

Oracle® Communications Convergent Charging Controller Release Notes



Release 12.0.6

September 2022

The Oracle logo, consisting of the word "ORACLE" in white, uppercase, sans-serif font, centered within a solid red square.

ORACLE

Copyright

Copyright © 2022, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software" or "commercial computer software documentation" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

About the Release Notes.....	1
New Features	1
Known Problems	2
Fixes in This Release	2
About Convergent Charging Controller Documentation	5
Third-Party Products and Licensing	5

About the Release Notes

This document provides the release notes for the new and enhanced features introduced between Oracle Communications Convergent Charging Controller (CCC) release 12.0.5 and Oracle Communications Convergent Charging Controller (CCC) release 12.0.6.

New Features

Convergent Charging Controller 12.0.6 includes enhancements to the following components:

- Support for Location Based Charging
- Support for On-demand Voucher Creation
- Enhanced VPN Functionality
- Support Reading Multiple Topics for Notifications Gateway
- Increased Limit in SDK for acsActionsDataSDK.hh
- Updated CCC Help System

Support for Location Based Charging

CCC now supports fetching and utilizing subscriber real time location to use across all rating and charging functions. RESTServer interface is implemented to support this functionality. BRM and ECE can now send REST request to get the subscriber location from CCC.

RESTServer interface is used for accepting request from clients. RESTServer accepts the GET request with subscriber number and translates it into SOAP request. SOAP request is then forwarded to OSD application endpoint. OSD sends back the SOAP response to RESTServer. RESTServer converts it to JSON response and sends it back to the client. RESTServer supports LocationInfo endpoint to get the location of the subscriber.

For more information, see *REST Technical Guide*.

Support for On-demand Voucher Creation

CCC now supports creating on-demand voucher. Now you can generate a single voucher with the specified details from an external system. Provisioning Interface (PI) is used for this functionality. ASPs can now send the SOAP requests through PI. PI command CCSVR1 is now enhanced to support on-demand voucher creation. A new action COV is used along with CCSVR1 command to create on-demand voucher.

For more information, see the following documents:

- *CCS Provisioning Interface Commands*
- *Voucher Manager Technical Guide*
- *Provisioning Interface User's and Technical Guide*

Enhanced VPN Functionality

VPN functionality is now enhanced to support WSDL for all the PI commands for provisioning VPN information on SMS.

VPNIsonNet macro node is also updated to identify VPN On-net and OFF-net calls. CCC can now fetch the network ID of the called party and calling party to decide if the cross group calling is allowed or not.

VPN PI command VPNNW1 is now simplified to modify prefix tree profile tags. Now, you can add or delete the elements from a prefix tree profile tags by sending only one entry, without sending the complete list. A new parameter PTMODE is introduced for prefix tree profile tags with ADD and DEL option for adding and deleting profile values.

For more information, see the following documents:

- *VPN Provisioning Interface Commands*
- *Virtual Private Network Technical Guide*
- *Provisioning Interface User's and Technical Guide*

Support Reading Multiple Topics for Notifications Gateway

CCC now support reading multiple topics at a time for notification gateway. Notification gateway now accepts multiple topics in the configuration. Earlier, reading from one topic was only supported.

For more information, see *Notification Gateway Technical Guide*.

Increased Limit in SDK for acsActionsDataSDK.hh

SmallBalanceBucketInfoArray in acsActionsDataSDK.hh stores BalanceBucketInfo in an array. Earlier, size of the array was 2. Now, the size of the array is increased to 10.

Updated CCC Help System

From this version onwards, CCC Help is delivered as web based Help. Java based Help is no longer supported. You can access Help from either SMS UI, or directly from the Oracle Help Centre. All the Helpsets for 12.0.6 are available at the following location:

<https://docs.oracle.com/en/industries/communications/convergent-charging-controller/12.0.6/index.html>

You can also use the search functionality provided in this page to search any keyword across multiple Helpsets.

Known Problems

List of Known Problems

If you get the following error in `/IN/service_packages/PI/tmp/PImanager.log` while running voucher query:

```
UNKNOWN COMMAND CCSVR1=QRY
```

1. Log in as smf_oper (application user) in the SMS node and run the following:

```
export LOGFILE=< file name>  
export SMFPASSWORD=<Database password for smf user>
```
2. Run the script from `/IN/service_packages/PI/db/install/create/SMF/scripts` path.
`./install_PlcCommands_OC3C.sh.`

Fixes in This Release

List of Fixes

The following table lists service request issues reported by external sources that have been fixed in this release. The issues are listed component-wise.

