

Agilent OpenLAB Chromatography Data System (CDS)

ChemStation Edition

ChemStation AIC (M8304AA) Setup Guide



Notices

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Introduction

Who should read this guide?

This document details the necessary configuration steps to deploy the OpenLAB CDS ChemStation AIC Hardware (M8304AA).

This document is valid for OpenLAB CDS ChemStation Edition Rev. $\rm C.01.05$ and higher.

Specifications



Table 1 Server Hardware Specifications

AIC Model	CPU	RAM	Disk Space
ML350e Gen8	2.2 GHz, 4 core	16 GB	2x500 GB
(P/N M8304AA)			

NOTE

The OpenLAB CDS ChemStation Instrument Controller software uses the Remote Desktop Services (RDS) role in Windows Server 2008 R2.

The usage of this role requires, in addition to the Windows Server 2008 Client Access License (CAL), a Windows Server 2008 Remote Desktop Services CAL (RDS CAL) to access any application or graphical user interface remotely hosted by Windows Server 2008 R2.

You must also have at least one Remote Desktop Services Licensing Server deployed and activated in your environment. A grace period of 120 days during which no license server is required. At the end of the grace period, remote connections will be refused.

For more information about CAL and RDS CAL requirements, see Windows Server 2008 R2 Licensing Overview.

Operating System Installation

After booting up the server, a wizard walks you through interview questions to prepare the server for operating system installation. Follow the on-screen instructions to complete the Operating System installation.

- **1** Boot up the server.
- 2 Select **English** for the Language of the Operating System and select the Keyboard type. Click \rightarrow to proceed with the next step.
- 3 In the Thank You screen, click \rightarrow to proceed with the next step.
- 4 Read and agree with the Microsoft End-User License Agreement, click \rightarrow to proceed with the next step.
- **5** Read and agree with the HP End-User License Agreement, click \rightarrow to proceed with the next step.
- **6** In the OS Partition Screen
 - **a** Select Custom (475903MB)
 - **b** Provide an Administrator Password (e.g. 3000Hanover)
 - c Confirm the Administrator Password
 - **d** Click \rightarrow to proceed with the next step.

NOTE Password Policy

- Minimum 8 characters
- Maximum 63 characters
- Can't contain username, first name or last name
- Can contain characters of the following 4 classes only Must contain at least 3 of the 4 classes of characters
 - ✓ a-z
 - ✓ A-Z
 - ✓ 0-9
 - ✓ `~!@#\$%^&*() +={}\:";'<>,./
- 7 Read and agree with the Microsoft Software License Terms for Microsoft Windows Server[®] 2008 R2 Standard.
- 8 In the Operating System Contents
 - **a** Review all settings
 - **b** Click \rightarrow when you are ready to proceed with the installation.

NOTE

The server will reboot 4 times during the Operating Installation

Operating System Configuration

Logon to Microsoft Windows Server[®] 2008 R2 Standard Edition using the Administrator account and the password entered in the previous steps.

After you have completed the installation of Windows Server^{*} 2008 R2, and before you deploy the new server in your enterprise, some configuration is required to identify the computer to other computing resources on your network, secure the computer, enable administrators to perform tasks on the computer, and customize the computer by adding server roles and features.

Initial Configuration Tasks

You can finish configuring Windows Server[®] 2008 R2 by performing the following three tasks, identified in the **Initial Configuration Tasks** window that is opened when the operating system installation is complete.

- Provide computer information
- Update This Server
- Customize This Server

NOTE You can run OOBE.EXE to get back to **Initial Configuration Tasks** after selecting "**Do not show this window at logon**".

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

Provide Computer Information

- **1** Activate Windows
- 2 Set time zone
- **3** Configure Networking
- **4** Provide computer name and domain (if required)

Update This Server

- 1 Click on Enable automatic updating and feedback and select Manually configure settings.
- 2 In Windows automatic updating section.
 - a Click on change Setting... button.
 - **b** Select Never check for updates (not recommended)

- 3 In Windows Error Reporting
 - a Click on change Setting... button
 - **b** Select I don't want to participate, and don't ask me again or leave the default option Ask me about sending a report every time an error occurs .
- 4 In the **Customer Experience Improvement Program** section, keep the default selection **Not participating**.
- **5** Click the **Close** button when finished.
- 6 Click on Download and install updates

NOTE Your computer must have an available Internet connection to download updates, or to configure Windows automatic updating.

CAUTION Do not download and install Internet Explorer 9, unless you use OpenLAB Data Store or OpenLAB ECM 3.4.1 or higher. Internet Explorer 10 is not supported until further notice.

Customize This Server

NOTE Adding Roles, Features and Enabling Remote Desktop do not need to be configured at this stage. The OpenLAB CDS Master Installer will configure them during the ChemStation Instrument Controller installation.

