

Oracle® Communications Network Charging and Control

Diameter Charging Driver Alarms Guide



Release 15.1

April 2025

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

Copyright

Copyright © 2025, 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, Java, and MySQL 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

Alarm Topic Description1

Diameter Charging Driver Alarms3

Alarm Topic Description

Alarm Generation

Alarms on each configured node are written to the syslog and are then captured by the smsAlarmDaemon for entry in the SMF database.

For management of these alarms, see *Service Management System Technical Guide*.

Severity Levels

This table describes the alarm severity levels.

Level	Abbreviation	Description
Critical	C	These alarms are raised when the application has encountered an error indicating that the system is unable to function.
Error	E	These alarms indicate the application has encountered a serious problem completing a necessary task and could not complete the task.
Warning	W	Warnings are raised to indicate the application encountered a problem completing a non-mission critical task.
Notice	N	Notices are raised to indicate that the application has completed a task successfully.

Alarm Format

Alarms usually follow this format:

```
Mon DD 24:MM:SS hostname process name: [ID alarmID user.severity] process(PID)
SEVERITY: Alarm text with possible variables
```

Where:

Variable	Description
Mon DD	Month and date the alarm was logged.
24:MM:SS	Time the alarm was logged in 24 hour format.
hostname	Name of the machine on which the alarm was generated.
process name	Name of the process which logged the alarm.
alarmID	ID number of the alarm.
severity	Alarm severity.
process	Name of the process which logged the alarm.
PID	Process ID of the process which logged the alarm.
SEVERITY	Alarm severity.
Alarm text	Alarm text. This may include variables such as node number. Note: In some cases, the entire alarm text is generated from variables.

Note: Some alarms from some subsystems may have a different format.

Example: This text shows an smsMaster alarm about pending update queues.

```
Mar 30 13:34:54 prodsmpl smsMaster: [ID 953149 user.warning] smsMaster(17833)
WARNING: Pending queue now above 15 (Worst Node 317)
```

Alarm Text and Variables

The %d and %s symbols represent variables within the alarm text. These values are generated by the subsystem and added to the message when the alarm is raised.

Usually the %d is a number and the %s is text in the context of the message to complete the alarm message. Occasionally other % symbols are also used (for example, %u) for different variables.

Further Information

For more information about:

- The SMS Alarms subsystem, see *Service Management System Technical Guide*
- Creating and maintaining the SMS Alarm Relay rule set, see *Service Management System User's Guide*

Diameter Charging Driver Alarms

Alarm	Severity	Text	Cause	Resolution	Service
970001	WARNING	\{970001\}	The program is exiting because it received a SLEE management event instructing it to.	Normal operation. No action required.	diameterBeClient
970002	CRITICAL	\{970002\}	The diameterBeClient failed to attach to the SLEE.	Check SLEE configuration. Check that the diameterBeClient is being correctly started as a sub-process of sleeStart.	diameterBeClient
970003	ERROR	\{970003\}	The program has received an unexpected SLEE event.	Check that SLEE interface names and keys have been configured correctly. In particular, check that no other applications are incorrectly configured to send events to the diameterBeClient. Contact Oracle Communications support.	diameterBeClient
970004	ERROR	\{970004\}	An error answer message was too large to send over the SLEE.	Contact Oracle Communications support.	diameterBeClient
970005	CRITICAL	\{970005\}	The diameterBeClient failed to load a configuration at start-up. It cannot continue.	Check and correct configuration.	diameterBeClient
970006	ERROR	\{970006\}	The diameterBeClient failed to re-load its configuration.	Check and correct configuration. Contact Oracle Communications support.	diameterBeClient
970007	CRITICAL	\{970007\}	The diamActions library failed to load configuration at start-up. It cannot continue.	Check and correct configuration.	slee_acs

Alarm	Severity	Text	Cause	Resolution	Service
970008	CRITICAL	\{970008\}	The named section could not be found in the configuration file. The DCD Actions cannot be initialised.	Check and correct configuration.	diameterBeClient
970011	NOTICE	\{970011\}	The configuration has been loaded correctly.	No action required.	slee_acs
970012	CRITICAL	\{970012\}	The diamActions library failed to load configuration at start-up. It cannot continue.	Check and correct configuration.	slee_acs
970013	NOTICE	\{970013\}	The diameterBeClient configuration is logged at start-up, for your convenience.	Normal operation. No action required.	diameterBeClient
970014	WARNING	\{970014\}	The diamActions library failed to reload configuration on receipt of a reload configuration signal. The previous configuration will be used instead.	Check and correct configuration.	slee_acs
970015	ERROR	\{970015\}	The diamActions library received an invalid message from slee_acs.	Contact Oracle Communications support.	slee_acs
970016	ERROR	\{970016\}	The diamActions library received an invalid message from slee_acs.	Contact Oracle Communications support.	slee_acs
970017	ERROR	\{970017\}	The diamActions library received an invalid message from slee_acs.	Contact Oracle Communications support.	slee_acs