Service Request (SR) Number	Bug DB Number	Component	Title
-	34558868	COMMON	CVE-2018-1311: Xerces-C 3.0.0 to 3.2.3 XML parser contains a use-after-free error
3-30088587171	34520235	BE	DCA Logs Not Archived and no Archive Directory Created on Installation
-	34514489	COMMON	CVE-2022-35737: SQLITE UPDATE TO AT LEAST 3.39.2
-	34514482	COMMON	CVE-2022-35737: SQLITE UPDATE TO AT LEAST 3.39.2
3-30116664481	34444428	BE	showCostsEDRScaledByDisplaySpendRatio parameter issue in NCC 12.0.4
3-29815532231	34416347	CCS	Control plans don't show in the Wallet Lifecycle Periods
3-30106060141	34377264	CCSPI	CCSCD1=CHG Fails to Reset Credit Limits when Bucket has a Negative IDs
3-30016115211	34356321	CCS	locApp (atiplugin) does not allow to define destination SCCP address
3-30013682551	34346861	ACS	acsProfile crash with coredump
3-29988500021	34331052	CAP3_GW	CAP3_GW Should Map EventTypeSMS to EventType in InitialDP
3-29975462621	34324282	SMS	NullPointerException error when trying to edit existing EDR Template
3-29639015331	34321560	BE	WARNING: too many parse errors in VWS DB alert.log
3-29747717237	34308491	CCS	SDK acsActionsDataSDK.hh limit for smallBalanceBucketInfo and SmallBalanceBucket
3-29833389591	34300246	ACS	DCA Voice over LTE - Cannot modify Called Number
3-29522979411	34283487	CCS	SK for voice and sms
3-29768479921	34264262	CCS	The FormatText node is causing System Fault error
3-27783536391	34252380	CCS	High memory usage by ccsCDRLoader
3-29388231811	34246228	ACS	Branch 16 does not work for UATB node
3-29698189751	34242784	SMS	Java Code Dynamically Generates HTTP URLs for Images
3-29671823281	34224208	SMS	IVR Resource ID Definition support upto 10 Digit required
3-29574027181	34215835	ENUM	ENUM Call Out Fails to Handle Response Event
3-29456426061	34175551	PI	PIProcess reports Warning:ORA-01480: trailing null missing from STR bind value
3-29347152751	34162915	ACS	SLC: ERROR: acsChassisRegisterEventHandler: Attempted to register more than MAX_
3-29388231811	34159008	ACS	Branch 16 does not work for UATB node
3-29456341441	34149692	CCS	Need to update charging domain on IN SLC for an existing subscriber
3-29437413081	34139631	ACS	Memory leak in ccsCDRLoader process

Service Request (SR) Number	Bug DB Number	Component	Title
3-29357898261	34116970	CCS	Current Date is not populated by using Date store Feature node
3-29000611291	34094741	CCS	Profile Type Panels are missing from Product Type
3-29280017631	34093616	DAP	Character length discrepancy for the column name
-	34092817	COMMON	CVE-2020-36518: JACKSON-DATABIND UPDATE TO AT LEAST 2.13.2.1 OR 2.12.6.1
-	34092810	COMMON	CVE-2020-36518: JACKSON-DATABIND UPDATE TO AT LEAST 2.13.2.1 OR 2.12.6.1
3-29253573651	34074570	XMS	xmsTrigger Crashes in getPresentationAddress()
3-29211958641	34064524	ACS	Maximum charge not respected for CLI-DN when mid-session commit enabled.
3-29137498301	34045790	ACS	Disabling enableTermAttemptAuthorizedConnect in ACS is ignored in 12.0.4
3-28447368521	34016850	CCS	Bad status on Periodic Charge VWS sync
3-28959821861	34003477	CCS	WLC Control Plan Drop Down Lists Do Not Update Effective Customer
3-28605242451	33929824	CCS	Bundle minutes not used for voice calls some minutes before renewal
3-28820285571	33924459	ACS	Wallet <id_number> doesn't exist on either BE
3-28680232971	33905257	ACS	compareNode not working
3-29253573651 3-28682753623	33881281	ACS	xmsTrigger cores
3-27949817751	33879828	SMS	java.sql.SQLException while opening subscriber panel
3-28627447321	33875013	SIP	SCA cores
3-28532566812	33837200	CCS	[12.0.4] DAP GUI validation inconsistent with dapIF runtime validation
3-28414365771	33832681	BE	Port Bug 27207916 to 5.0.3
3-28401952431	33788916	ACS	Hardcoded Parameters in CTR/PA Messages
3-28191991491	33785496	VPN	Useability Issues with the VPN Screens
3-27774669581	33661162	DCA	Validity-Time AVP Not Set without RSU
3-27819472251 3-29639015331	33653766	CCS	VWS DB alert.log: too many parse errors
3-27783536391	33648795	CCS	High memory usage by ccsCDRLoader
3-29610029361 3-27603790321	33633798	ACS	Slee_acs Exception: Bad value for 4G data session

About Convergent Charging Controller Documentation

Where to Start

Convergent Charging Controller product documentation is available on Oracle Help Center:

https://docs.oracle.com/communications/F60967_01/index.htm

The first guides to look at should be those that help with the installation and configuration of the Convergent Charging Controller software.

The next set of guides should be those pertaining to your usage of the Convergent Charging Controller software.

The guides have been generally classified according to their use.

Third-Party Products and Licensing

For all the Oracle Communications Convergent Charging Controller licensing information and all related third-party product acknowledgments, see *Oracle Communications Convergent Charging Controller Licensing Information User Manual*.