Oracle® Communications Convergent Charging Controller

Release Notes

Release 6.0

May 2016

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Contents

About the Release Notes

This document provides the release notes for the new and enhanced features introduced between Oracle Communications Network Charging and Control release 5.0.3 and Oracle Communications Convergent Charging Controller release 6.0.

New Features

Convergent Charging Controller 6.0 includes enhancements to the following components:

- Advanced Control Services (ACS). See *Advanced Control Services Enhancements* (on page 1).
- CAP3SMS Gateway. See *CAP3SMS Gateway Enhancements* (on page 1).
- Compatibility. See *Compatibility Enhancements* (on page 1)
- Data Access Pack (DAP). See *Data Access Pack Enhancements* (on page 2).
- Profile fields. See *Profile Field Enhancements* (on page 2).
- Provisioning Interface. See *Provisioning Interface Enhancements* (on page 2).
- Service Management System (SMS). See *Service Management System Enhancements* (on page 2).

Advanced Control Services Enhancements

This section describes the enhancements to Advanced Control Services (ACS).

New Parameters to Convert the Network Time Zone to Local Time Zone

The following parameters have been added to the acsChassis single-instance parameters list to set the subscriber's caller network time zone:

- `setCallerNetworkTZFromIncomingGmtOffset`
- `setCallerLogicalTZFromIncomingGmtOffset`

For more information about the subscriber's caller network time zone, see *Advanced Control Services Technical Guide*.

CAP3SMS Gateway Enhancements

This section describes the enhancements to CAP3SMS Gateway.

CAP3SMS Gateway Now Provides smscAddress in initialDPSMS Messages

The **smscAddress** parameter is a network-provided parameter that identifies which smsc to send SMS messages to. CAP3SMS Gateway now provides the **smscAddress** parameter in initialDPSMS messages sent to ACS. Previously, CAP3SMS Gateway supported the **smscAddress** parameter only in Connect operations.

For more information about CAP3SMS Gateway, see *CAP3SMS Gateway Technical Guide*.

Compatibility Enhancements

This section describes the enhancements to compatibility.

Convergent Charging Controller Is Now Supported on Oracle Linux 7

Convergent Charging Controller 6.0 is now supported on Oracle Linux 7. Convergent Charging Controller 6.0 is certified on Oracle Linux 7.1 with critical patch updates.

For more information about installing Convergent Charging Controller with Oracle Linux, see *Convergent Charging Controller Installation Guide*.

Data Access Pack Enhancements

This section describes the enhancements to Data Access Pack (DAP).

Logging Notifications

DAP Manager now logs all or failed notifications for the defined time and predetermined size to the specified directory for future processing.

For more information about logging notifications, see *Data Access Pack User's and Technical Guide*.

Profile Field Enhancements

The following table lists new profile fields added for this release.

Profile Field	Profile Block	Description
SMSC Address	Incoming Session Data	Numeric string. Stores the smsc address from initialDPSMS messages.
Number Of Events Used	Temporary Storage	Unsigned integer. Stores the number of events used when the Named Event feature node is used in commit mode, when processing Diameter events.

Provisioning Interface Enhancements

This section describes the enhancements to the provisioning interface (PI).

Enhanced PI User Security

PI user security is enhanced so that you can now restrict the data that a PI user can query or modify. In previous releases, a PI user could run PI commands to query or modify the data of any service provider. Now, a PI user can run PI commands to query or modify the data for only those service providers that the PI user is associated with.

To enable a new or an existing PI user to run PI commands successfully for a service provider, you must associate the service provider with the PI user. You associate a service provider with a PI user, on the **Users** tab in the Administration screen in the PI UI. By default, a PI user is not associated with any service providers, and attempts by the PI user to run PI commands result in a negative acknowledgment (NACK) message being returned.

For more information, see *Provisioning Interface User's and Technical Guide*.

Service Management System Enhancements

This section describes the enhancements to Service Management System (SMS).

Enhanced Password Verification through Non-Standard Oracle Profiles

You can now assign a non-standard Oracle profile to new Convergent Charging Controller screen users that you create through the User Management screen of Service Management System. In previous releases, new screen users were assigned the standard Oracle profile, named DEFAULT. This profile includes a password verification function that is applied to user passwords and that determines the specific conditions for a valid password, such as the minimum length, number of digits, and so on.

You can create a non-standard Oracle profile by using the CREATE PROFILE command. You can assign the non-standard Oracle profile to new users. When you create the Oracle profile, you specify the password verification function that will be applied to user passwords. You can use this feature, for example, to specify an Oracle profile that uses a password verification function that has stricter password verification conditions.

