

# CUDB Library Overview

## Ericsson Centralized User Database

---

### Library Overview

**Copyright**

© Ericsson AB 2016–2018. All rights reserved. No part of this document may be reproduced in any form without the written permission of the copyright owner.

**Disclaimer**

The contents of this document are subject to revision without notice due to continued progress in methodology, design and manufacturing. Ericsson shall have no liability for any error or damage of any kind resulting from the use of this document.

**Trademark List**

All trademarks mentioned herein are the property of their respective owners. These are shown in the document Trademark Information.



# Contents


<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Target Groups	1
1.2	Prerequisites	1
1.3	CPI Library Distribution	1
1.4	CPI Library Access	1
1.5	CPI Product Numbers	1
1.6	Library Structure	2
1.7	Document Types	2
<b>2</b>	<b>CUDB Library</b>	<b>3</b>
2.1	Safety and Environment	3
2.2	Library Overview	3
2.3	Product Overview	4
2.4	Site Engineering	5
2.5	Planning	6
2.6	Integration	6
2.7	Operation and Maintenance	6
2.8	Interface	12
2.9	3rd Party Products	12
	<b>Glossary</b>	<b>13</b>
	<b>Reference List</b>	<b>15</b>





# 1 Introduction

This library overview presents the information products available for the Ericsson Centralized User Database (CUDB). The library contains the Customer Product Information (CPI) necessary for the life cycle of the product.

Information related to native and virtualized CUDB systems is provided in a single library, but a filter can be used to display only the documents for Native or Virtual deployment. To apply filters, use the funnel icon  on the upper left side of the browser.

## 1.1 Target Groups

This document is intended for personnel working on CUDB products.

## 1.2 Prerequisites

Users of this document must have the necessary training and competence required to work on CUDB products.

## 1.3 CPI Library Distribution

The CUDB CPI libraries are distributed as follows:

- Online libraries on the Ericsson eBusiness portal. Access to these libraries requires access privileges to <https://ebusiness.ericsson.net>.
- Libraries available through the SW Gateway.
- Online libraries on CPI Store in the Ericsson Intranet.

## 1.4 CPI Library Access

Refer to *How to Get Started with Active Library Explorer*, Reference [2] for more information on how to access and use the CUDB CPI library.

## 1.5 CPI Product Numbers

Table 1 provides the CUDB product number.

*Table 1 Product Number of the CUDB CPI Library*

Product	CPI Library
CUDB 1.9	EN/LZN 702 0449

## 1.6 Library Structure

The CUDB CPI library consists of documents grouped in the following folders:

- Safety and Environment
- Library Overview
- Product Overview
- Site Engineering
- Planning
- Integration
- Operation and Maintenance
- Interface
- 3rd Party Products

See Section 2 on page 2 for more information on these folders.

## 1.7 Document Types

The documents are grouped into the following three types:

- **Descriptive** documents contain descriptions of the product on different levels.
- **Operative** documents give instructions on how to install, operate, or maintain the product.
- **Reference** documents.



## 2 CUIDB Library

This section provides a detailed description of the CUIDB CPI library.

### 2.1 Safety and Environment

The Safety and Environment folder includes important information related to health and safety in the workplace, product safety, and the external environment.

Documents included in this area are listed in Table 2. The folder contains no product-specific information, only the general Ericsson safety documents.

*Table 2 Safety and Environment Documents*

<b>Title</b>	<b>Description</b>	<b>Type</b>
<i>Personal Health and Safety Information</i>	Provides information related to health and safety in the workplace and the external environment.	Descriptive
<i>System Safety Information</i>	Provides information related to product safety.	Descriptive

### 2.2 Library Overview

Documents included in this area are listed in Table 3. These documents are intended for all personnel involved in work related to any aspect of the product.

The folder contains the following subfolder:

- Active Library Explorer

*Table 3 Library Overview Documents*

<b>Title</b>	<b>Description</b>	<b>Type</b>
<i>CUIDB Glossary of Terms and Acronyms</i>	Explanations of all terms, abbreviations, and acronyms that occur in the library.	Reference
<i>CUIDB Library Overview</i>	Overview of the library.	Reference
<i>Trademark Information</i>	Includes trademark information used in the library.	Reference
<i>Typographic Conventions</i>	Includes typographic conventions used in the library.	Reference



### 2.2.1 Active Library Explorer

The Active Library Explorer folder contains information on the use of the Active Library Explorer (ALEX). Table 4 lists the available document for using the ALEX.