Alarm	Severity	Text	Cause	Resolution	Service
970018	ERROR	\{970018\}	The diamActions library received an invalid message from slee_acs.	Contact Oracle Communications support.	slee_acs
970019	ERROR	\{970019\}	The diamActions library received an invalid message from slee_acs.	Contact Oracle Communications support.	slee_acs
970020	NOTICE	\{970020\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970021	NOTICE	\{970021\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970022	NOTICE	\{970022\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970023	NOTICE	\{970023\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970024	NOTICE	\{970024\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970025	NOTICE	\{970025\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970026	NOTICE	\{970026\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970027	NOTICE	\{970027\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient

Alarm	Severity	Text	Cause	Resolution	Service
970028	NOTICE	\{970028\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970029	NOTICE	\{970029\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970030	NOTICE	\{970030\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970031	NOTICE	\{970031\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970032	NOTICE	\{970032\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970033	NOTICE	\{970033\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970034	NOTICE	\{970034\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970035	NOTICE	\{970035\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970036	NOTICE	\{970036\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970037	NOTICE	\{970037\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient

Alarm	Severity	Text	Cause	Resolution	Service
970038	NOTICE	\{970038\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970039	NOTICE	\{970039\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970040	NOTICE	\{970040\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970041	NOTICE	\{970041\}	The dcd client statistics interval has finished, and stats are reported.	Normal operation. No action required.	diameter BeClient
970050	ERROR	\{970050\}	The diamActions library failed to register itself with slee_acs. Probably the result of a binary mismatch.	Contact Oracle Communications support.	slee_acs
970051	ERROR	\{970051\}	The diamActions library failed to find a necessary configuration manager. Probably the result of a binary mismatch.	Contact Oracle Communications support.	slee_acs
970052	ERROR	\{970052\}	A mismatch between the domain types on the SMP database and the eserv.config file exists.	Either remove the domain type from the eserv.config file, or add it to the SMF database.	slee_acs
970053	ERROR	\{970053\}	The mentioned AVP references a ccsConcept that does not exist.	Either remove the ccsConcept label, or correct it.	slee_acs
970054	ERROR	\{970054\}	The mentioned AVP references a profile block with an illegal value.	Correct the profileBlock entry for the mentioned AVP.	slee_acs
970055	ERROR	\{970055\}	The mentioned AVP references a profile format that is not understood.	Correct the profileFormat entry for the mentioned AVP.	slee_acs

Alarm	Severity	Text	Cause	Resolution	Service
970056	WARNING	\{970056\}	The mentioned AVP references a diameter format type that is not understood.	Correct the type entry for the mentioned AVP to match one of the AVP types mentioned in the manual.	slee_acs
970057	ERROR	\{970057\}	The AVP configuration section was not able to be understood.	Correct the AVPMapping section. Check for syntax errors and compare with the example mentioned in the manual.	slee_acs
970058	ERROR	\{970058\}	While adding the configurable AVPs to the outbound CCR, a parameter declared as mandatory could not be obtained.	Either change the call plan so that the parameter is available at the time of message construction, or correct the AVPMapping section, making the parameter optional.	slee_acs
970059	WARNING	\{970059\}	While adding the configurable AVPs to the outbound CCR, a parameter declared as a diameter format type that is not understood. The AVP was not included in the outbound request.	Correct the type entry for the mentioned AVP to match one of the AVP types mentioned in the manual.	slee_acs
970060	ERROR	\{970060\}	The named event to eventType configuration is incorrect.	Correct the event type entry in the eserv.config file.	slee_acs
970061	ERROR	\{970061\}	The diamActions library was called with a service domain type that did not match anything in the eserv.config file.	Correct the domainTypes array (in the DCD section) of the eserv.config file.	slee_acs
970062	ERROR	\{970062\}	The diamActions library was called with a service domain type that did not match anything in the eserv.config file.	Correct the domainTypes array (in the DCD section) of the eserv.config file.	slee_acs

Alarm	Severity	Text	Cause	Resolution	Service
970063	ERROR	\{970063\}	The diamActions library was called with a service domain type that did not match anything in the eserv.config file.	Correct the domainTypes array (in the DCD section) of the eserv.config file.	slee_acs
970064	ERROR	\{970064\}	The diamActions library was unable to handle a dialog closed event from the be client.	Try tracing a similar call to examine the debug. Contact support.	slee_acs
970065	ERROR	\{970065\}	The conversion factor to apply to the mentioned AVP is too extreme for CCS.	Consider using a different scale, or AVP type.	slee_acs
970066	WARNING	\{970066\}	An AVP type was configured for an avp code that disagrees with RFC 4006.	Only the type mentioned in RFC 4006 is available for this avpCode. Consider using a vendor specific id for this code.	slee_acs
970067	ERROR	\{970067\}	An AVP octetLength was configured to a number of bytes greater than 4.	For variable length (ascii like) encoding, 0 should be used. For integer like encoding 4 is the maximum allowed.	slee_acs
970068	ERROR	\{970068\}	The eserv.config file has a syntax error in the DIAMETER.routes section.	Correct the eserv.config file so the a routes section is present, and syntactically correct.	slee_acs
970069	WARNING	\{970069\}	The eserv.config file does not define a route to a realm that is specified in the database.	Add the necessary route in the DIAMETER.routes section, if outgoing CCRs to this realm are desired.	slee_acs
970070	ERROR	\{970070\}	The eserv.config file has a syntax error in the AVP section.	Make sure the repeating option is set to true if the maxOccurrences option is set to more than 1.	slee_acs
970071	ERROR	\{970071\}	The eserv.config file has a syntax error in the AVP section.	Make sure all cdrTags consist of alphanumeric and underscore characters only.	slee_acs

