

Agilent CrossLab Start Up Services

Agilent OpenLab CDS v3.0 AIC Software Site Preparation Checklist

Thank you for purchasing software from **Agilent Technologies**. CrossLab Start Up is focused on helping customers shorten the time it takes to start realizing the full value of their instrument system investment.

Correct site preparation is the key first step in ensuring that your instruments and software systems operate reliably over an extended lifetime. This document is an **information guide and checklist** prepared for you that outlines the software requirements for the system set up in your lab.

Introduction

Customer Information

- If you have questions or problems in providing anything described as part of Customer Responsibilities below, please contact your local Agilent or partner support / service organization for assistance prior to delivery. In addition, Agilent and/or its partners reserve the right to reschedule the installation dependent upon the readiness of your laboratory.
- Should your site not be ready for whatever reasons, please contact Agilent as soon as possible to re-schedule any services that have been purchased.
- Other optional services such as additional training, operational qualification (OQ) and consultation for user-specific applications may also be provided at the time of installation when ordered with the system but should be contracted separately.

Customer Responsibilities

Ensure that your site meets the following specifications before the installation date. For details, see specific sections within this checklist, including

- The **computing environment** and the necessary space is made available.
- The number and location of **electrical outlets** for your computer systems and peripherals are planned.
- Your site meets the **software, hardware, and networking specifications** described later in this document.
- Locate your **sales order information** and the **software entitlement email** sent to the person named as the software contact person during purchase.
- Check for Hotfix, Microsoft updates, and patch compatibility appropriate for the customer's system. **Critical Note: Current Microsoft updates and Windows version must be installed in the customer-provided PC before installation can begin.**
- The necessary **software media** is available, including upgrade/update media. Note: physical software media is only delivered if requested at the time of purchase. Software may be downloaded from the customer's **Agilent Online Account** and should be downloaded prior to the installation.
- That a suitable **backup solution** is identified for your software.

- If Agilent is delivering **Installation and Introduction services**, users of the instrument system should be present throughout these services. Otherwise, they will miss important operational, maintenance, and safety information.
- Availability of a **system/network administrator** as needed to connect to your intranet.
- Please consult the **Special Requirements** section for other product-specific information.
- Complete Final Check: Run the System Preparation Tool. Access the OpenLab CDS v3.0 installation media and run the SystemPreparationTool.exe under \Setup\Tools\SPT to complete the final check.

This System Preparation Tool (SPT) checks and applies Windows settings on your machine. Most of the steps are automated by the tool. Applying these settings helps avoid issues during the installation and use of the product. Please read the System Preparation Tool Report and manually make the mandatory and recommended adjustments that are outlined in the report.

Important Customer Web Links

- To access Agilent training and education, visit <https://www.agilent.com/chem/training> to learn about training options, which include online, classroom and onsite delivery. A training specialist can work directly with you to help determine your best options.
- To access the **Agilent Resource Center** web page, visit <https://www.agilent.com/en-us/agilentresources>. The following information topics are available:
 - Sample Prep and Containment
 - Chemical Standards
 - Analysis
 - Service and Support
 - Application Workflows
- The **Agilent Community** is an excellent place to get answers, collaborate with others about applications and Agilent products, and find in-depth documents and videos relevant to Agilent technologies. Visit <https://community.agilent.com/welcome>
- Videos about specific preparation requirements for your instrument can be found by searching the **Agilent YouTube** channel at <https://www.youtube.com/user/agilent>
- **Need to place a service call?** [Flexible Repair Options | Agilent](#)

- To access the **Agilent Software Service Desk**, visit <https://servicedesk.li.agilent.com/support>. Only users with an active Software Maintenance Agreement (SMA) will be able to submit support requests and check the status of those requests.
- OpenLab CDS 3.0 uses **Agilent Electronic Licensing**, allowing all licensing entitlements to be viewed and managed through the Licenses & Agreements page of your **Agilent Online Account**. You can access your **Agilent Online Account** by visiting <https://www.agilent.com>, logging in with your account credentials, expanding your account dropdown, and selecting the "Dashboard" option. Software installation media and updates can be downloaded by following the "Download/Activate software" link for the associated Entitlement.
- Some OpenLab instrument drivers and add-ons as well as MassHunter Qualitative Analysis and BioConfirm use **Agilent SubscribeNet** to manage and administer their licenses and provide users with access to download the latest software/updates. To access **Agilent SubscribeNet**, visit <https://agilent.subscribenet.com>.
- Links to the Software Status Bulletin (SSB) and Software Release Bulletin (SRB) are in the Software Bulletins.pdf located under Setup\Tools\Support\History on the installation media.
- The full OpenLab Help & Learning system with most current Help and Resources is available via <https://openlab.help.agilent.com>. The Online version features localized User Manuals.

