Agilent OpenLab CDS

Configuring OpenLab CDS with ECM
Notices

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Software Revision
This guide is valid for revision 2.4 of Agilent OpenLab CDS.

Configuring OpenLab CDS with ECM
In this Guide ...

This document contains information on configuring OpenLab CDS 2.4 with an ECM 3.5 Update 6 or ECM 3.6 system.
It also includes information OpenLab CDS interoperability with OpenLab CDS ChemStation or EZChrom Edition.

Table 1  Terms and abbreviations used in this document

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIC</td>
<td>Agilent's Analytical Instrument Controller</td>
</tr>
<tr>
<td>Control Panel</td>
<td>Control Panel for Agilent OpenLab software</td>
</tr>
<tr>
<td>Microsoft Control Panel</td>
<td>Part of the Microsoft Windows operating system</td>
</tr>
<tr>
<td>ECM</td>
<td>OpenLab Enterprise Content Management system</td>
</tr>
<tr>
<td>Shared Services</td>
<td>Set of administrative services that control, for example, the security policy and the central configuration of OpenLab CDS. Shared Services are accessed via the Control Panel.</td>
</tr>
<tr>
<td>ECM</td>
<td>OpenLab Enterprise Content Management system</td>
</tr>
</tbody>
</table>
1 Introduction
This chapter describes the typical software architecture.

2 Install the Shared Services Server
This chapter describes the installation of the Shared Services server software.

3 Configure
This chapter describes the initial configuration steps after installing the OpenLab Shared Services server software.

4 Working With CDS and ECM
This chapter contains basic information on working with a CDS system that is connected to ECM.
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Introduction

About CDS with ECM
Compatibility and Requirements
Combining different Agilent Chromatography Data Systems
Installation Overview

This chapter describes the typical software architecture.
Introduction
About CDS with ECM

About CDS with ECM

OpenLab CDS 2.4 can be configured with Agilent ECM (v3.5 Update 6, v3.6 and above) as its storage, as an alternative to OpenLab Server or OpenLab ECM XT. In this configuration, you can view, import and reprocess data stored in ECM that has been generated by CDS 2.4 or by OpenLab CDS ChemStation or EZChrom Edition.

This manual describes the installation and configuration of a Shared Services server and OpenLab CDS 2.4 components in an environment with existing ECM 3.x.
Introduction
Compatibility and Requirements

Compatibility and Requirements

Table 2  Compatibility with ECM

<table>
<thead>
<tr>
<th>Component</th>
<th>Supported versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECM</td>
<td>3.5 Update 6 or 3.6</td>
</tr>
<tr>
<td>OpenLab Shared Services Server</td>
<td>3.2 (part of OpenLab CDS 2.4)</td>
</tr>
</tbody>
</table>

Table 3  Minimum hardware requirements for Shared Services Server

<table>
<thead>
<tr>
<th>Item</th>
<th>HW requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor speed (CPU)</td>
<td>3 GHz Dual core</td>
</tr>
<tr>
<td>Physical memory (RAM)</td>
<td>12 GB (64-bit)</td>
</tr>
<tr>
<td>Hard disc</td>
<td>160 GB</td>
</tr>
<tr>
<td>Network</td>
<td>100/1000 LAN</td>
</tr>
<tr>
<td>Operating System</td>
<td>Windows Server 2012 R2, Standard or Datacenter</td>
</tr>
<tr>
<td></td>
<td>Windows Server 2016, Standard or Datacenter</td>
</tr>
</tbody>
</table>
Combining different Agilent Chromatography Data Systems

OpenLab CDS can be configured with ECM to operate in an environment containing different Data Systems. OpenLab CDS 2.4 can share a single Shared Services Server connected to ECM 3.5 update 6 or ECM 3.6 with either EZChrom A.04.09 or with ChemStation C.01.10.