For information about creating Oracle profiles by using the CREATE PROFILE command, see the Oracle Database documentation.

When you create or edit a user's password, smsTaskAgent verifies that you have entered an acceptable password by applying the password verification function that is specified in the Oracle profile assigned to the user.

You configure smsTaskAgent to assign a non-standard Oracle profile instead of the default Oracle profile to new users as follows:

```
smsTaskAgent = {
    defaultOracleProfile = "password_profile"
}
```

where *password_profile* is the name of the existing Oracle profile you want to use.

You can also now specify the message that displays for failed attempts to create or change a user's password in the new `passwordPolicyMessage` Java applet parameter.

See *Service Management System Technical Guide* for more information.

Removed Features

The following components have been removed from Convergent Charging Controller:

- LDAP Control Agent
- Social Networking Service Template
- Solaris Cluster agents for the SMS node. For more information about high availability, see *Convergent Charging Controller High Availability Operations Guide*.

Documentation Updates

The following guides have been removed from the documentation set:

- *ACS PI SOAP Interface Specification*
- *CCS PI SOAP Interface Specification*
- *Customer Care Portal User's Guide*
- *LDAP Control Agent Alarms Guide*
- *LDAP Control Agent Technical Guide*
- *NP PI SOAP Interface Specification*
- *Promotion Manager User's Guide*

- *Social Networking Template User's Guide*

Known Problems

List of Known Problems

There are no known problems with this release.

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 for each component in order of BugDB number.

Service Request (SR) Number	BugDB Number	Component	Title
3-2063452471	10133052	ACS	PROFILE TAG HELP DOES NOT EXPLAIN PARAMETER TYPE
3-9451512391	19485226	ACS	High number of TCAP_ABORT messages for all Voices severs
3-10351688031	20670019	ACS	Problem with Profile Tags of Type Date while configuring SendRequest node
3-10427301811	20710054	ACS	Missing Parameter
3-10150910641 3-10926454617	20754079	ACS	ACS check tool - problem with displaying correlationid
3-10862261861	21220933	ACS	slee_acs core dumps
3-10903031291	21253744	ACS	TCAP reject received after SendActivityTest
3-10905887791	21258053	ACS	slee_acs Cores when MATH Node Operates on Uninitialised Profile Tags
3-10905546661	21272602	ACS	Globaltitle config not working for smInapCA
3-11527167471	22062619	ACS	Utility to dump Geographic Routing Table Data
3-11599154771	22143209	ACS	Could not stat error thrown by cmnPushFiles second instance
3-11727809511	22235823	ACS	CopyBalanceDetails node does not work when expireAtMidnightTZ is set
3-11777194911	22312384	ACS	SLC core dumps upon voucher type recharge
3-11833625821	22351094	ACS	Call not ended when AWOL reached
3-11918027741	22468744	ACS	NOTF Does Not Stop Processing After DCD Failure
3-11996435461	22534397	ACS	TBLU Node Failure Reports Incorrect Table in DEBUG
3-12068054781	22627312	ACS	sca running in proxy mode is crashing when trying to forward INVITE request

Service Request (SR) Number	BugDB Number	Component	Title
3-10459519401 3-11139884571 3-11165554361	20760372	BE	BeClient Crashing on VWS Restart
3-11215667161	21651955	BE	Double notifications beServiceTrigger <-> OSD
3-11415057001 3-11869356441	21879745	BE	beServiceTrigger crashes repeatedly with SIGABRT
3-11869356441	22375567	BEAPI	beServiceTrigger process is coring from time to time
3-10921339051	21273120	CAP3_GPRS	IDPGPRS with gPRSEventType of pdp-ContextChangeOfPosition has no ACHGPRS
3-10921339051	21305949	CAP3_GPRS	cap3GprsControlAgent Errors when an ACRGPRS and ERGPRS arrive in the same TCAP
3-10952928591	21317424	CAP3_GPRS	originationReference should be a unique per PDP context
3-10766775191	21120855	CAP3_GW	CAP3SMS doesnt support FCI/FCI_SMS
3-9422902751	19576320	CCS	ccsSLEEChangeDaemon Periodic Charge License Doesn't Exist
3-9614452571	19786322	CCS	Incorrect value for holiday in Rate Table export
3-10120397971	20355670	CCS	Rate Table Import Failing
3-10324209461	20600069	CCS	NEVT store cost does not get reset in between NEVT FNs
3-10344863621 3-10861532911	20617827	CCS	CCSPART for non-clustered ASM
3-10710623481	21051822	CCS	Periodic Charge Execution Order Ignored
3-10756682751 3-10815062771 3-11384986901	21111077	CCS	CCSCD1_CHG with MSISDN change causes ORA-00060: Deadlock detected
3-10766727791	21119231	CCS	Memory corruption issue during performance test using VTRH node
3-10807901291	21155928	CCS	WLC bucket does not automatically expire
3-10855128371	21199877	CCS	ccsProfileDaemon is dying
3-10857318781	21203709	CCS	beVWARS Caches Tariff Plan Resulting in Incorrectly Rated Named Event
3-10178747671	21228586	CCS	Change required for WSUP FN
3-10914870861	21270796	CCS	Balance Expiry EDR contains ACCOUNT_TYPE=0
3-10963180851	21321607	CCS	ccsCdrLoader Discards the Rest of a Flat File when it Errors
3-10964184311	21326186	CCS	"Discount" field in the Named Event FN (nevt) is completely ignored
3-11029571451	21415478	CCS	Voucher Type to override Expiry Date only does not work
3-11099750241	21500873	CCS	Individual Limited Liability Monthly Reset not working correctly