- **1** Configure Windows Firewall
 - a Click on Configure Windows Firewall
 - **b** In the left pane, click Allow a program or feature through Windows Firewall.
 - **c** Click **Change settings ***. If you're prompted for an administrator password or confirmation, type the password or provide confirmation.
 - **d** Under Allowed programs and features, select the check box next to **Remote Desktop**, and then use the check boxes in the columns to select the network location types you want to allow communication on.
 - e Click OK.

If the **Change settings** button is unavailable, you might not have permissions to change some settings that are managed by your system administrator.

2 Click Close on the Initial Configuration Tasks window when finished.

Configure Windows Server[®] 2008 R2 Settings

Configure the second Hard disk

- 1 Click on 🌄 to open Server Manager.
- 2 Go to **Storage > Disk Management** and add the Disk 1 to the configuration select MBR (master Boot Record)
- **3** Right Click on **CD-ROM 0**
 - **a** select Change Drive Letter and Paths.
 - **b** Click on the **Change** button and assign **F** as drive letter.
 - c Click Yes in the warning windows.
- 4 Right click on **disk 1**
 - a select New Simple Volume and click next
 - b Select the Max size 476937 and click next
 - c Select **D** as drive letter and click next
- **5** Format the disk with:
 - File System: NTFS
 - Allocation unit size: Default
 - Volume Label: Data (or any other label)
 - Check the **Perform Quick format** box

NOTE

For best disk performance make sure to install OpenLAB CDS ChemStation on this new D:\ partition. It separates the ChemStation raw data write processes from the Windows paging file and the operating system user's TEMP directory.

Disable Services

- 1 In Server Manager, go to **Configuration > Services**
- 2 Stop and set the startup type of the **Application Experience** service to disabled and click **OK**.
- **3** Stop and set the startup type of the **Desktop Window Manager Session Manager** to disabled and click **OK**.
- 4 Close Server Manager.

Adjust the Screen for best performance

- 1 Open the Control Panel using Start > Control Panel > System and Security > System
- 2 Click Advanced system settings.
- **3** On the Advanced tab > Performance section, click Settings
- 4 In the Visual Effects tab, select Adjust for best performance

Configure the Page file

When you set up a 64-bit version of Microsoft Microsoft Windows Server[®] 2008 and Microsoft Windows Server[®] 2008 R2, the operating system will create a page file that is auto managed (Automatically manage paging file size for all drives) in your computer.

For best performance, do not set the initial size to less than the minimum recommended size under Total paging file size for all drives. The recommended size is equivalent to 1.5 times the amount of RAM on your system. Usually, you should leave the paging file at its recommended size, although you might increase its size if you routinely use programs that require a lot of memory.

To change the page file size:

- 1 Open the Control Panel using Start > Control Panel > System and Security > System
- 2 Click Advanced system settings.
- 3 On the Advanced tab > Performance section, hit the Settings button
- 4 Click on the Advanced tab
- 5 In the Virtual memory section click the Change button
- 6 Click **OK** to save your modifications.
- 7 Click **OK** to close the **System Properties** window.

For more information please read the following article from Microsoft

"How to determine the appropriate page file size for 64-bit versions of Windows Server[®] 2008 and or Windows 2008 R2" (<u>http://support.microsoft.com/kb/2021748</u>)

Changes made for the Virtual Memory, require a restart of the computer before they can take effect.

Data Execution Prevention

NOTE

- 1 Open the Control Panel using Start > Control Panel > System and Security > System
- 2 Click Advanced system settings.
- 3 On the Advanced tab > Performance section, hit the Settings button
- 4 Select the Data Execution Prevention tab
- 5 Enable Turn on DEP for essential Windows programs and services only.
- 6 Click **OK** to close the Performance options.
- 7 Click **OK** to close the System Properties window.

Configure the Power Options for the computer

- 1 Open the Control Panel using Start > Control Panel > System and Security > Power Options
- 2 Click on Change settings that are currently unavailable
- **3** Click High performance
- 4 Click Change Plan settings
- 5 Click Change advanced power settings
- **6** Open the nodes for Hard disk, Turn off hard disk after and check that Minutes are set to 0 (=Never).
- 7 Click OK
- 8 Save the changes

Disable Power Management on the network adapter(s)

- 1 Open the Control Panel using Start > Control Panel > System and Security > System
- 2 Click Device Manager.
- 3 Expand the Network adapters node
- **4** Double click on the listed adapter(s) and select the **Power Management** tab and deselect **Allow the computer to turn off this device to save power**.
- **5** Click **OK** and close the **Device Manager** tool.
- **6** Restart the computer

What to do next

The operating system installation and configuration for the OpenLAB CDS ChemStation AIC is now complete. You can now deploy the OpenLAB CDS software. Follow the installation instructions as outlined in the chapter **Install the software** of the *Agilent OpenLAB CDS Distributed System Installation Guide*.

In this Book

This document details the necessary configuration steps to deploy the OpenLAB CDS ChemStation AIC Hardware.

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