Alarm	Severity	Text	Cause	Resolution	Service
970072	ERROR	\{970072\}	The eserv.config file has a syntax error in the AVP section.	Make sure all cdrOperations are one of: replace/append/leave.	slee_acs
970073	ERROR	\{970073\}	The base interpretation supplied is greater than 36.	Consider using a different base, concept, or AVP type.	slee_acs
970100	ERROR	\{970100\}	The diamActions library received a non diameter message from an interface.	Check and correct SLEE.cfg configuration.	slee_acs
970101	ERROR	\{970101\}	The diamActions library received an invalid diameter message.	Check and correct SLEE.cfg configuration. Also check content and format of messages sent from the billing enging.	slee_acs
970200	NOTICE	\{970200\}	The diamActions library received an invalid message from slee_acs.	Contact Oracle Communications support.	slee_acs
970201	ERROR	\{970201\}	The diamActions library could not find the AVP Config for this ServiceDomainType.	Check and correct eserv.config file. Ensure a AVPs section exist for this domain type.	slee_acs
970210	NOTICE	\{970210\}	The diamActions library received an invalid message from slee_acs.	Contact Oracle Communications support.	slee_acs
970211	ERROR	\{970211\}	The diamActions library could not find the AVP Config for this ServiceDomainType.	Check and correct eserv.config file. Ensure a AVPs section exist for this domain type.	slee_acs
970220	NOTICE	\{970220\}	The diamActions library received an invalid message from slee_acs.	Contact Oracle Communications support.	slee_acs
970221	ERROR	\{970221\}	The diamActions library could not find the AVP Config for this ServiceDomainType.	Check and correct eserv.config file. Ensure a AVPs section exist for this domain type.	slee_acs

Alarm	Severity	Text	Cause	Resolution	Service
970231	ERROR	\{970231\}	An exception occurred in a series of Diameter put_xxx() calls while creating a request AVP.	Can be triggered by invalid/inconsistent AVP mappings. Contact Oracle Communications support if required.	slee_acs
970232	ERROR	\{970232\}	An exception occurred in a series of Diameter get_xxx() calls while parsing a response AVP.	Can be triggered by invalid/inconsistent AVP mappings. Contact Oracle Communications support if required.	slee_acs
970233	ERROR	\{970233\}	A fatal exception occurred while parsing a response AVP, which prevented further processing of this message.	Can be triggered by invalid/inconsistent AVP mappings, or excessively large values. Contact Oracle Communications support if required.	slee_acs
970240	NOTICE	\{970240\}	The diamActions library received an invalid message from slee_acs.	Contact Oracle Communications support.	slee_acs
970241	ERROR	\{970241\}	The diamActions library could not find the AVP Config for this ServiceDomainType.	Check and correct eserv.config file. Ensure a AVPs section exist for this domain type.	slee_acs
970242	WARNING	\{970242\}	An AVP configured as a mandatory sub-AVP of another grouped AVP was not defined in the configuration file.	Check and correct eserv.config file. Ensure an AVP section exists for this AVP or remove it from the list of mandatory AVPs in the referring AVP definition if it is not required.	slee_acs
970243	WARNING	\{970243\}	An AVP configured as an optional sub-AVP of another grouped AVP was not defined in the configuration file.	Check and correct eserv.config file. Ensure an AVP section exists for this AVP or remove it from the list of optional AVPs in the referring AVP definition if it is not required.	slee_acs

Alarm	Severity	Text	Cause	Resolution	Service
970244	WARNING	\{970244\}	An AVP configured as an ARRAY profileFormat has more than 1 mandatory sub-AVP defined in the configuration file.	Check and correct eserv.config file. Ensure that any AVP defined as an ARRAY profileFormat has only one sub-AVP in the list of mandatory AVPs in the referring AVP definition. Definitions with more than one mandatory AVP are not fully supported.	slee_acs
970245	ERROR	\{970245\}	An error occurred while building a request AVP containing a group structure, which prevented further processing of this message.	Can be triggered by invalid/inconsistent/unsupported AVP mappings that contain group structures. See Alarm 970244 for possible corrective measures. Contact support if required.	slee_acs
970246	ERROR	\{970246\}	An error occurred while parsing a response AVP containing a group structure, which prevented further processing of this message.	Can be triggered by invalid/inconsistent/unsupported AVP mappings that contain group structures. See Alarm 970244 for possible corrective measures. Contact support if required.	slee_acs