Thank you for purchasing Agilent software.

Correct site preparation and evaluation is the key first step in assuring that the installation of your Agilent software product is successful and that your instruments and software systems operate reliably over an extended lifetime. The information provided in this document can be used as an information guide AND checklist that outlines the computing requirements for your site. It may also recommend tools where needed, that will help you get started.

**Customer Responsibilities**

Make sure your site meets the following specifications prior the installation date.

- Your site meets the software, hardware and networking specifications as outlined below
- Computing environment and the necessary space is made available
- The number and location of electrical outlets and network ports for your computer systems, peripherals and instruments are planned.
- Locate your sales order information such as software authorization codes, software licenses or software certificates.
- The necessary software media are available.
- A suitable backup solution is identified for your software.
- A system or network administrator is available as needed to connect to your intranet.
- Complete Final Check: Software Site Preparation Tool.

Please visit the following Agilent website to download the Software Installation Site Preparation Tool: [http://www.agilent.com/en-us/support/software-informatics/swsitepreptool](http://www.agilent.com/en-us/support/software-informatics/swsitepreptool)

This easy-to-use tool verifies that your PC meets the necessary hardware and software pre-requisites before installing the Agilent software.

If Agilent is delivering installation and familiarization services, users of the instrument should be present throughout these services; otherwise, they will miss important operational, maintenance and safety information.

**Important Customer Information**

- If you have questions or problems in providing anything described as Customer Responsibilities above, 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-arrange 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.
## Software Specifications for OpenLAB CDS 2.1 Workstation

<table>
<thead>
<tr>
<th>Specification Description</th>
<th>Support Statement</th>
</tr>
</thead>
</table>
| Operating System (OS)                                         | • Windows 7 SP1, Enterprise or Professional, 64bit  
• Windows 8.1, Enterprise or Professional, 64bit  
• Windows 10, Enterprise or Professional, 64bit |
| The following localized versions of Windows operating systems  | • English  
• Western European language versions (CDS software will always appear in English). Which language:  
• Chinese (Non-localized instrument drivers are supported and will always appear in English)  
• Japanese (Non-localized instrument drivers are supported and will always appear in English)  
• Brazilian Portuguese (Non-localized instrument drivers are supported and will always appear in English) |
| Domain connectivity                                           | optional for workstations                                                                                                                                 |
| OS .NET & other Add-ins                                       | • .NET 4.5 SP1 (Installed by OpenLAB 2.0 Installer, launch if needed); and  
• .NET 3.5.1 must be enabled on systems running on Microsoft Windows 8.1, Windows 10, or Windows Server 2012 R2 |
| Drives                                                        | NTFS File system                                                                                                                                 |
| Network                                                       | TCP/IP Protocol version 4 only  
TCPv6 addressing is not supported by OpenLAB CDS. See `OpenLAB CDS Requirements` guide for detailed specifications |
| Privileges                                                    | Local Administrator permissions required for software installation and configuration                                                                 |
| Printing                                                      | Check that a valid printer driver is installed on the system and a test page prints successfully                                                                 |
| IP Address                                                    | Static or DHCP Reservation                                                                                                                                 |
| Virtualization                                                | Not currently supported                                                                                                                                 |
| Citrix                                                        | Not currently supported                                                                                                                                 |
| Terminal Services                                             | Not currently supported                                                                                                                                 |
| Antivirus Software                                            | Highly recommended. The application was tested with Symantec Endpoint Protection, Microsoft Security Essentials, Trend Micro and McAfee |
| Adobe Reader                                                  | Adobe Reader XI or above                                                                                                                                 |
| Adobe Flash Player                                            | Adobe Flash Player 17 or above                                                                                                                                 |

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Agilent Technologies
## Computer Hardware Specifications

The OpenLAB CDS Workstation is available either with storage in the local file system (OpenLAB CDS Workstation Software) or in a built-in Content Management database (OpenLAB CDS Workstation Plus Software). A workstation with Content Management (OpenLAB CDS Workstation Plus) requires higher performing hardware.