Table 4 Active Library Explorer Document

Title	Description	Type
<i>How to Get Started with Active Library Explorer</i>	Describes how to use the ALEX software (SW) to read Ericsson CPI.	Reference

## 2.3 Product Overview

The Product Overview folder includes high-level descriptions of the functions provided by CUDB. The available documents are listed in Table 5.

The folder contains the following subfolder:

- Facility Descriptions

Table 5 Product Overview Documents

Title	Description	Type
<i>CUDB Technical Product Description</i>	Contains the technical data of CUDB, such as interfaces, weight, dimensions, internal components and power requirements.	Descriptive
<i>CUDB Third Party License Agreement</i>	License agreements for all third-party product SW used by CUDB.	Descriptive

### 2.3.1 Facility Descriptions

The Facility Descriptions folder contains a set of facility descriptions describing most of the functions provided by CUDB in detail. Table 6 lists the available facility description documents.

Table 6 Facility Descriptions Documents

Title	Description	Type
<i>CUDB Application Counters</i>	Describes the application counters function in CUDB.	Descriptive
<i>CUDB Binary Large Object Attributes Management</i>	Describes the operational conditions and function administration of the optional BLOB Attributes Management feature.	Descriptive
<i>CUDB Data Distribution</i>	Describes the data distribution features supported by CUDB.	Descriptive





**Table 6 Facility Descriptions Documents**

<b>Title</b>	<b>Description</b>	<b>Type</b>
<i>CUDB Data Storage Handling</i>	Describes the data storage handling features supported by CUDB.	Descriptive
<i>CUDB Dynamic Library for Distribution</i>	Describes how to develop customized subscriber data distribution policies in the CUDB by an external library.	Descriptive
<i>CUDB Subscription Reallocation</i>	Describes the operational conditions and function of the optional Administrative Data Redistribution feature supported by CUDB.	Descriptive
<i>CUDB High Availability</i>	Describes the High Availability feature in CUDB.	Descriptive
<i>CUDB LDAP Data Access</i>	Describes the CUDB Lightweight Directory Access Protocol (LDAP) data access feature, its management, and its operation.	Descriptive
<i>CUDB LDAP Data Views</i>	Describes the LDAP Data Views concepts, configurations, and procedures.	Descriptive
<i>CUDB LDAP Schema Management</i>	Describes the main features of LDAP Schema Management and the LDAP Management Tools provided to translate application-based LDAP schemas.	Descriptive
<i>CUDB Multiple Geographical Areas</i>	Describes the optional multiple geographical areas feature in CUDB.	Descriptive
<i>CUDB Notifications</i>	Describes the optional notifications feature from a functional and operational point of view.	Descriptive

## 2.4 Site Engineering

Table 7 lists the available site engineering document. The Site Engineering folder includes high-level descriptions about the plant engineering and deployment process of CUDB.

**Table 7 Site Engineering Document**

<b>Title</b>	<b>Description</b>	<b>Type</b>
<i>CUDB Deployment Guide</i>	Describes reference network configurations in designing the deployment of a CUDB system on operator networks.	Operative
<i>CUDB Virtual Infrastructure Requirements</i>	Describes the infrastructure requirements of virtualized CUDB.	Operative



## 2.5 Planning

Table 8 lists the available planning documents. These documents are intended for personnel responsible for planning, implementation, and product handling.

Table 8 Planning Documents

Title	Description	Type
<i>CUDB 1.9 Network Impact Report</i>	Describes the impact of the current product release compared to previous releases of the product, starting from CUDB 16A FD1. To find the changes applicable to a specific upgrade path, apply the filters by using the funnel icon on the upper left side of the browser.	Descriptive

## 2.6 Integration

Table 9 lists the available general integration document. The information in this category ensures that the network elements of the system work together as planned.

Table 9 Integration Document

Title	Description	Type
<i>CUDB Application Integration Guide</i>	This document provides the information required by application Front Ends (FEs) to be integrated in CUDB.	Operative

## 2.7 Operation and Maintenance

The Operation and Maintenance (OAM) folder contains information required to operate and maintain the product.

The folder contains the following subfolders:

- Configuration Management
- Data Management
- Fault Management
- Logging Management
- Health Check
- Network Management
- Performance Management
- Security Management



- HW Management

Table 10 lists the available general OAM documents.

Table 10 OAM Documents

Title	Description	Type
<i>CUDB Node Commands and Parameters</i>	Describes CUDB commands and parameters.	Descriptive
<i>CUDB System Administrator Guide</i>	This document serves as a generic guideline for OAM purposes, and provides information for system administrators about what can be accessed or configured in CUDB. It also describes the interfaces and necessary permissions used for OAM operations.	Operative
<i>CUDB System Split Partial Recovery Procedure</i>	Provides system administrators clear operating instructions for recovering from a node failure or IP network loss, and make provisioning available until the CUDB site or IP network becomes operational again.	Operative
<i>Virtualized CUDB Virtual Machine Recovery</i>	Describes how to recover a Virtual Machine (VM) in a CUDB node deployed on a cloud infrastructure.	Operative
<i>CUDB VNF Lifecycle Management</i>	Describes system administration tasks performed in the Virtualized Network Function (VNF) Lifecycle Manager (VNF-LCM).	Operative
<i>Ericsson Command-Line Interface</i>	Describes the Ericsson Command-Line Interface (ECLI), which is a proprietary Ericsson CLI standard.	Operative
<i>COM Management Guide</i>	Describes how to use the Fault Management (FM), Configuration Management (CM), Security Management (SM), File Management (FileM), and Performance Management (PM) in the Common Operation and Maintenance (COM) product.	Operative
<i>Ericsson NETCONF Interface</i>	Describes the functions provided in the Ericsson Network Configuration (NETCONF) interface.	Operative
<i>Core MW Management Guide</i>	Describes how to manage the Core Middleware (MW) component.	Operative
<i>ESA Setup and Configuration</i>	Describes the basic system administration tasks for the Ericsson SNMP Agent (ESA).	Operative
<i>eVIP Management Guide</i>	Describes the regular method to connect a cluster to an external Data Communication Network (DCN).	Operative
<i>LDE Management Guide</i>	Describes how to configure and manage a system that has installed Linux Distribution Extensions (LDE).	Operative



## 2.7.1 Configuration Management

Table 11 lists the available general configuration management document.

Table 11 Configuration Management Document

Title	Description	Type
<i>CUDB Node Configuration Data Model Description</i>	Describes the configuration data model of the CUDB nodes and the configuration modification procedure.	Descriptive , Operative

## 2.7.2 Data Management

Table 12 lists the subfolder and documents located in the Data Management folder.

The folder contains the following subfolder:

- Schema Management

Table 12 Data Management Documents

Title	Description	Type
<i>CUDB Automatic Handling of Network Isolation Output Description</i>	Describes the logs produced by Selective Replica Check and Data Repair.	Descriptive
<i>CUDB Backup and Restore Procedures</i>	Describes the available backup and restore procedures of the product.	Operative
<i>CUDB Consistency Check</i>	Describes how the CUDB Consistency Check function is used to find the differences between a slave replica and the corresponding master replica of a Data Store Unit Group (DSG) or the Processing Layer Database (PLDB).	Operative
<i>CUDB Import and Export Procedures</i>	Describes how to introduce and retrieve data from the CUDB database with the Import and Export Tool.	Operative
<i>CUDB LDAP Data Views Management</i>	Describes the concepts, configurations, and procedures of the LDAP Data Views function.	Operative

### 2.7.2.1 Schema Management

The Schema Management folder contains information on the use of the Schema Management Tool. Table 13 lists the subfolder and document related to the Schema Management Tool.



The folder contains the following subfolder:

- Schema Management Tools (not detailed in this document)

*Table 13 Schema Management Documents*

<b>Title</b>	<b>Description</b>	<b>Type</b>
Schema Management Tools folder	Describes how to install the CUDB Customer Tools SW and describes the Graphical User Interface (GUI) of the CUDB LDAP Schema Management tool.	Operative
<i>CUDB Application Schema Update</i>	Describes how to perform a schema update when a new application, a new function, or an extension requires new data to be stored in the CUDB system	Operative

### 2.7.3 Fault Management

Table 14 lists the subfolders and document located in the Fault Management folder.