Older versions of ChemStation (C.01.07 SR3, C.01.08, C.01.09) or EZChrom (A.04.08) may require a separate Shared Services server compatible with that version. Please work with your local Agilent representative for the recommend system topology.

NOTE

Environments using ECM as a data repository do not require Content Management components from OpenLab Server or OpenLab ECM XT software.
There are different approaches how you can add a CDS 2.4 system to an existing ChemStation/ECM solution.

The starting point is your existing installation. As a preparation, update the ECM Server, and update the existing Shared Services server.

**Step 1:** Install/Upgrade ECM server (v3.5 Update 6 or v3.6)

**Step 2:** Install/Upgrade OLSS Server (v3.2 shipped with CDS 2.4)

**Step 3:** Install/Upgrade AICs and Clients (CDS v2.4)
Introduction
Installation Overview

Staged Upgrade to new shared Services Server

With this approach, a new Shared Services server hosts the CDS 2 instruments. New CDS 2 AICs are added to the new Shared Services server. Old AICs are retired, they will be repurposed as CDS 2 AICs and connected to the new Shared Services server.

Figure 2  Staged upgrade, interim layout

Pro:
• Little to no downtime for existing systems
• Little to no revalidation costs for existing systems
• Parallel system for validation
• Update ECM server (if needed), add CDS2 filterpack
• No major changes to existing Shared Services Server
• No major changes to existing CS/EE AICs or Clients

Contra:
• Need to manage 2 Shared Services Servers
• Additional resources (for new Shared Services Server)
Introduction
Installation Overview

Figure 3  Staged upgrade, final layout

Pro:
• Need to manage only one Shared Services Server
• Reclaim resources (from old Shared Services server)

Contra:
• If keeping CS/EE, you need a CS/EE release that is compatible with the Shared Services server version
In-place Upgrade of existing Shared Services Server

With this approach, you upgrade an existing Shared Services server. New CDS2 AICs are added to this existing Shared Services server. Retired old AICs can be repurposed as CDS2 AICs.

Pro:

• Need to manage only one Shared Services Server
• No additional resource requirements
• Update ECM server (if needed), add CDS2 filterpack

Contra:

• Possibly higher downtime
• Higher upfront revalidation costs
• If keeping CS/EE, you need a CS/EE release that is compatible with the Shared Services server version
2

Install the Shared Services Server

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Step 3 - Install or Upgrade the OpenLab Shared Services Server  32
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This chapter describes the installation of the Shared Services server software.
Before You Begin

Acquire administrator privileges

Acquire administrator privileges for the Shared Services server and all computers that you will use in your system.

Set up your Server

1. Disconnect the server from the Internet until you have installed the latest security fixes and virus protection.

2. Install and configure your server operating system. See your Windows user information for details.
   - Apply Windows security updates, and then configure to Never check for updates. See your Windows user information for details.
   - Set the Security Settings > Local Policies > Security Options > Network Access: Sharing and security module for local accounts to allow Classic - local users authenticate as themselves.
   - Set region and language options.
   - Set the time zone.

3. Install an antivirus program. OpenLab Shared Services was tested to run with Symantec’s Norton AntiVirus, McAfee, and Trend Micro™.

   Settings for Trend Micro™ Antivirus Software

   If you use Trend Micro™ as your antivirus software, the following tasks are recommended to optimize system performance.
   - Pre-installation task
     Turn off Web Reputation. The risk of turning off Web Reputation is that web traffic through browsing from the machine will not be checked. Ensure that there is another URL/web scanner on the gateway level to protect the endpoint, or ensure that the endpoints have limited access to Internet.
2 Install the Shared Services Server

Before You Begin

- Post-installation tasks
  - **Real time scan.** Add exclusions, and modify the scan direction from Created/Modified/Retrieved to Created/Modified. Exclusions ensure that the working directory will not be scanned. The risk is that only files that are created and changed on this machine are scanned. Files that are only accessed will be bypassed. Dormant files that were infected without being noticed at the time they were created or written to the machine will not be scanned. Increase the scheduled scan to run daily to ensure all files on the machine are checked for infections that are dormant or not moving.
  
