

Oracle® Communications Convergent Charging Controller ENUM Control Agent Alarms Guide



Release 15.0.0

October 2023

The Oracle logo, consisting of the word "ORACLE" in white, uppercase, sans-serif font, positioned on a solid red rectangular background.

ORACLE®

Copyright

Copyright © 2023, 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 Description 1

ENUM Control Agent Alarms.....3

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*

ENUM Control Agent Alarms

Alarm	Severity	Text	Cause	Resolution	Service
1110001	WARNING	%z Invalid DNS request received from %s %d (message too short). Discarding.	DNS query message received from the client (IP address) is too short to be correct.	Calling party may need to check the message or means through which the message is sent.	ENUM
1110002	WARNING	%z DNS Request from client %s %d has been refused due to: Client address not in accepted list.	The incoming request was refused because the client is not in the allowed list of incoming clients.	If it is required for that client to communicate then add IP address to allowed client list.	ENUM
1110003	WARNING	%z DNS Request from client %s %d has been refused due to: Maximum concurrent queries reached (%d).	The connection has been refused because the maximum number of concurrent requests has been met.	Increase the maximum number of connections or re-send request later when server load has decreased.	ENUM
1110004	WARNING	%z DNS Request from client %s %d has been rejected due to: Query content invalid.	Client DNS NAPTR query was invalid.	Check the client query to ensure it complies with the NAPTR and DNS standards. (RFCs 2915 \& 1035)	ENUM
1110005	WARNING	%z DNS Request from client %s %d has been rejected due to: Query is for non-NAPTR data.	The query is for another non-NAPTR record type.	Change query to request NAPTR records only.	ENUM
1110006	WARNING	%z DNS Request from client %s %d has been rejected due to: Query qname is empty.	The query sent is blank/empty.	Check the query sent has a valid question section.	ENUM
1110007	WARNING	%z DNS Request from client %s %d has been rejected due to: No appropriate service configured to process this query.	No appropriate service trigger rule has been configured for the query.	Create a service trigger rule for the client request.	ENUM

Alarm	Severity	Text	Cause	Resolution	Service
1110008	ERROR	%z DNS Request from client %s %d has been rejected due to: Could not open a dialog to triggered service (%d).	Failed to create a SLEE dialog to the trigger rules service key.	Check SLEE is running correctly and check appropriate logs.	ENUM
1110009	ERROR	%z DNS Request from client %s %d has been rejected due to: Could not send event to triggered service (%d).	Failed to send event on SLEE dialog.	Check SLEE is running correctly and check appropriate logs.	ENUM
1110010	ERROR	%z Failed to process DNS request for %s %d, received from %s %d. Reason: %s %d.	The dialog was closed or timed out.	Check SLEE and ENCA logs. In event of timeout try resending request when server load has decreased.	ENUM
1110011	ERROR	%z ENCA failed to register UDP DNS socket: %s %d:%d, reason: %s %d	The configured socket could not be bound.	Check that the port is not privileged (not <1024), or not in use.	ENUM
1110012	NOTICE	%z UDP port %d is privileged (<%d). The ENCA must be run as root to open this port.	Information only.	No resolution.	ENUM
1110013	ERROR	%z ENCA failed to register TCP DNS socket: %s %d:%d, reason: %s %d	The configured socket could not be bound.	Check that the port is not privileged (not <1024), or not in use.	ENUM

Alarm	Severity	Text	Cause	Resolution	Service
1110014	NOTICE	%z TCP port %d is privileged (<%d). The ENCA must be run as root to open this port.	Information only.	No resolution.	ENUM
1110015	ERROR	%z DNS request from client %s %d has been rejected due to: %s %d.	Request rejected for the specified reason in the alarm (unsupported INAP, TCAP or SLEE type in response).	Check the internal ACS reply to why an unsupported message was returned.	ENUM
1110016	ERROR	%z DNS Request from client %s %d has been rejected due to: Service response is not dynamic, or is malformed.	The applicable ENCA trigger rule expected dataType as DYNAMIC, but the response could not be interpreted as DYNAMIC record data.	Check the ACS response, or change the triggerRule dataType to either URI or NAPTR as appropriate.	ENUM
1110017	NOTICE	%z Service encountered a problem while processing DNS request for %s %d from %s %d. Release cause: %d.	Information only.	No resolution.	ENUM