Service Request (SR) Number	BugDB Number	Component	Title
3-11162117151	21656548	CCS	beVWARS RuntimeError: There is no such reservation against Wallet
3-11300229661	21775356	CCS	Empty buckets are created on account activation
3-11777315401	22276584	CCS	ccsBeResync on Second VWS pair uses incorrect Primary VWS
3-10653752781	20963727	CCSPI	CCSCD9_QRY ERROR READING REPLY FROM FILE
3-11508111121	22104610	CCSPI	Invalid SOAP fault response from OSD interface
3-10949871741	21314849	DAP	Add notification message to DAP logging
3-11665673971	22222195	DAP	One DAP node failure causes subsequent DAP nodes to fail
3-11776260351	22278398	DAP	Call takes different DAP2 exit for the same request/response soap message
3-11593907181	22094471	DCA	diameterControlAgent Crashing on Abnormal Message Flow when Credit Exhausted
3-11755802891	22254936	DCA	multiple service credit control not supported in CCR EVENT_REQUEST
3-12050382581	22583552	DCA	diameterControlAgent Crashing when Processing Timeout
3-10645833341	20962123	IS41	CAP3SMS GW does not support the field 'SMSC Address' in the IDP
3-11011724121	21376473	OSD	Compliance of OSD to HTTP 1.1 spec
3-11011724121	21464525	OSD	Date: HTTP header in osdInterface response does not always use GMT timezone
3-11526883081	22030589	OSD	osdInterface restarts - Crash logs observed /var/crash
3-10322394691	20670650	PI	CCSCD1_DEL error
3-10414015971 3-10635628141	20711716	PI	Extra optional parameter for CCSCD7=QRY command
3-11177506411	21680861	PI	PI result length limitation to 2000 characters
3-11307891961	21795746	PI	Response from PI Crashes PI Client (Third Party App not Convergent Charging Controller)
3-11782960791	22351614	PI	Performance issues related to PI on NCC 5.0.3
3-11539253591	22392174	SIGTRAN	No alarm defined in SMF_ALARM_DEFN for m3ua_if receiving Unrecognised Trans. ID
3-10116035421	20551743	SIP	Can not control the suppression of T-CSI by call_init_suppress_t_csi parameter
3-12002914761	22582776	SIP	Request to Port Bug 16611670
3-10744566641 3-9625604591 3-9629858001	19647356	SLEE	xmlTcapInterface crashed on SLC
3-10969282941	21343739	SLEE	SLEE Memory Corruption, Event of Size 8196, and event size 1020
3-11322860881	21791300	SLEE	slee_acs get SIGABRT in a SIP/XMS message

Service Request (SR) Number	BugDB Number	Component	Title
3-12005379221	22563060	SLEE	SLPIT script issue reading A Party and B Party numbers from separate files
3-10843199861	21184532	SMINAPCA	Roaming Scenario in Camel V1
3-10905546661	21193830	SMINAPCA	E-21184532 Roaming Scenario in Camel V1
3-6492799851	15930395	SMS	SMSSTATSTHRESHOLD CORES WHEN DATABASE STOPS UNDERNEATH IT
3-10815181071	21222718	SMS	smsMaster - memory leak on SMS
3-10406877271 3-10744244081 3-12064380941	21253740	SMS	replicationIF continuously crashing on all SLC
3-10988792053	21353905	SMS	Screen Users Password Policy - Change Error Message
3-11320516031	21824799	SMS	Unable to create BCD domain
3-11548493531	22045849	SMS	SMS Alarm Type IDs need fixing for proper SNMP traps management
3-11646246121	22155098	TOOLS	Slpit tool issues with NCC 5.0.3
3-10216955801	20477804	USSD_GW	How to access untruncated value of USSDGW dialledString from a control plan
3-11346105821	21814721	XMS	SIP URI & TEL URI parsing issue

About Convergent Charging Controller Documentation

Where to Start

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.