  - **Behavior Monitoring:** Add the following list of programs to Approved programs. C:\Program Files (x86)\Agilent Technologies\...
    - OpenLab Services\UI\Agilent.OpenLab.ControlPanel.exe
    - OpenLab Services\Automation\AutomationServerHost.exe
    - OpenLab Services\Diagnostics\DiagnosticsToolsServiceHost.exe
    - OpenLab Services\Licensing\Flexera\lmadmin.exe
    - OpenLab Services\Licensing\Licensing.Service.Host.exe
    - OpenLab Services\Server\SharedServicesHost.exe
    The risk is that if any of the excluded files get infected, it will not be detected. Trigger a schedule on a daily basis to cover these files.
  
  - **Realtime monitoring:** Add the following folder to the exclusion list of Realtime Monitoring settings: C:\Program Files (x86)\Agilent Technologies
  
  - **Confirm that no server role or feature is installed.**

4 Join an existing domain. Changing the server domain after the installation requires direct consultation with Agilent Support.

5 Obtain the server name. You will need to enter this information during the installation. The software will not install to a server that uses an underscore character in its name.

6 Obtain the server administrator credentials. You will need to enter this information during the installation.
Install the Shared Services Server

Before You Begin

Install ECM API on the server

1. If any previous version of the ECM API is present, uninstall it from Programs and Features.
2. Connect to the ECM Server from Internet Explorer 11, and login to ECM. On login, the installation of the current Agilent OpenLab ECM API starts and completes automatically.
3. Reboot the server.
4. Run the Software Verification Tool, and qualify Agilent OpenLAB ECM Client and Agilent OpenLab ECMAPI. Verify that both software verification reports pass.
Start Installer

1. Log on to the server as a domain user with administrative rights on the local machine.
2. Insert the USB drive.
3. Right-click `setup.exe`, and run it as an administrator. Select OpenLab CDS, and click OK.
2 Install the Shared Services Server
Run System Configuration Checker

Run System Configuration Checker

1 Run the CDS 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 Shared Server Core 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.
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.

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.
Install the Shared Services Server
Install or Upgrade the Shared Services server software

Step 1 - Install or Upgrade Software Prerequisites

1. From the Planning screen, select **CDS with ECM 3.X**.
2. **Install the Shared Services Server**

Install or Upgrade the Shared Services server software

From the **CDS with ECM 3.x** screen, click **Step 1 - Install or Upgrade Software**

**Prerequisites.**

- **Step 1 - Install or Upgrade Software - Prerequisites.**
  - Verify, install, or upgrade mandatory software prerequisites.

- **Step 2 - Create or Update Database Schema.**
  - Click here to create, update, or connect to an existing OpenLab database schema.

- **Step 3 - Install or Upgrade the OpenLab Shared Services Server.**
  - Click here to install, update, or upgrade software components.

- **Step 4 - Configure Shared Services Server.**
  - Click here to configure or reconfigure OpenLab Shared Services with an existing ECM 3.x server.
Install the Shared Services Server
Install or Upgrade the Shared Services server software

3 Decide on the Database Server that you would like to use. If you select PostgreSQL Server, continue with the next step. If you select Oracle Database Server or Microsoft SQL Server, proceed to the Review step.

- **PostgreSQL Server**: This database is provided with the OpenLab software and can be installed and configured during installation, or you can configure an existing PostgreSQL server previously installed by the OpenLab software. Any PostgreSQL server that you have installed outside of OpenLab must be removed before installing the provided OpenLab PostgreSQL Server.

- **Oracle Server**: This database can be configured during installation, but it must be installed prior to installation of the OpenLab software.

