installer.

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

NOTE Do not use the Windows uninstallation tool for uninstalling OpenLab CDS ChemStation Edition.

Run the OpenLab CDS Uninstallation Wizard

1 Select **Start> All Programs> Agilent Technologies> Uninstall OpenLab CDS**.

The **OpenLab Uninstallation Wizard** opens.

2 In the **Shared Components** screen, select the **Uninstall Software Verification** and **Uninstall PostgreSQL** check box.

Note: Software Verification Tool needs to be uninstalled if you wish to re-install OpenLab CDS ChemStation Edition at a later time.

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

4 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.

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

8 Troubleshooting

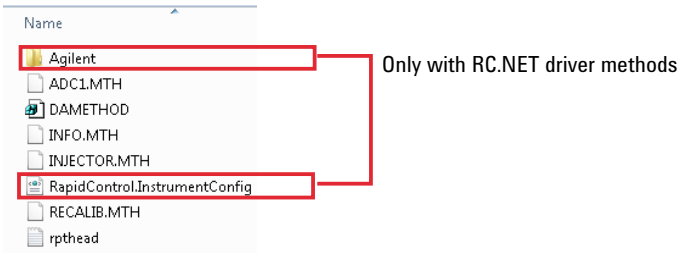
The chapter contains some troubleshooting hints.

Reconfigure Instruments Using Classic Drivers After Upgrade to ChemStation C.01.08 or Higher

If you missed the recommendations from the driver preparation described in the *OpenLab CDS ChemStation Edition Upgrade Guide* (CDS_CS-Upgrade.pdf), ChemStation will start up, but instruments with the Classic driver will no longer be available. You will receive a notice that you need to reconfigure your instrument.

The classic driver instruments and methods are not updated to RC.NET automatically. To adjust them, perform the following steps.

To check if a classic method is used, go to Windows Explorer and view the contents of the corresponding method folder. The classic method will not have the Agilent folder listed.

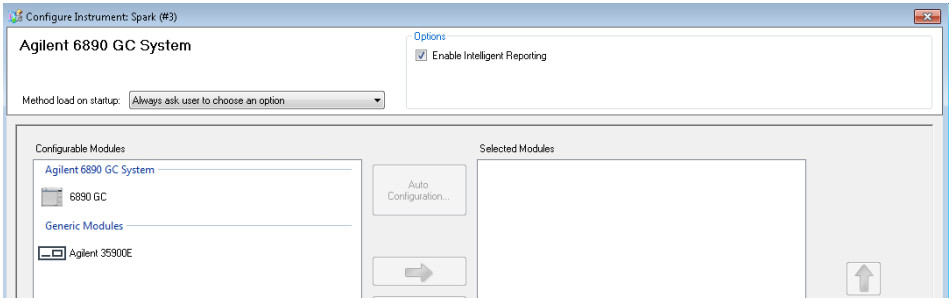


1. Record the IP address for each classic driver instrument.
2. Verify there is a backup of the methods and data to another location.
3. To reconfigure the instrument, select the instrument in the **OpenLab Control Panel**.
4. In the ribbon, click **Configure Instrument**.

   A message is displayed, requesting you to reconfigure your instrument.

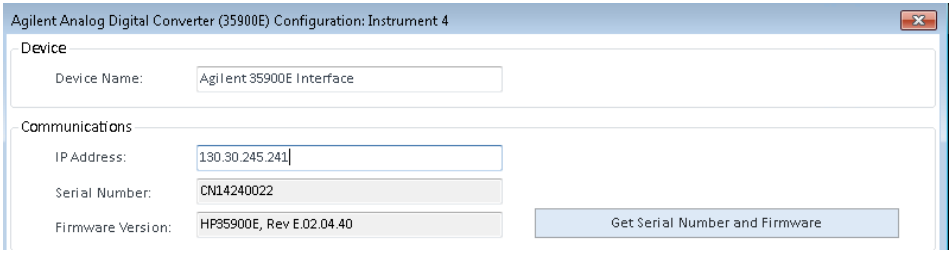
5 Click **OK**.

The **Configure Instrument** panel opens. The **Use classic drivers** check box is no longer shown.



6 To update the instrument to use the RC.net driver, select the instrument in the **Configurable Modules** panel, then click the arrow to add it to the **Selected Modules** panel.

7 Enter the IP Address. *Only for 35900E A/D instrument:* Click **Get Serial Number and Firmware** to get the corresponding entries. For the example below the serial number and firmware version are updated upon successful connection to the 35900E A/D instrument.



This completes the setup of the instrument.

8 Click **OK** to load the instrument configuration.

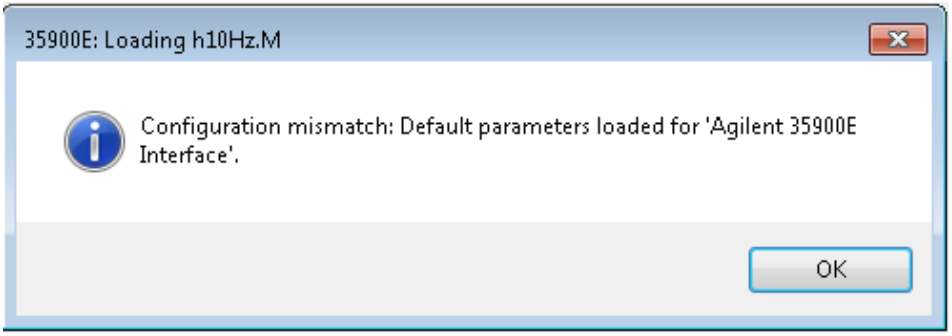
9 Specify the **Method Load on Startup** option and select one of the following options:

- **a Always ask the user to choose an option**
- **b Download method to instrument on start up** (select this option to match the behavior of the classic driver)
- **c Upload method from instrument**
- **d New method from instrument**

10 Click **OK** to complete.

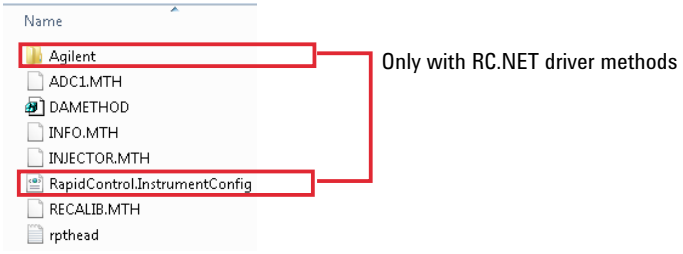
11 Launch the newly configured instrument.

12 To convert a method to RC.NET driver, load the method. If a dialog like the following opens, click **OK**.



Review the method, and if no updates are needed, add a comment such as "Updated to RC.NET" to the method when saving it.

Methods are converted to RC.NET when loaded. After saving to disk, converted methods have an additional Agilent folder and RapidControl.InstrumentConfig file.



9 Appendix

Sales and Support Assistance

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

http://www.agilent.com/en-us/contact-us/page

In This Book

This installation guide provides instructions to install the Agilent OpenLab CDS ChemStation Edition workstations.

www.agilent.com

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