Site Preparation

Software Specifications for AICs

Software Specification Description	Comments
Operating system name, version	Windows 10 Enterprise or Professional, 64-bit (version 21H2 or greater) Windows 11 Enterprise or Professional, 64-bit (version 24H2 or greater) Windows Server 2019 Standard or Datacenter, 64-bit* Windows Server 2022 Standard or Datacenter, 64-bit* Windows Server 2025 Standard or Datacenter, 64-bit*
.NET Framework (64-bit)	.NET 3.5.x (<i>must be enabled in Windows</i>) and .NET 4.8 or higher (<i>installed by OpenLab CDS v3.0 Installer</i>)
.NET Core (64-bit)	6.0 and 8.0 (<i>installed by OpenLab CDS v3.0 Installer</i>)
Asp.NET Runtime	6.0 and 8.0 (<i>installed by OpenLab CDS v3.0 Installer</i>)
Web browser	Google Chrome 98 or higher Microsoft Edge
Antivirus Software	Microsoft Defender Antivirus Trellix MVISION Plus Symantec Endpoint Security CrowdStrike
Language settings/compatibility	English Western European Language (<i>CDS will always appear in English</i>) Chinese (<i>Non-localized instrument drivers are supported and will always appear in English</i>) Japanese (<i>Non-localized instrument drivers are supported and will always appear in English</i>) Brazilian Portuguese (<i>Non-localized instrument drivers are supported and will always appear in English</i>)
Account settings/privileges	Domain user with local administrator privilege required for installation and configuration

*Supported, but not recommended

Computer Hardware Recommendations for AICs

Hardware Specification Description	Comments
Tested Agilent original bundle PC	HP Z2 G9 SFF Workstation: Intel® Core i5-12500, 3.0 GHz, 18MB cache, 6 Core
Processor type and speed	Intel® i5, i7, Xeon E3, or equivalent 3.0 GHz or greater, 4 Core
Memory	16 GB; Ensure that at least 4 GB is reserved for the Windows operating system
Hard disk	2x500GB or 1TB 7200 RPM SATA (minimum) Or equivalent Solid-State Drive (recommended) If the computer has a disc array controller, Agilent recommends 2 x 1 TB in RAID1
USB Port	USB 3.0 required for installation, if USB media were ordered [†]
RS-232 Port	1 Serial port required for select instruments still using RS-232 communication. See instrument specifications for details.
LAN Card	100MB/1GB LAN for instrument control 2nd LAN card required for house, to isolate the instruments' data traffic from the lab intranet connection.
Graphic resolution (Monitor required for failover mode only)	1600 x 900 minimum 1920 x 1080 recommended

[†]Software can be downloaded from your Agilent Online Account. USB media are available as an option.

Computer Hardware Recommendations for AICs with one LC/(Q-)TOF instrument*

Hardware Specification Description	Comments
Tested Agilent original bundle PC	HP Z4 G5
Processor type and speed	Intel® W3-2423 (4.2 GHz, 15 MB cache, 6 cores) or equivalent 4.2 GHz or greater; 6 cores or more
Memory	32 GB minimum, 64 GB recommended (for one LC/(Q-)TOF instrument)
Hard disk	1 TB M.2 NVMe SSD Boot Volume, and (Optional) 12 TB 7200 RPM SATA 6G HDD (for extended failover operation)
USB Port	USB 3.0 required for installation, if USB media were ordered†
RS-232 Port	1 Serial port required for select instruments still using RS-232 communication. See instrument specifications for details.
LAN Card	10 GbE LAN for instrument control of G6575A 1 GbE LAN for G6549A or G6230C 2nd LAN card required for house, to isolate the instruments' data traffic from the lab intranet connection.
Graphic resolution (Monitor required for failover mode only)	1600 x 900 minimum 1920 x 1080 recommended

*All configurations assume MassHunter Qualitative Analysis and BioConfirm are installed.