Installation and Configuration Guides

The following table lists the primary installation and configuration guides.

Guide Title	File Name
Advanced Control Services Technical Guide	ccc_60_acs_tg.pdf
Advanced Control Services User's Guide	ccc_60_acs_ug.pdf
Concepts	ccc_60_concepts.pdf
Configuration User's guide	ccc_60_configuration_ug.pdf
Control Plan Editor User's Guide	ccc_60_cpe_ug.pdf
Configuration User's guide	ccc_60_configuration_ug.pdf
Feature Nodes Reference Guide	ccc_60_feature_nodes_rg.pdf
High Availability Operations Guide	ccc_60_high_availability_og.pdf

Guide Title	File Name
Installation Guide	ccc_60_installation.pdf
Release Notes	ccc_60_release_notes.pdf
Service Logic Execution Environment Technical Guide	ccc_60_slee_tg.pdf
System Administrator's Guide	ccc_60_sysadmin.pdf
Testing Utilities User's Guide	ccc_60_testing_utilities_ug.pdf

External Provisioning Interface Guides

The following table lists the external Provisioning Interface guides.

Guide Title	File Name
ACS Provisioning Interface Commands	ccc_60_acs_pi_commands_og.pdf
CCS Provisioning Interface Commands	ccc_60_ccs_pi_commands_og.pdf
MM Provisioning Interface Commands	ccc_60_mm_pi_commands_og.pdf
NP Provisioning Interface Commands	ccc_60_np_pi_commands_og.pdf
Provisioning Interface User's and Technical Guide	ccc_60_pi_utg.pdf
VPN Provisioning Interface Commands	ccc_60_vpn_pi_commands_og.pdf

Charging and Control Management Guides

The following table lists the primary charging and control guides.

Guide Title	File Name
Charging Control Services Technical Guide	ccc_60_ccs_tg.pdf
Charging Control Services User's Guide	ccc_60_ccs_ug.pdf
Voucher Manager Technical Guide	ccc_60_voucher_mgmt_tg.pdf
Voucher Manager User's Guide	ccc_60_voucher_mgmt_ug.pdf
Voucher Print Shop Operations Guide	ccc_60_voucher_print_shop_og.pdf

Messaging Manager Guides

The following table lists the primary messaging manager guides.

Guide Title	File Name
Messaging Manager Navigator Technical Guide	ccc_60_mm_navigator_tg.pdf
Messaging Manager Technical Guide	ccc_60_messaging_manager_tg.pdf
Messaging Manager User's Guide	ccc_60_mm_message_mgmt_ug.pdf

Number Services Manager Guides

The following table lists the primary numbering manager guides.

Guide Title	File Name
Number Portability Service Pack Technical Guide	ccc_60_np_service_pack_tg.pdf
Number Portability Service Pack User's Guide	ccc_60_np_service_pack_ug.pdf

Reference Guides

The following table lists the reference guides to use for Oracle Communications Convergent Charging Controller:

Guide Title	File Name
Advanced Control Services Alarms Guide	ccc_60_acs_ag.pdf
BRM Charging Driver Alarms Guide	ccc_60_brm_charging_driver_ag.pdf
CAP3GPRS Control Agent Alarms Guide	ccc_60_cap3_gprs_ctrl_agent_ag.pdf
CAP3 SMS Gateway Alarms Guide	ccc_60_cap3_sms_gateway_ag.pdf
CDMA U-CA-IS41 Alarms Guide	ccc_60_cdma_u_ca_is41_ag.pdf
Charging Control Services Alarms Guide	ccc_60_ccs_ag.pdf
Data Access Pack Alarms guide	ccc_60_dap_ag.pdf
Diameter Charging Driver Alarms Guide	ccc_60_dcd_ag.pdf
Diameter Control Agent Alarms guide	ccc_60_dca_ag.pdf
ENUM Control Agent Alarms Guide	ccc_60_enum_ag.pdf
Event Detail Record Reference Guide	ccc_60_edr_rg.pdf
Location Capabilities Pack Alarms Guide	ccc_60_lcp_ag.pdf
Messaging Manager Alarms Guide	ccc_60_mm_ag.pdf
Messaging Manager Navigator Alarms Guide	ccc_60_mm_navigator_ag.pdf
NP Service Pack Alarms Guide	ccc_60_np_service_pack_ag.pdf
Open Services Development Alarms Guide	ccc_60_osd_ag.pdf
Provisioning Interface Alarms Guide	ccc_60_pi_ag.pdf
Radius Control Agent Alarms Guide	ccc_60_rca_ag.pdf
Roaming Alarms Guide	ccc_60_roaming_ag.pdf
Sample Message Flows Reference Guide	ccc_60_msg_flows_rg.pdf
Security Guide	ccc_60_security_rg.pdf
Service Logic Execution Environment Alarms Guide	ccc_60_slee_ag.pdf
Service Management System Alarms Guide	ccc_60_sms_ag.pdf
Session Control Agent Alarms Guide	ccc_60_sca_ag.pdf
Short Message Charging Bundle Alarms Guide	ccc_60_sm_charging_ag.pdf
SIGTRAN Alarms Guide	ccc_60_sigtran_tcap_if_ag.pdf
SMS Center Alarms Guide	ccc_60_sms_center_ag.pdf
SMS Email Interface Alarms Guide	ccc_60_sei_ag.pdf
Subscriber Event Service Alarms Guide	ccc_60_ses_ag.pdf
Universal Call Agent for ISUP Alarms Guide	ccc_60_uca_for_isup_ag.pdf
USSD Gateway Alarms Guide	ccc_60_ussd_gw_ag.pdf
Web Services Description Language Reference Guide	ccc_60_wsdl_rg.pdf

Other Components Guides

The following table lists the guides for other components.

Guide Title	File Name
BRM Charging Driver Technical Guide	ccc_60_brm_charging_driver_tg.pdf
CAP3GPRS Control Agent Technical Guide	ccc_60_cap3_gprs_ctrl_agent_tg.pdf
CAP3 SMS Gateway Technical Guide	ccc_60_cap3_sms_gateway_tg.pdf
Data Access Pack User's and Technical Guide	ccc_60_dap_utg.pdf

Guide Title	File Name
Diameter Control Agent Technical Guide	ccc_60_dca_tg.pdf
Diameter Charging Driver Technical Guide	ccc_60_dcd_tg.pdf
EDR Control Agent Technical Guide	ccc_60_eca_tg.pdf
ENUM Control Agent User's and Technical Guide	ccc_60_enum_utg.pdf
Location Capabilities Pack Technical Guide	ccc_60_lcp_tg.pdf
Location Capabilities Pack User's Guide	ccc_60_lcp_ug.pdf
Notification Gateway Technical Guide	ccc_60_ngw_tg.pdf
Open Services Development User's and Technical Guide	ccc_60_osd_ug_tg.pdf
Radius Control Agent Technical Guide	ccc_60_rca_tg.pdf
Radius Control Agent User's Guide	ccc_60_rca_ug.pdf
Roaming Technical Guide	ccc_60_roaming_tg.pdf
Service Management System Technical Guide	ccc_60_sms_tg.pdf
Service Management System User's Guide	ccc_60_sms_ug.pdf
Session Control Agent Technical Guide	ccc_60_sca_tg.pdf
Short Message Charging Bundle User's and Technical Guide	ccc_60_sm_charging_utg.pdf
SIGTRAN Technical Guide	ccc_60_sigtran_tcap_if_tg.pdf
SMS Center Technical Guide	ccc_60_sms_centre_tg.pdf
SMS Email Interface Technical Guide	ccc_60_sei_tg.pdf
Subscriber Event Service User's and Technical Guide	ccc_60_ses_utg.pdf
Universal Call Agent for ISUP Technical Guide	ccc_60_uca_for_isup_tg.pdf
USSD Gateway Technical Guide	ccc_60_ussd_gw_tg.pdf
USSD Gateway User's Guide	ccc_60_ussd_gw_ug.pdf
Virtual Private Network Technical Guide	ccc_60_vpn_tg.pdf
Virtual Private Network User's Guide	ccc_60_vpn_ug.pdf
Voucher and Wallet Server Technical Guide	ccc_60_vws_tg.pdf
XML TCAP Interface Technical Guide	ccc_60_tcap_if_tg.pdf

Protected Guide

SDK Developer's Guide is in the separate Oracle Communications Convergent Charging Controller Developer Pack. A password is required to download this media pack.

Guide Title	File Name
SDK Developer's Guide	ccc_60_sdk_dev_guide.pdf

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 Manual*.