Alarm	Severity	Text	Cause	Resolution	Service
1110018	CRITICAL	%z Unable to find configuration file.	ENCA could not find the ENUM config file.	Check the config file exists and is in the correct location.	ENUM
1110019	CRITICAL	%z Error reading configuration file. (Exception: %s %d)	ENCA could not read the config file.	Check reason in message and ensure file permissions are set correctly. Check all config entries are formatted correctly.	ENUM
1110020	CRITICAL	%z Config section \"%s %d\" not found.	ENCA could not find the specified config section.	Add specified config section to file.	ENUM
1110021	NOTICE	%z Received SIGINT signal. Shutting down.	Information only.	No resolution.	ENUM
1110022	NOTICE	%z Received SIGTERM signal. Shutting down.	Information only.	No resolution.	ENUM
1110023	CRITICAL	%z Error installing SIGPIPE handler: %s %d	Error registered application signal handle.	Check operating system integrity and restart the SLEE.	ENUM
1110024	CRITICAL	%z Error installing SIGINT handler: %s %d	Error registered application signal handle.	Check operating system integrity and restart the SLEE.	ENUM
1110025	CRITICAL	%z Error installing SIGTERM handler: %s %d	Error registered application signal handle.	Check operating system integrity and restart the SLEE.	ENUM
1110026	CRITICAL	%z Error reading configuration file: %s %d	Failed to read the config file.	Check previous error messages to determine cause.	ENUM
1110027	CRITICAL	%z ENCA Configuration validity check failed. Reason: %s %d	Failed on validation of the config file.	Check the cause in the error message, and edit the config file appropriately.	ENUM

Alarm	Severity	Text	Cause	Resolution	Service
1110028	WARNING	%z Slee management event could not be processed (type: %d)	A SLEE management event of unknown type was sent to the ENCA interface	Check compatibility between the ENUM and SLEE installations.	ENUM
1110029	WARNING	%z Slee non-management event could not be processed (type: %s %d)	A SLEE event of unknown type was sent to the ENCA interface	Check enca and SLEE logs for possible cause.	ENUM
1110030	NOTICE	%z ENCA application started	Information only.	No resolution.	ENUM
1110031	CRITICAL	%z ENCA Initialisation Failed. Check log for details.	ENCA failed to initialise.	Check previous error messages for cause.	ENUM
1110032	NOTICE	%z ENCA application shutting down	Information only.	No resolution.	ENUM
1110033	CRITICAL	%z Exception propogated up to main() with message: %s %d	ENCA unhandled/unexpected exception caught.	Check exception details for possible resolution.	ENUM
1110034	NOTICE	%z ENCA aborting	Information only.	No resolution.	ENUM
1110035	CRITICAL	%z Exception propogated up to main() of an unknown type!	ENCA unhandled/unexpected exception caught.	No resolution.	ENUM
1110036	ERROR	%z Failed to process call-out request for %s %d. Reason: %s %d.	The SLEE dialog was closed (due to timeout or another reason).	Check SLEE/ACS logs for cause. In event of timeout try resending request when server load has decreased.	ENUM
1110037	WARNING	%z Unable to process call out request. Maximum total queries met (%d).	The connection has been refused as the maximum number of concurrent requests has been met.	Increase the maximum number of connections or re-send request later when server load has decreased.	ENUM
1110038	WARNING	%z Unable to process call out request. Request contains no number.	The request sent does not contain any number.	Check the callout node data to ensure a number is being sent.	ENUM