†Software can be downloaded from your Agilent Online Account or SubscribeNet. USB media are available as an option.

Networking Specifications

Domain Requirements: Domains support the flow of information and user access rights across machines in the network. This means that all machines and instruments within the networked OpenLab CDS system must reside within the same domain or have two-way transitive trusts established between domains to allow name-based communications between all components in the system. In the case of an AIC installation, the AIC must always be able to communicate with domain components to function as expected.

By default, OpenLab Server/ECM XT 2.8 Feature Pack 01 (FP01) is limited to single-domain applications. Before deploying OpenLab CDS 3.0 clients and AICs on a different domain than the OpenLab Server/ECM XT 2.8 FP01 server:

- Ensure that the proper two-way transitive trust relationship is established between the domains, and
- Deploy/update multi-domain-compatible digital certificates, either by deploying custom certificates from a certificate authority or by following the procedure outlined by KPR# 1058057 on the OpenLab CDS SSB:
agilent.com/cs/library/support/Patches/SSBs/M84xx.html#TTID:1058057

The domain name server (DNS) must be able to resolve the IPv4 address of all instrument controllers and instruments. Any unresolved instrument controller or instrument will disrupt the functionality of OpenLab resulting in errors or delays. IPv6 is not supported and must be deactivated.

When using LAN communications to connect an AIC to an instrument, follow the guidelines below:

- Connect via an isolated switch using standard CAT-5E or CAT-6 network cabling.
- LAN communication hardware should be 100/1000 mbps (or higher) speed capable. 10 GbE required for some LC/(Q-)TOF configurations. The J4100 Jet Direct Card is not supported. Use a G1369 LAN interface card instead.
- NIC teaming (See *Note 1*): LAN cards should not be teamed on AICs.
- LAN communication must be on the same subnet as instruments, and preferably on the same segment.

Note 1: Network Interface Card (NIC) teaming is also known as Load Balancing and Failover (LBFO)

Network Specification Description	Comments
Network type, bandwidth, speed, protocol etc.	Internet Protocol Version 4 (TCP/IPv4) only <i>Internet Protocol Version 6 (TCP/IPv6) is not supported</i>
IP Address	Static or DHCP Reservation

For more detailed information regarding OpenLab CDS 3.0 network specifications, please refer to the *Network Specifications* chapter of the OpenLab CDS Requirements and Support Instruments Guide (**CDS_v3.0_Requirements_en.pdf**) on the installation media.

Virtualization

Virtualizing AICs is supported with VMware vSphere; however, Agilent does not recommend virtualizing AICs. In addition, virtualized AICs are not supported when controlling LC/(Q-)TOF instruments. AICs located far from the instrumentation introduce additional risks, particularly if the instrument-to-AIC connection is outside of the OpenLab communication redundancy protocols. To reduce the likelihood of non-recoverable communication issues, it is recommended that this connection resides on a local network. It is the customer's responsibility to perform an appropriate risk assessment when determining where and how to deploy AICs within their environment.

Special Requirements

- Please refer to the **CDS_v3.0_Requirements_en.pdf** on the installation media for supported hardware, software, instruments, and firmware requirements.
- If the customer uses a Firewall other than the Windows Defender Firewall, ensure that all required ports can be used by OpenLab CDS. For details, see the *Firewall Settings* section of *Chapter 3 Network Requirements* in the *OpenLab CDS Workstations, Clients, and Instrument Controllers Requirements and Supported Instruments* (**CDS_v3.0_Requirements_en.pdf**).

Service Engineer Review (Optional)

Service Engineer Comments

If the Service Engineer completed a review of the Site Preparation requirements with the customer, the Service Engineer should complete the following sections below.

If there are any specific points that should be noted as part of performing the service review or other items of interest for the customer, please write in this box.

Site Preparation Verification

Service Request Number:

Date of Review:

Service Engineer Name:

Customer Name:

Service Engineer Signature:

Total number of pages in this document: