

# CSCF Library Overview

## Call Session Control Function

---

### DESCRIPTION

**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	CPI Product Numbers	1
1.2	CPI Library Distribution	1
1.3	CPI Library Access	1
1.4	Library Structure	1
1.5	Document Types	2
1.6	Related Information	2
<b>2</b>	<b>CSCF Library</b>	<b>3</b>
2.1	Library Overview	3
2.2	Product Overview	3
2.3	Planning	4
2.4	Installation	4
2.5	Operation and Maintenance	4
2.6	Emergency	9
2.7	Interface	9





# 1 Introduction

This document lists the information available for the Virtual Call Session Control Function (vCSCF).

## 1.1 CPI Product Numbers

The Customer Product Information (CPI) product numbers and delivery information is provided in Table 1.

*Table 1 CPI Product Numbers*

Product name	Product Number	CPI Library
vCSCF 1.6	AVA 901 30/2 R8A	EN/LZN 765 0209 R8A

## 1.2 CPI Library Distribution

CPI libraries are distributed as follows:

- Online libraries on CPI Store on the Ericsson extranet

## 1.3 CPI Library Access

How to access the library, refer to the document *How to Get Started with Active Library Explorer*.

## 1.4 Library Structure

The CPI library consists of documents grouped into the following main folders:

- Library Overview
- Product Overview
- Planning
- Operation and Maintenance
- Emergency
- Interface



## 1.5 Document Types

The documents are grouped into the following three types:

- Descriptive documents contain descriptions of the product on different levels.
- Operational documents give instructions on how to install, operate, or maintain the product.
- Reference documents contain additional information to which a user might need to refer.

## 1.6 Related Information

Trademark information, typographic conventions, definition, and explanation of acronyms and terminology used in this library, refer to the following documents:

- *Trademark Information*
- *Typographic Conventions*
- *Glossary of Terms and Acronyms*



## 2 CSCF Library

This section describes the CPI library contents for the CSCF library.

### 2.1 Library Overview

Documents included in this area are listed in Table 2. These documents are intended for all personnel involved in work related to any aspect of the product.

Table 2 Library Overview

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

### 2.2 Product Overview

Documents included in this area are listed in Table 3. These documents are intended as an introduction for all personnel who want to learn more about the product.

Table 3 Product Overview

Title	Description	Type
<i>CSCF Technical Description</i>	Technical description of CSCF.	Descriptive
<i>Free and Open Source Software</i>	Contains notices and license documentation related to the Free and Open Source Software (FOSS) that is included in the CSCF.	Descriptive
<i>Virtual CSCF Infrastructure Requirements</i>	Describes the minimum infrastructure resource requirements to deploy virtual CSCF application in a cloud deployment.	Descriptive
<b>Statement of Compliance</b>		
<i>CSCF Statement of Compliance Overview</i>	General information about compliances with standards for the product.	Descriptive

## 2.3 Planning

Documents included in this area are listed in Table 4. These documents are intended for personnel responsible for planning, implementation, and product handling.

Table 4 Planning

Title	Description	Type
<i>CSCF VNF Network Connectivity Overview</i>	Provides a general description of the CSCF logical network connectivity in a virtualized or cloud environment.	Descriptive
<i>vCSCF Network Impact Report from 1.5 to 1.6.0</i>	Describes the impact of current product release on a previous release of the product.	Descriptive

## 2.4 Installation

Documents included in this area are listed in Table 5. These documents are intended for personnel performing software installation and configuration.

Table 5 Upgrade

Title	Description	Type
<i>vCSCF Upgrade Information from 1.5 to 1.6.0</i>	Describes how to upgrade the CSCF.	Descriptive, Operative

## 2.5 Operation and Maintenance

The following subsections list documents included in the Operation and Maintenance (O&M) area.

Table 6 Operation and Maintenance

Title	Description	Type
<i>Ericsson Command-Line Interface User Guide</i>	Describes the basic features of the Ericsson Command-Line Interface (ECLI) and how to use it.	Descriptive, Operative

### 2.5.1 Fault Management

Documents included in this area are listed in Table 7. These documents are intended for personnel performing fault handling, alarm handling, and troubleshooting.





Table 7 Fault Management

Title	Description	Type
<i>Handling Alarms</i>	Provides an overview of the management model and concepts associated with this managed area.	Descriptive
<b>Alarms</b>		
<i>CSCF Alarm List</i>	Lists all alarms that the CSCF may receive.	Reference
<i>CSCF List of Alarms and Attributes</i>	Lists all alarms and attributes.	Reference
<b>Troubleshooting Information</b>		
<i>CSCF AppTrace User Guide</i>	Describes how to use and apply the Application Trace (AppTrace) in the CSCF.	Descriptive, Operative
<i>CSCF Fault Codes Catalogue</i>	Describes the fault codes that are generated by the CSCF.	Descriptive, Reference
<i>CSCF Network Tracing</i>	Describes the procedure that is to be used to obtain network traces from the CSCF.	Descriptive, Operative
<i>CSCF SIP Hexadecimal Error Codes</i>	Describes the CSCF SIP response error codes that can occur for the SIP.	Descriptive
<i>CSCF Troubleshooting Guideline</i>	Describes common corrective actions to locate an error.	Descriptive, Operative
<i>CSCF User Tracing</i>	Describes the procedure to obtain user traces from the CSCF nodes.	Descriptive, Operative
<b>Data Collection</b>		
<i>Data Collection Guideline for CSCF</i>	Step-by-step instructions required during data collecting activities.	Descriptive, Operative

## 2.5.2 Configuration Management

Documents included in this area are listed in Table 8. These documents are intended for personnel working with configuring and fine-tuning. It is also intended for personnel performing provisioning.

Table 8 Configuration Management

Title	Description	Type
<i>CSCF Configuration Management</i>	Provides information regarding configuration activities, including procedures and background information	Descriptive, Operative

**Table 8 Configuration Management**

Title	Description	Type
<i>CSCF User Data Output Guideline</i>	Provides CSCF troubleshooting guidelines on printing user data from the Serving CSCF (S-CSCF) and the Proxy CSCF (P-CSCF).	Descriptive, Operative
<i>CSCF VNF Lifecycle Management</i>	Describes system administration tasks performed in the VNF LifeCycle Manager (VNF-LCM).	Descriptive, Operative
<i>System Management</i>	Provides information about configuration activities, including procedures and background information.	Descriptive
Configuration Management Parameters		
<i>vCSCF 1.6 Master Parameter Value List for Performance Management</i>	Source parameter list for the CSCF for NETCONF.	Reference
<i>vCSCF 1.6 Master Parameter Value List for Netconf</i>		
Diameter Management		
<i>Diameter Management</i>	Provides an overview of the management model and concepts associated with the Diameter Management managed area.	Descriptive
File Management		
<i>Handling Files</i>	Provides an overview of the management model and concepts associated with this managed area.	Descriptive
Transport Management		
<i>Virtual IP Addressing</i>	Provides an overview of the management model and concepts associated with the Virtual IP Address Management managed area.	Descriptive

### 2.5.3 Performance Management

Documents included in this area are listed in Table 9. These documents are intended for personnel involved in performance monitoring.



Table 9 Performance Management

Title	Description	Type
<i>Performance Management</i>	Provides an overview of the management model and concepts associated with the Performance Management managed area.	Descriptive

## 2.5.4 Scaling Management

Documents included in this area are listed in Table 10. These documents are intended for personnel involved in scaling.

Table 10 Performance Management

Title	Description	Type
<i>CSCF Scaling Management</i>	Provides an overview of the management model and concepts associated with the Scaling Management managed area.	Descriptive

## 2.5.5 Security Management

Documents included in this area are listed in Table 11. These documents are intended for personnel performing security tasks, including supervision and user administration. They are also intended for personnel performing hardening of the product.

Table 11 Security Management

Title	Description	Type
<i>CSCF Hardening Guideline</i>	Describes the basic hardening information of the CSCF.	Descriptive
<i>CSCF Security User Guide</i>	Describes the security functions implemented by the CSCF) and the security-related procedures that can be performed by the system administrators.	Descriptive
<i>User Management</i>	Provides an overview of the management model and concepts associated with the User Management managed area.	Descriptive
<b>Certificate Management</b>		
<i>Certificate Management</i>	Provides an overview of the management model and concepts associated with the Certificate Management managed area.	Descriptive

## 2.5.6 Software Management

Documents included in this area are listed in Table 12. These documents are intended for personnel performing preventive maintenance of the software and for personnel involved in troubleshooting. They are also intended for personnel performing backup and restoration.

Table 12 Software Management

Title	Description	Type
<i>Software Management</i>	Provides an overview of the management model and concepts associated with the Software Management managed area.	Descriptive
<i>Software Inventory Management</i>	Provides an overview of the management model and concepts associated with the Software Inventory Management managed area.	Descriptive
<b>Backup and Restore</b>		
<i>System Backup and Restore</i>	Provides an overview of the management model and concepts associated with the Backup and Restore managed area.	Descriptive
<b>License Management</b>		
<i>License Management</i>	Provides an overview of the management model and concepts associated with the License Management managed area.	Descriptive
<i>CSCF License Management</i>		

## 2.5.7 Health Check

Documents included in this area are listed in Table 13. These documents are intended for personnel performing installation, preventive maintenance of the software, and provisioning tasks. They are also intended for personnel involved in troubleshooting.

