Oracle® Communications Network Charging and Control

Session Control Agent Alarms Guide

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Contents

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 prodsmp1 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*

Session Control Agent

Critical errors

This table defines the Critical error messages for the Session Control Agent.

Alarm Number	Alarm Text	Reason	Remedy
1452	`Failed to initialise C-ARES: ares_init_options() returned %d: %s`	The DNS subsystem was unable to initialize the C-ARES library.	Correct the error and try again.
2004	`Failed to initialise NHP subsystem`	The NHP has failed to initialize. One of the following alarms will also be raised – 2000, 2001 or 2003.	Refer to previous alarm description for cause and resolution.
1451	`gethostbyname() did not return an address of type AF_INET`	The DNS subsystem was unable to retrieve a valid address type for the DNS server.	Make sure the DNS server is contactable from the SLC.
5006	`No "local_ip" specified in coniguration`	The mandatory configuration item, “local_ip”, is missing from the sca configuration file.	Correct the error and try again.
2003	`Read error for NHP rules file : %s`	The NHP rules file cannot be located or read. Either the configured/default file does not exist or the file cannot be read due to a permissions/disk error.	Check the **rules.nhp** file exists and has the correct permissions. Contact support with details.
1500	`%s Transaction state machine error: Invalid transition <%s> in state [%S]`	The state machine has received an invalid transition. The current request will terminate with an error response.	Contact support with details.
5004	`Unable to initialise SLEE IN Call Model`	The SCA was unable to initialize the SLEE IN Call Model, which is the component that allows it to interact with external IN applications such as ACS.	Ensure that your Trigger Detection Point (TDP) definition file is correct or that the TDP_DEFINITIONS environment variable points to an alternative file. **Note:** The default location for the TDP definition file is **/IN/service_packages/SCA/etc/tdp.conf**.
5003	`Unable to read configuration`	The SCA was unable to read the sca section of the sca.config configuration file.	Check the configuration file and make sure it contains an `sca` section with all the mandatory parameters.
1450	`Unable to resolve host name '%s': %s`	The operating system was unable to resolve the DNS server hostname.	Make sure the DNS server is contactable from the SLC. Contact support with details.

Errors

This table defines the Error messages for the Session Control Agent.

Alarm Number	Alarm Text	Reason	Remedy
1200	400 Bad Request : Malformed Syntax	The SCA has received a message that does not contain a valid request line.	Contact support with details.
1203	400 Bad Request : Missing %s header field	The SCA has received a message with missing header fields.	Contact support with details.
1204	400 Bad Request : Corrupt Message	The decoding of the character array into an osip_message_t data structure has failed because of a possibly corrupt message.	Contact support with details.
1202	405 Method Not Allowed : %s	The SCA has received a message that contains a method that it does not support. Allowed methods are: INVITE, ACK, BYE, REGISTER, OPTIONS, MESSAGE and CANCEL.	Contact support with details.
1201	505 Version Not Supported : SIP version number must be 2.0	The SCA has received a message defined for an unsupported version of SIP. The SIP version must be 2.0.	Ensure the SIP client supports SIP 2.0. Contact support with details.
1109	bind(3SOCKET): %s	Unable to bind the name to a socket.	Check accompanying error text. Contact support with details.
1105	connect(3SOCKET): %s	Error with the transport layer. Unable to connect to a remote address.	Check accompanying error text. Contact support with details.
5005	Could not open SLEE dialog to SK %s	The SCA was unable to open a SLEE dialog.	Ensure the service key specified in the **rules.nhp** file or in the **tdp.conf** file is a valid SLEE service key.
1110	fcntl(2): %s	Unable to get/set file descriptor options required for the normal operation of the transport layer.	Check accompanying error text. Contact support with details.
1102	getsockopt (3SOCKET): %s	The transport layer is unable to obtain the options associated with a socket.	Contact support with details.
1100	inet_pton(3SOCKET): %s	The transport layer is unable to convert an IP address from the presentation format to network format.	Contact support with details.
1106	listen(3SOCKET):%s	Unable to listen to connections on a socket.	Check accompanying error text. Contact network admin/support with details.

Alarm Number	Alarm Text	Reason	Remedy
1300	`Message does not allow multipart bodies.`	SLEE error.	Contact support with details.
1502	`Message Not Processed - TransactionFramework: %s`	The last message has not been processed correctly because it was invalid or because the transport layer was invalid. This error is unrecoverable.	Contact support with details.
1503	`No Transaction for Response`	The transaction framework cannot find a current Transaction to handle the response, it will generate a '481 - Transaction Does Not Exist' response that will be sent back to the transport layer.	Contact support with details.
2000	`Parse error for rules file : %s`	The rules file contains a syntax error and cannot be parsed.	Correct the error in the **rules.nhp** file and try again.
1101	`poll(2): %s`	The transport layer is unable to poll if sockets are ready.	Contact support with details.
1108	`recv(3SOCKET): %s`	Unable to read data into buffer sent by remote entity.	Check accompanying error text. Contact support with details.
2001	`Regular expression compile error : %s`	The reported regular expression is invalid and must be corrected before the rules file can be completely parsed.	Correct the error in the **rules.nhp** file and try again.
1107	`send(3SOCKET): %s`	Unable to send messages to the remote entity.	Check accompanying error text. Contact support with details.
1103	`setsockopt (3SOCKET): %s`	The transport layer is unable to set the socket options required for the normal operation of the transport layer.	Contact support with details.
1205	`Sip %s: invalid %s: value '%s'`	The specified header field cannot be set with the specified value. Additional information may be provided in the error text.	Check accompanying error text. Contact support with details.
1104	`socket(3SOCKET): %s`	Unable to obtain an IPv4 socket.	Check accompanying error text. Ensure that the OS limit has not been reached. Contact support with details.
1501	`Transaction subsystem not initialised`	The transaction subsystem was not initialised because of a configuration error.	Correct the error and try again.

Warnings

This table defines the Warning messages for the Session Control Agent.

Alarm Number	Alarm Text	Reason	Remedy
1507	`Invalid transaction configuration : 'esc.timers %s`	A configuration error has occurred, the transaction subsystem will use the appropriate default value.	If the default value is not suitable, correct the error and try again.
2002	`No rule found for request`	There is no method section defined for the request, therefore no rule can be found and no command executed.	Check the host definitions in the **rules.nhp** file.

Notices

This table defines the Notice messages for the Session Control Agent.

Alarm Number	Alarm Text	Reason	Remedy
5002	`Exiting with status 0`	The SCA is terminating normally.	No action is required.
5008	`No NHP Rules Matched`	Next-Hop processing has failed for the number being called. If parallel hunting is being performed, then the alarm is only raised if the next-hop process failed for all the numbers in the hunting list.	Check the **rules.nhp** file to ensure that at least one rule matches one of the numbers being called. Contact support with details.
5001	`SLEE-related functions are disabled`	The SCA was started from the command-line instead of being included in the SLEE configuration file.	For information only. No action is required.
5007	`Remote Commander listening on port %s`	The SCA remote commander is configured to listen on the specified port.	No action is required.
5000	`Starting`	The SCA is starting.	No action is required.
1504	`Timer_B has fired`	Timer B has expired causing the Transaction to timeout. The TU has been informed and the current SIP interaction has failed.	Contact support with details.
1505	`Timer_F has fired`	Timer F has expired causing the Transaction to timeout. The TU has been informed and the current SIP interaction has failed.	Contact support with details.

Alarm Number	Alarm Text	Reason	Remedy
1506	Timer_H has fired	Timer H has expired causing the Transaction to timeout. The TU has been informed and the current SIP interaction has failed.	Contact support with details.

registrar Alarms

Errors

This table defines the Error messages for the registrar.

Alarm Number	Alarm Text	Reason	Remedy
6003	Unknown command line: %s	Command line parameter error.	Check parameters and error output. Contact support with details.
6004	sca.config: %s	**sca.config** error.	Check parameter and error output. Contact support with details.
6008	Startup failed.	Registrar start up failed.	Check error output. Contact support with details.

Notices

This table defines the Notice messages for the registrar.

Alarm Number	Alarm Text	Reason	Remedy
6000	registrar started.	The registrar has started.	Information only, no action required.
6001	registrar stopped.	The registrar has stopped.	Information only, no action required.
6006	sca.config file used: %s	Tells you which configuration file is being used.	Information only, no action required.
6007	sca.cofig section used: %s	Tells you which section in the configuration file is being used.	Information only, no action required.