Minimum hardware configuration for a workstation

<table>
<thead>
<tr>
<th>Specification Description</th>
<th>Workstation</th>
<th>Workstation with Content Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor type &amp; speed</td>
<td>Intel® Xeon® E3 (3.2 GHz, 8 MB SmartCache, 4 Core, Hyper Threading) Intel® vPro TM Technology, Intel® HD Graphics, or equivalent</td>
<td>Intel® Xeon® E5-1620 v3 (3.5 GHz, 10 MB SmartCache, 4 Core), or equivalent</td>
</tr>
<tr>
<td>Memory</td>
<td>8 GB</td>
<td>16 GB</td>
</tr>
<tr>
<td>Hard disk drive</td>
<td>1 x 500 GB SATA 7200 RPM See Table 2 on OpenLAB CDS Requirements Guide</td>
<td>2 x 500 GB or 1 TB SATA 7200 RPM¹ See Table 2 on OpenLAB CDS Requirements Guide</td>
</tr>
<tr>
<td>Monitor/Graphics Adapter</td>
<td>1600 x 1200</td>
<td>1600 x 1200</td>
</tr>
<tr>
<td>RS-232 port</td>
<td>1 serial port</td>
<td>1 serial port</td>
</tr>
<tr>
<td>USB port</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>LAN card</td>
<td>Integrated Intel® I217LM PCIe GbE Controller</td>
<td>Integrated Intel® I217LM PCIe GbE Controller Intel® Ethernet I210-T1 PCIe as 2nd NIC²</td>
</tr>
</tbody>
</table>

¹ If the computer has a disc array controller we recommend 2 x 1 TB in RAID1.
² A second LAN interface is recommended to isolate the instrument’s data traffic.

Recommended bundle PC for a workstation with Content Management: HP Z440 Workstation or equivalent.
**Number of Instruments**
You can configure any number of instruments that sums up to 4 instrument points per OpenLAB CDS Workstation.

Instrument points are an indicator for the data stream that needs to be managed, and thus also for the required hardware and software. Instruments count as follows:

- GC + 2D 1 instrument point
- LC + 2D 1 instrument point
- LC + 3D 2 instrument points
- GC + MS 2 instrument points
- LC + MS 2 instrument points

**Database**
Workstation Plus uses a PostgreSQL 9.3 database for both Shared Services and Content Management. It is installed and configured automatically during installation.

Agilent does not support the use of a PostgreSQL version other than the one installed by the OpenLAB software.

**Networking Specifications**
When using LAN communications to connect workstations to an instrument, use one of these methods:

- Connect via an isolated switch using standard CAT-5 network cabling
- LAN communication hardware should be 100/1000 mbps (or higher) speed capable.
- NIC teaming\(^1\): LAN cards should not be teamed on workstations, instrument controllers, or clients.
- LAN communication must be on the same subnet as instruments, and preferably on the same segment.

Note: See the separate driver installation guides for further information regarding vendor specific instrument connections. GPIB or RS232 might be required.

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

**Analytical Instruments**

**Firmware Requirements**
Additional firmware upgrades may be needed. Please review the respective Driver Release Notes in the OpenLAB 2.1 Installer > Documentation
## Hardware Specifications

<table>
<thead>
<tr>
<th>Specification Description</th>
<th>Support Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN Interface</td>
<td>G1369 A/B/C LAN Interface Card – Min FW A.01.10 / A.01.01 / B.06.40, respectively. 35900E, Agilent 1100 or 68xx only: J4100A HP Jet Direct Card – min. FW</td>
</tr>
<tr>
<td>Local Area Network (LAN)</td>
<td>Instruments and Workstations should be installed in an isolated network or on a separate vLAN. A second network interface can be used to isolate the Instrument.</td>
</tr>
<tr>
<td>IP Address Assignment</td>
<td>Static or DHCP Reservation. BootP is supported on Workstations connected to the Instrument by a Crossover Cable.</td>
</tr>
</tbody>
</table>

### Agilent Customer Web Links
- For additional information about our solutions, please visit our web site at [www.agilent.com](http://www.agilent.com)
- How to get information on your product: Literature Library - [www.agilent.com/chem/library](http://www.agilent.com/chem/library)
- Need to know more? - [www.agilent.com/chem/education](http://www.agilent.com/chem/education)
- Need technical support, FAQs? - [www.agilent.com/chem/techsupp](http://www.agilent.com/chem/techsupp)
- OpenLAB CDS Software Updates - [agilent.subscribenet.com](http://www.agilent.com/chem/software/)

### Other important web links
- Links to specific O/S fixes, updates needed [http://support.microsoft.com/](http://support.microsoft.com/)