Table 13 Health Check

Title	Description	Type
<i>Check CSCF Key Performance Indicators</i>	Describes how to perform a check of the Key Performance Indicators (KPIs) on the CSCF.	Operative
<i>CSCF Health Check</i>	Step-by-step instructions required in health check situations.	Operative



## 2.5.8 Managed Object Management

The Managed Object Model (MOM) included in this area is listed in Table 14. The MOM is intended for personnel working with configuring and who requires detailed information about the MOM.

Table 14 MOMs

Title	Description	Type
<i>Managed Object Model User Guide</i>	Describes the Managed Object Model (MOM) and how to use it.	Descriptive, Operative
<i>Managed Object Model (MOM)</i>	The MOM defines the information model with regard to Node Management. It presents a view of all the manageable resources in the node, and all the parameters and actions associated with these resources.	Descriptive, Reference

## 2.6 Emergency

Documents included in this area are listed in Table 15. These documents are intended for personnel authorized to perform an emergency recovery.

Table 15 Emergency

Title	Description	Type
<i>Emergency Recovery Procedure for CSCF</i>	Information regarding emergency recovery activities, including procedures and background information.	Descriptive, Operative

## 2.7 Interface

Documents included in this area are listed in Table 16. These documents are intended for personnel needing to understand the logical entity, including interfaces and protocols.

Table 16 Interface

Title	Description	Type
<i>Ericsson Alarm Interface</i>	Describes the alarm interface concepts.	Descriptive, Reference
<i>Ericsson Command-Line Interface</i>	Describes the ECLI, including descriptions of all commands, key combinations, error messages, character support, and examples.	Descriptive, Reference

Table 16 Interface

Title	Description	Type
<i>Ericsson FTP over TLS</i>	Describes the Ericsson FTP over TLS interface.	Descriptive, Reference
<i>Ericsson NETCONF Interface</i>	Describes the Ericsson Network Configuration (NETCONF) interface, including standard compliance, NETCONF operations, and examples.	Descriptive, Reference
<i>LDAP-Based Authentication and Authorization Interface</i>	Describes the Lightweight Directory Access Protocol (LDAP) authentication and authorization interface.	Descriptive, Reference
<i>Performance Management Report File Format</i>	Describes the 3GPP® compliant Performance Management (PM) XML file format supported in the PM interfaces.	Descriptive, Reference
<i>CSCF Cx and Dx Interface</i>	Detailed information regarding the Cx/Dx interface.	Descriptive, Reference
<i>CSCF Gm Interface</i>	Detailed information regarding the Gm interface between the UE and the P-CSCF.	Descriptive, Reference
<i>CSCF I4 and I5 Interface</i>	Detailed information regarding the EATF and the CSCF using reference points I4 and I5.	Descriptive, Reference
<i>CSCF ISC Interface</i>	Detailed information regarding the ISC interface.	Descriptive, Reference
<i>CSCF Mw Interface</i>	Detailed information regarding the interface between CSCF including the BGCF to a number of SIP-based nodes using the reference points Mg, Mj, Mk, Mm/Mx, Mr, Mw, and I2.	Descriptive, Reference
<i>CSCF Rf Interface</i>	Detailed information regarding the Rf interface, used for offline charging.	Descriptive, Reference
<i>CSCF Ro Interface</i>	Detailed information regarding the Ro interface, used for online charging.	Descriptive, Reference
<i>CSCF Rx Interface</i>	Detailed information regarding the Rx interface.	Descriptive, Reference
<i>E-CSCF MI SIP Interface</i>	Detailed information regarding the SIP-based MI interface.	Descriptive, Reference
<i>I-CSCF DUA-DB LDAP Interface</i>	Detailed information regarding the LDAP interface between the I-CSCF and the Dynamic User Association-Database (DUA-DB).	Descriptive, Reference
<b>Events</b>		
<i>AlarmListRebuilt</i>	Describes event AlarmListRebuilt and how to handle it.	Descriptive, Operative



Table 16 Interface

Title	Description	Type
<i>eVIP, Configuration Fault</i>	Describes event eVIP, Configuration Fault and how to handle it.	Descriptive, Operative
<i>HeartBeat</i>	Describes event HeartBeat and how to handle it.	Descriptive, Operative