- **Microsoft SQL Server**: This database can be configured during installation, but it must be installed prior to installation of the OpenLab software.
2 Install the Shared Services Server
Install or Upgrade the Shared Services server software

4 If this is a new installation, enter the **Server Name** and **Port**, and click **Next**. If this is an update, this screen is not displayed.
5 If this is a new installation, enter the **Installation** and **Database** location paths, create and confirm a superuser password. If this is an upgrade, this screen is not displayed.

6 Click **Next**.
Install the Shared Services Server
Install or Upgrade the Shared Services server software

7 Click **Install**. The items listed here will depend on the server you will be using.

8 When the installation is complete, click **Next**.

9 Click **Finish**.
Step 2 - Create or Update your Database Schema

1. Click Step 2 - Create or Update Database Schema.
2. **Install the Shared Services Server**

   Install or Upgrade the Shared Services server software

2. Select the server that you have decided to use for your database, and click **Next**.

   By default, the database you chose in “Step 1 - Install or Upgrade Software Prerequisites” on page 20 will be selected. If you are installing a **Microsoft SQL Server**, continue to step 3 of this procedure. If you are installing a **PostgreSQL Server** or **Oracle Database Server**, see “For a PostgreSQL or Oracle Server” on page 31.
2 Install the Shared Services Server
Install or Upgrade the Shared Services server software

3 Enter the server name, and select **Connect to Default Instance** or **Connect to Named Instance**, and click **Next**. The OpenLab Shared Services software will not install to a server that uses an underscore character in its name.
Install the Shared Services Server
Install or Upgrade the Shared Services server software

4. Select the authentication mode. If you select **SQL authentication**, complete the **Super User** and **Password** fields. Click **Next**.
Install the Shared Services Server

Install or Upgrade the Shared Services server software

5 The Schema Information screen displays the database that is going to be created for OpenLab Shared Services. It is recommended that you keep the default Database User. Click **Next**.

6 Review the information and click **Apply**.

7 Click **Finish**.
2 Install the Shared Services Server
Install or Upgrade the Shared Services server software

For a PostgreSQL or Oracle Server

By default, the information you entered in "Step 1 - Install or Upgrade Software Prerequisites" on page 20 will be displayed.

1 Provide the server name and port. By default, the information you entered in "Step 1 - Install or Upgrade Software Prerequisites" on page 20 will be displayed.

2 Select whether you are creating a new database or are connecting to an existing one, and click Next.

3 The defaults in this screen are populated according to the server you chose to install in "Step 1 - Install or Upgrade Software Prerequisites" on page 20. Use the superuser credentials created in "Step 1 - Install or Upgrade Software Prerequisites" on page 20, or Reset them.

4 Click Next.

5 A new database was created in "Step 1 - Install or Upgrade Software Prerequisites" on page 20 and is required to run the Shared Services Services. The Shared Services database is used for software administration and access control. Create a password for this database. Agilent recommends that the default Database User name remains unchanged.

6 Click Validate to confirm credentials.

7 Click Next.

8 Review the information and click Create Database.
Step 3 - Install or Upgrade the OpenLab Shared Services Server

If upgrading the software, all uploads from the client must be stopped and the File Upload Queue on the client must be empty before upgrading.

1. Click **Step 3 - Install or Upgrade the OpenLab Shared Services Server**.
2. **Install the Shared Services Server**
   Install or Upgrade the Shared Services server software

2. **Review and agree to the license terms and click Next.**

3. **Select the Installation Folder** and click Next.
2 Install the Shared Services Server
   Install or Upgrade the Shared Services server software

4 Provide the ECM Server Name and select the Transfer Protocol. If you choose HTTPS, enter the server name as a fully qualified domain name. Click Next. If you upgrade an existing Shared Services server, the ECM server name is already filled.

5 Review the components to be installed and click Install.
2 Install the Shared Services Server
Install or Upgrade the Shared Services server software

6 When the installation is complete, click Next.

7 Run the Software Verification, then Click Finish to reboot the computer.
Step 4 - Configure OpenLab Shared Services Server

Use the OpenLab Shared Services Server Configuration utility to configure or reconfigure an OpenLab Shared Services Server in a standalone or clustered configuration.

1. Click **Step 4 - Configure OpenLab Shared Services Server.**
2 Install the Shared Services Server
Install or Upgrade the Shared Services server software

2 Select the type of database to use, and click Next. By default, your selections from “Step 1 - Install or Upgrade Software Prerequisites” on page 20 will be displayed.

3 Enter the Server Information for your configuration, and click Next.
2 **Install the Shared Services Server**
Install or Upgrade the Shared Services server software

4 **Enter the Schema Information** for your configuration, and click **Next**.
Install the Shared Services Server
Install or Upgrade the Shared Services server software

5 Enter your ECM access credentials.
The ECM server name will be read-only as you have already provided in step 3.
Under Shared Services Storage Path, you may keep the slash that is suggested by default. The path must not be empty, but project paths should be configured manually later using the OpenLab Control Panel (see “About Projects” on page 54).

6 Click Validate to check your entries.
7 Click Next.
8 Review the server configuration summary, and click **Apply**. To save the configuration file, click **Export**.

9 When the configuration is complete, click **Done**.
This chapter describes the initial configuration steps after installing the OpenLab Shared Services server software.
Configure
Access the Control Panel

Access the Control Panel

All configuration tasks for the Shared Services server, such as security settings, project management or user management, are performed in the OpenLab Control Panel.

1. On the Shared Services Server, open the Control Panel from the desktop shortcut, or go to Start > All Programs > Agilent Technologies > Control Panel.
2. Log in with your ECM administrator credentials.
Verify Connection of Shared Services Server to ECM

These settings are present by default. Follow the procedure to confirm everything is correct.

1. On the Shared Services Server, open the Control Panel from the desktop shortcut, or go to Start > All Programs > Agilent Technologies > Control Panel.

2. From the navigation pane, select Administration > System Configuration.

3. In the System Configuration toolbar, select Edit System Settings.

4. In the Edit System Settings window, verify that ECM is currently configured as authentication provider and as storage type.

5. Click Cancel to close the dialog and keep current settings.
Configure Users and Roles

User management is described in detail in the OpenLab CDS Client/AIC installation guide (CDS_ClientAIC.pdf).

With ECM as an authentication provider, you have the option to import users from ECM. For example, import the built-in ECM users Chemist or Technician.

Import Users

Use the Control Panel to manage the roles and privileges. You can create custom roles, or assign one or more of the predefined roles to give users varying degrees of access.

To add users to your system, you must have privileges to obtain user and group information from ECM 3.x.

1. From the navigation pane, click Administration > Users.
2. In the ribbon, click Import.
3. In the Search Users dialog box, enter search string for the ECM 3.x username.
4. From the Search Results list, select the user you want to import, and click Add. The user is added to the Selected Users list.
5. Repeat steps 2 through 4 until you have added all the user names that you want to import to the Selected Users list, then click OK.
6. Assign roles to the users to give them the required OpenLab CDS permissions.
Configure Users and Roles

Default Roles

For OpenLab CDS several default roles are provided, such as Chemist, Technician, or Project Administrator. Each role has specific project level privileges. If required, these roles may be edited. To configure roles, choose Administration > Roles in the OpenLab Control Panel.
Project-Level Roles

A user can have different roles for different projects. To change the settings for a project, right-click a project, select *Edit Privileges*, and clear the *Inherit privileges from parent* check box in the dialog.
Security Settings

Users need permissions in both ECM and OpenLab CDS:

- **OpenLab CDS:**
  
  CDS application specific privileges are configured in the OpenLab Control Panel. OpenLab CDS provides default roles that can be adjusted. See “Default Roles” on page 45

- **ECM:**
  
  Privileges to access content stored in ECM are configured in ECM. See “Read/Write Access” on page 48 and “Read-Only Access” on page 50

ECM privileges must be assigned to at least one of your roles in order to become active.
Read/Write Access

The list of ECM privileges described in the following table is the minimum set of privileges allowing full read/write access from OpenLab CDS. These ECM privileges are required to ensure that results from operations such as data acquisition, data analysis, or e-signature are uploaded to the repository.