The folder contains the following subfolders:

- Alarms (not detailed in this document)
- Troubleshooting
- Preventive Maintenance

*Table 14 Fault Management Documents*

<b>Title</b>	<b>Description</b>	<b>Type</b>
Alarms folder	Contains the Operating Instructions (OPIs) for all alarms.	Operative
<i>CUDB Node Fault Management Configuration Guide</i>	Contains an overview of the configuration and lists all CUDB alarms.	Descriptive , Operative
<i>ESA Fault Management</i>	Describes the system administration tasks for setting up the Fault Management features in the ESA.	Operative

#### 2.7.3.1 Troubleshooting

The Troubleshooting folder contains common corrective actions to locate errors. Table 15 lists the available troubleshooting documents.



Table 15 Troubleshooting Documents

Title	Description	Type
<i>CUDB Troubleshooting Guide</i>	Provides troubleshooting information for CUDB nodes and system-level problems and failures.	Operative
<i>Data Collection Guideline for CUDB</i>	Provides instructions on collecting troubleshooting data.	Operative

### 2.7.3.2 Preventive Maintenance

The Preventive Maintenance folder contains instructions on maintenance tasks required to minimize the number of faults. Table 16 lists the available preventive maintenance document.

Table 16 Preventive Maintenance Document

Title	Description	Type
<i>CUDB Node Preventive Maintenance</i>	Describes the maintenance procedures to prevent breakdown and failures in CUDB and provides the schedule of planned maintenance tasks.	Operative

### 2.7.4 Logging Management

Table 17 lists the available logging documents.

Table 17 Logging Documents

Title	Description	Type
<i>CUDB Logchecker</i>	Provides the instructions and tools needed to automate CUDB log collection and log analysis.	Operative
<i>CUDB Node Logging Events</i>	Describes detailed information about the logging events that the CUDB reports by means of the Unix SysLog.	Descriptive

### 2.7.5 Health Check

Table 18 lists the available health check document.

Table 18 Health Check Document

Title	Description	Type
<i>CUDB Health Check</i>	Describes how to perform the health check procedure on the CUDB node.	Operative



## 2.7.6 Network Management

Table 19 lists the available health check document. The Network Management folder contains the document that describe the network of the CUDB system and its means of configuration.

*Table 19 Network Management Document*

Title	Description	Type
<i>CUDB Node Network Description</i>	Describes the internal network infrastructure of a CUDB node, and the integration of the node with the customer network environment.	Descriptive

## 2.7.7 Performance Management

Table 20 lists the available performance management documents.

*Table 20 Performance Management Documents*

Title	Description	Type
<i>CUDB Counters List</i>	Lists all counters in a CUDB node.	Descriptive
<i>CUDB Performance Guide</i>	Describes the performance management solution provided by CUDB.	Operative
<i>ESA Performance Management</i>	Describes the system administration tasks for the Performance Management Agent (PMA) within the product ESA.	Operative

## 2.7.8 Security Management

Table 21 lists the available security management document.

*Table 21 Security Management Document*

Title	Description	Type
<i>CUDB Security and Privacy Management</i>	Describes the security functions available in CUDB nodes.	Operative

## 2.7.9 HW Management

Table 22 lists the available HW documents.



Table 22 HW Management Documents

Title	Description	Type
<i>CUDB Node Hardware Description</i>	Describes the HW components related to the CUDB node.	Descriptive
<i>Server Platform, Blade Replacement</i>	Describes how to prepare a CUDB node to replace a blade.	Operative

## 2.8 Interface

The Interface folder contains information on the external interface provided by CUDB.

Table 23 lists the available interface documents.

Table 23 Interface Documents

Title	Description	Type
<i>CUDB LDAP Interwork Description</i>	Describes the LDAP data model used for subscriber data in CUDB.	Descriptive
<i>CUDB SOAP Interwork Description</i>	Describes the Simple Object Access Protocol (SOAP) based notification interface, that is the interface used for notifying changes in certain data stored in the CUDB to a generic application FE.	Descriptive

## 2.9 3rd Party Products

The 3rd Party Products folder contains information on all third-party products used by the CUDB system.

The folder contains the following subfolder:

- Open LDAP





## Glossary

For the terms, definitions, acronyms and abbreviations used in this document, refer to *CUDB Glossary of Terms and Acronyms*, Reference [1].





## Reference List

### **CUDB Documents**

- [1] *CUDB Glossary of Terms and Acronyms*

### **Other Ericsson Documents**

- [2] *How to Get Started with Active Library Explorer*