Alarm	Severity	Text	Cause	Resolution	Service
1110039	WARNING	%z Unable to process call out request. Domain is invalid (%s %d).	The domain in query is invalid.	Check the format of the domain is valid (see RFC 1035, section 2.3.1).	ENUM
1110040	WARNING	%z Unable to process call out request. Error converting number to FQDN.	The number specified cannot be converted to a FQDN	Check log for specific reason, ensure number is valid as e.164.	ENUM
1110041	WARNING	%z Call-out query for %s %d completed but contains no answers.	Unexpected or malformed response from external DNS.	Check that the applicable, external DNS server is appropriate for NAPTR queries.	ENUM
1110042	WARNING	%z Call-out query for %s %d completed but the server claims that the query was malformed.	Error response from external DNS	Check that the applicable, external DNS server is appropriate for NAPTR queries, and that the request sent is correct.	ENUM
1110043	WARNING	%z Call-out query for %s %d completed but the server claims to have experienced a failure.	Error response from external DNS	Retry the request, or remove this server from the configured list of call-out servers.	ENUM
1110044	WARNING	%z Call-out query for %s %d completed but the queried-for domain name was not found.	Error response from external DNS	Not an error - the external DNS server has no knowledge of the requested number and domain.	ENUM
1110045	WARNING	%z Call-out query for %s %d completed but the server does not implement the operation requested by the query.	Error response from external DNS	The external DNS server does not support NAPTR queries. Remove it from the configured list of call-out servers.	ENUM
1110046	WARNING	%z Call-out query for %s %d completed but the server refused the query.	Error response from external DNS	The external DNS server refused the call-out query. Remove it from the configured list of call-out servers.	ENUM

Alarm	Severity	Text	Cause	Resolution	Service
1110047	WARNING	%z Call-out query name %s %d could not be encoded as a domain name, either because it contains a zero-length label or because it contains a label of more than 63 characters.	The encoded query number+domain is invalid as a domain name.	Check that the number and domain being used by the call-out node are correct.	ENUM
1110048	WARNING	%z Call-out query for %s %d has timed out.	Call-out DNS query has timed out without a response.	Increase the timeout period or resend the request.	ENUM
1110049	WARNING	%z Call-out query for %s %d failed. No name servers could be contacted.	No call-out DNS servers could be contacted.	Check configured call-out server list.	ENUM
1110050	WARNING	%z Call-out query for %s %d failed. Memory was exhausted.	A call-out request could not be fulfilled as the system is out of memory.	Check all processes memory usage.	ENUM
1110051	WARNING	%z Call-out query for %s %d failed. Unknown error.	Call-out request has failed for an unknown reason.	Retry the request.	ENUM
1110052	ERROR	%z failed to send SLEE event: %s %d	Failed to send response back to call-out node.	Check SLEE is running and view logs for specific cause.	ENUM
1110053	ERROR	%z Failed to process call-out request. Reason: Dialog no longer active.	SLEE dialog no longer active.	Retry the request.	ENUM
1110054	ERROR	%z Compile Pattern error %s %d (%d) on pattern %s %d	Regular expression failed to parse.	Check system stability and restart the ENCA.	ENUM
1110055	ERROR	%z %s %d() : Failed to retrieve nodePtr, disconnecting call.	Internal slee_acs error.	Check system stability, restart slee_acs and retry.	ENUM
1110056	ERROR	%z failed to initialise macro-node with fast-key %s %d	Could not register the macronode.	Check ENUM package installation and restart SLEE.	ENUM

Alarm	Severity	Text	Cause	Resolution	Service
1110057	ERROR	%z failed to register macro-node with fast-key %s %d	Could not register the macronode.	Check ENUM package installation and restart SLEE.	ENUM
1110058	CRITICAL	%z ECA Call Out macro-node: could not lookup ENUM chassis action handler	Failed to locate ENUM chassis action handler.	Check that acs.conf contains an entry for the enumMacroNodes library.	ENUM
1110059	ERROR	%z ECA Call Out macro-node: could not read configuration: %s %d	Could not read the config file.	Check the config file is present and correct.	ENUM
1110060	ERROR	%z ECA Call Out macro-node: empty interfaceHandles list.	Empty interface handle list in the config file.	Check the config file for the interfaceHandles list and add a valid ENCA interface name.	ENUM
1110061	CRITICAL	%z ECA Call Out macro-node: could not retrieve node pointer	Cannot retrieve pointer to macronode.	Check system stability, restart slee_acs and retry.	ENUM
1110062	ERROR	%z ECA Call Out macro-node: unable to obtain interface handle %s %d %s %d	Failed to obtain an interface handle for specified interface.	Check the applicable interface is running and that the configuration is correct.	ENUM
1110063	WARNING	%z ECA Call Out node rejected request (All available SLEE queue lengths exceeded %d)	Cannot find unburdened interface to which the request can be sent.	Resend the request when activity reduces, or increase maxQueueLength.	ENUM
1110064	WARNING	%z ECA Call Out macro-node: response from ECA interface has been truncated.	Response from DNS is larger than supported so has been truncated.	No resolution.	ENUM
1110065	CRITICAL	%z ECA Call Out macro-node: invoked with invalid state %d	Internal slee_acs error.	Check system stability, restart slee_acs and retry.	ENUM

Alarm	Severity	Text	Cause	Resolution	Service
1110067	WARNING	%z acsEngine: acsEnumNaptrResponse: Unable to extract value from input string.	The input NAPTR string is invalid or empty.	Check that the input to the node is valid NAPTR data, or that this NAPTR node follows an ENUM Call Out node.	ENUM
1110068	WARNING	%z acsEngine: acsEnumNaptrResponse: Unable to parse non-NAPTR records.	A non-NAPTR record has been passed into the NAPTR node.	Check that the input to the node is valid NAPTR data, or that this NAPTR node follows an ENUM Call Out node.	ENUM
1110069	WARNING	%z acsEngine: acsEnumNaptrResponse: Unable to parse NAPTR records.	Parsing of the input NAPTR (or non-NAPTR) record has failed.	Check that the input to the node is valid NAPTR data, or that this NAPTR node follows an ENUM Call Out node.	ENUM
1110070	WARNING	%z acsEngine: acsEnumNaptrResponse: No matching NAPTR record.	No NAPTR records matched the NAPTR nodes search string.	Re-define search string or check NAPTR record data.	ENUM
1110071	WARNING	%z acsEngine: acsEnumNaptrResponse: No matching NAPTR record at the given index	No records at the index specified in NAPTR node configuration.	Check the index specified is correct.	ENUM
1110072	WARNING	%z acsEngine: acsEnumNaptrResponse: Error before writing active record.	Active record to be written is empty.	An empty active record has been selected. If this is unwanted, check NAPTR node search string and index.	ENUM
1110073	WARNING	%z acsEngine: acsEnumNaptrResponse: No AUS in active record.	No AUS data could be found in the active NAPTR record.	Check that the input NAPTR record, search string and index are correct.	ENUM
1110074	WARNING	%z acsEngine: acsEnumNaptrResponse: Error before writing AUS record. No AUS in active record.	No AUS data could be found in the active NAPTR record.	Check that the input NAPTR record, search string and index are correct.	ENUM

Alarm	Severity	Text	Cause	Resolution	Service
1110075	ERROR	%z Compile Pattern error %s %d (%d) on pattern %s %d, node %d	Regular expression failed to parse.	Check system stability and restart the SLEE.	ENUM
1110076	ERROR	%z : unknown action	SLEE execution error.	Check SLEE Configuration.	ENUM
1110077	ERROR	%z : invalid event type	SLEE execution error.	Check SLEE Configuration.	ENUM
1110078	WARNING	%z : unable to reset bound dialog	SLEE execution error.	Check SLEE Configuration.	ENUM