<table>
<thead>
<tr>
<th>Privilege</th>
<th>View</th>
<th>Edit</th>
<th>Delete</th>
<th>Add</th>
<th>Run</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content: File</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>Privilege to access files</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Required to acquire and process data</td>
</tr>
<tr>
<td>Content: File Filtering</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>Privilege to add files to an ECM folder</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Required to acquire and process data</td>
</tr>
<tr>
<td>Content: File Revisions</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to view revisions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Required to acquire and process data</td>
</tr>
<tr>
<td>Content: File Associations</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to view associations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Required to acquire and process data</td>
</tr>
<tr>
<td>Content: File Type [XLS]</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>Privilege to add and check in files with an .xls extension</td>
</tr>
<tr>
<td>Content: Folder</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>Privilege to view ECM properties</td>
</tr>
<tr>
<td>System: Audit Trail</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to view ECM Audit Trail</td>
</tr>
<tr>
<td>System: Filtering Configuration</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum privilege to access ECM indexing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum privilege to view or change the filtering configuration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum privilege to use attribute extraction services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum privilege to manage user-defined attributes</td>
</tr>
<tr>
<td>System: Advanced Search</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>Privilege to use Search in OpenLab CDS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Required for Data Analysis</td>
</tr>
<tr>
<td>System: Quick Search</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>Privilege to use Search in OpenLab CDS</td>
</tr>
</tbody>
</table>

Table 4: ECM privileges for read/write access in OpenLab CDS
Privilege to Delete Content

**CAUTION**

Handle the Content:File:Delete privilege with care.

If users shall be allowed to delete report templates, sequences, and methods from OpenLab CDS, they need the **Content:File:Delete** privilege in addition. However, users with this privilege can also delete any other data from ECM.

- Only apply the Content:File:Delete privilege if this is needed for a specific workflow, and restrict it to the relevant folders.
Configure
Security Settings

Read-Only Access

The list of ECM privileges described in the following table is required for read-only access from OpenLab CDS.

Table 5 ECM privileges for read-only access in OpenLab CDS

<table>
<thead>
<tr>
<th>Privilege</th>
<th>View</th>
<th>Edit</th>
<th>Delete</th>
<th>Add</th>
<th>Run</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content: File</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to access files</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Required to acquire and process data</td>
</tr>
<tr>
<td>Content: File Filtering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to add files to an ECM folder</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Required to acquire and process data</td>
</tr>
<tr>
<td>Content: File Revisions</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to view revisions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Required to acquire and process data</td>
</tr>
<tr>
<td>Content: File Associations</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to view associations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Required to acquire and process data</td>
</tr>
<tr>
<td>Content: File Type [XLS]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to add and check in files with an.xls extension</td>
</tr>
<tr>
<td>Content: Folder</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to view ECM properties</td>
</tr>
<tr>
<td>System: Audit Trail</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to view ECM Audit Trail</td>
</tr>
<tr>
<td>System: Filtering Configuration</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to view or change the filtering configuration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to use attribute extraction services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to manage user-defined attributes</td>
</tr>
<tr>
<td>System: indexing Configuration</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum privilege to access ECM indexing</td>
</tr>
<tr>
<td>System: Advanced Search</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to use Search in OpenLab CDS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Required for Data Analysis</td>
</tr>
<tr>
<td>System: Quick Search</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Privilege to use Search in OpenLab CDS</td>
</tr>
</tbody>
</table>
3 Configure
Security Settings

Specific CDS Role for Read-Only Access

For a read-only access to ChemStation or EZChrom data stored in ECM, ECM privileges are not sufficient. In addition, you must configure and assign a specific CDS role in the OpenLab Control Panel.

Prerequisites

The read-only access includes ChemStation or EZChrom data stored in ECM.

1. In the OpenLab Control Panel, navigate to Administration > Roles.
2. Click Create role, and add the privilege Edit content of project. Do not add any other privilege.

3. Save the new role.
4. Select the Projects page and navigate to the relevant project.
5 In the ribbon, click **Edit privileges**.
6 Clear the **Inherit privileges from parent** check box.
7 When you are asked if you want to copy settings from the parent node, click **No**.
8 Add the ECM user who shall have the read-only access to this project.
9 Assign the newly created role to this user.

10 Confirm your settings.

### No Access

Roles and security allow you to completely isolate two projects - for example, for ChemStation data and new OpenLab CDS v2 data.

Here is an example scenario: You have multiple divisions which have their own labs. Some of the divisions are working on secret projects and the work being done in their labs (**Secret Lab**) must not be accessible to users in other labs (**General Lab**). There are multiple projects in each lab.
Currently users in all labs store their data generated in ChemStation in ECM 3.x. Security is set up so that the data, methods, etc. owned by users in Secret Lab are not visible to users in General Lab.

If some of the instruments are upgraded to CDS v2, you will be able to secure the system in a similar manner so that users in General Lab cannot view data from Secret Lab regardless of whether they are using ChemStation or CDS v2.

1. Create separate project groups for the two labs.
2. For the Secret Lab, edit the privileges, and clear the **Inherit privileges from parent** check box. When you are asked if you want to copy settings from the parent node, click **No**.

3. Add users and assign roles to the users as required. These settings are only relevant for the projects in the Secret Lab project group.

In addition to setting up restrictive project access in the Control Panel, privileges in the corresponding ECM paths must also be restricted. Users who should not have access to a path should not be given any privilege to those paths.
The way you set up projects depends on how your data is organized in ECM. For example, your data structure may be product centric, instrument centric, or user centric. For all ECM installations there are exactly four levels (Location, Container, Drawer, Folder). Data can only be stored in Folder level.

When creating a project in the OpenLab Control Panel, you must adjust the file locations. All file locations must point to an ECM folder, except the Results location. The Results location can be assigned to any level in ECM, up to the Project folder path. See the following examples.

**Figure 5**  Product centric
Configure
About Projects

Figure 6  Instrument centric
For details on creating and configuring projects, refer to the Control Panel section in OpenLab Help & Learning.
This chapter contains basic information on working with a CDS system that is connected to ECM.
Search

To enable the Quick Search in OpenLab CDS, you must set up the search keys in ECM. The search keys correspond to the fields shown in the Quick Search results:

For details, please refer to the ECM help.
Working with Existing CS/EE Data in ECM

Loading data

Your ECM folders may contain SSIZip files produced by a ChemStation or EZChrom system. You can load the data in OpenLab CDS and work on it. When you save changed data, a new result set will be generated in OpenLab CDS v2 data format. The original data remains unchanged.

Original data and OpenLab CDS data are shown with different icons in the OpenLab CDS injection tree.

The Result Set Audit Trail of the new data will include the name of the original CS/EE SSIZip file.

Revisions

In OpenLab CDS you can only load the latest revision of your ChemStation or EZChrom data.

Search

SSIZip files that have been generated by ChemStation or EZChrom systems will not be listed in the search results.

After first saving with OpenLab CDS, the OpenLab CDS version of the ChemStation and EZChrom data will be found by the search. Please note that filter key extraction with ECM happens after saving the data. Therefore a delay between acquiring/saving data and finding them with a search is to be expected.
In This Book

This document contains information on configuring OpenLab CDS 2.4 with an ECM 3.5 Update 6 or ECM 3.6 system.

It also includes information OpenLab CDS interoperability with OpenLab CDS ChemStation or EZChrom Edition.