

Oracle® Communications
Network Charging and Control

NP Service Pack Alarms Guide

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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, refer to *SMS Technical Guide*.

Severity levels

This table describes the alarms severity levels.

Level	Abbr	Description
Critical	C	These alarms are raised when the application has encountered an error which indicates 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 *SMS Technical Guide*
- Creating and maintaining the SMS Alarm Relay rule set, see *SMS User's Guide*

NP Alarms

Warnings

This table defines the warning messages for NP Service Pack.

Error Number	Alarm Text	Reason	Remedy
1	called party Invalid	Length of the called party number violates dnMinimal and dnMaximal configuration. Possible causes are: <ul style="list-style-type: none"> • dnMinimal/Maximal settings not flexible enough for the numbering plans • acs.conf normalization rules incorrect therefore more or less digits reaching the service 	
201	More than 10 active LCR instances	Indicates there are more than 10 LCR node instances in a call plan that has been used in a cascade fashion without all carriers within the instances being exhausted.	
202	Product type action failed	Indicates that the product type action handler was not loaded by CCS	
204	CDR generation failed	Indicates that the CDR interface is not executing.	
205	Problem retrieving rule set from call plan	Indicates that there is a conflict between software versions.	Contact support with details.
208	RD_ID not found %s	An intermittent alarm generated in a window where data on the SMS has changed, but the Mfile has yet to be generated on the SLC. %s = RD_ID name	Repeat the scenario to establish if this is the case. If this is not the case, then check whether a macro node placed in between DS/HR and LCR node has corrupted data in the carrier field. Examine call plan to determine if any nodes have been placed in between these nodes. Contact support with details.
209	RD_ID not found (default) %s	The default id name (stated for DefaultDestination in configuration file) may not be present in the	Check the: <ul style="list-style-type: none"> • NP_ROUTING_DESTINATION table on the SMS/SLC for the

Error Number	Alarm Text	Reason	Remedy
		NP_ROUTING_DESTINATION table, or the NP_ROUTING_DESTINATION mfile was not generated. %s = default RD_ID name	<p>default id name.</p> <ul style="list-style-type: none"> • /IN/service_packages/NP_SERVICE_PACK/DS to establish if NP_ROUTING_DESTINATION_NAME mfile is present. <p>Log on as acs_oper and check if “npMfileRoutingDestinationDaemon –gpna destination” is running. Contact support with details.</p>
211	Rule not found in NP_RULE	<p>Either the:</p> <ul style="list-style-type: none"> • NP_RULE mfile not generated • The call plan is out of date i.e. LCR node contains a rule set name that is no longer in NP_RULE_SET • It is a replication problem 	<p>Check the /IN/service_packages/NP_SERVICE_PACK/LCR to establish if NP_RULE.mfile is present. If not present then log on as acs_oper and check if npMfileRuleDaemon is running. Contact support with details.</p>
212	Error retrieving routing destination name	Indicates the NP_ROUTING_DESTINATION_INDEX mfile was not generated.	<p>Check the /IN/service_packages/NP_SERVICE_PACK/DS to establish if NP_ROUTING_DESTINATION_INDEX.mfile is present. If not present then log on as acs_oper and check if “npMfileRoutingDestinationDaemon –gpna index” is running. Contact support with details.</p>
213	Routing destination name not found	Intermittent alarm generated in a window where data on the SMS has changed, but the Mfile has yet to be generated on the SLC, or the NP_ROUTING_DESTINATION table no longer contains the rd_id that is being looked up	<p>Repeat scenario to establish if this is the case. Contact support with details.</p>
214	Error retrieving carrier %s	NP_CARRIER mfile was not generated. %s = the carrier id	<p>Check whether the NP_CARRIER.mfile is present in /IN/service_packages/NP_SERVICE_PACK/LCR. If not present then log on as acs_oper and check if “npMfileCarrier” is running. Contact support with details.</p>

Error Number	Alarm Text	Reason	Remedy
215	carrier not found %s	Intermittent alarm generated in a window where data on the SMS has changed but Mfile has yet to be generated on the SLC, or the NP_CARRIER table no longer contains the carrier_id that is being looked up due to DB provisioning. %s = the carrier id	Repeat scenario to establish if this is the case. Contact support with details.
217	Preferred format table NoA problem	Processing error for the called or calling number.	Contact support with details.
	Pending Number length	The number of characters in the destination address has exceeded 32 characters.	
300	Statistic generation failure	Statistics not generated.	
302	DN minimal length not found	Indicates that the DNMinimal parameter is incorrectly configured.	Check in the np_components.cfg file to establish if DNMinimal is specified.
303	DN minimal length out of range (minimum 1, less than 32)	Incorrect value set for DN Minimal.	Check the np_components.cfg file to establish whether the DNMinimal value is within the allowable range.
305	DN maximal length out of range	Incorrect value set for DN Maximal	Check the np_components.cfg file to establish whether the DNMaximal is within the allowable range (minimum 1, less than 32, greater or equal than DN minimal length)
306	Internal destination not found	Internal destination not found	Check the np_components.cfg file to establish whether the InternalDestination falls within the allowable range.
307	Internal destination out of range	Incorrect value set for the Internal Destination.	Check the np_components.cfg file to establish whether the InternalDestination set, falls within the allowable range (64 chars maximum).
308	Default routing destination not found	Default routing destination not found.	Check the np_components.cfg file to establish whether the DefaultDestination is within the allowable range.
309	Default routing destination out of range	Incorrect value set for default routing destination.	Check the np_components.cfg file to establish whether the DefaultDestination falls within the allowable range (64 chars

Error Number	Alarm Text	Reason	Remedy
			maximum).
312	DN Maximal before DN Minimal not allowed in configuration file	DN Maximal and DN Minimal incorrectly placed in the configuration file.	Check the <code>np_components.cfg</code> file to establish whether or not the DNMaximal tag is before DNMinimal
313	appID out of range	Incorrect value set for appID.	Check the <code>np_components.cfg</code> file to establish whether the appID is within the allowable range (20 chars maximum).

Notices

This table defines the Notice messages for NP.

Error Number	Alarm Text	Reason	Remedy
304	DN maximal length not found	DNMaximal parameter is incorrectly configured.	Check the <code>np_components.cfg</code> file to establish whether DNMaximal is specified.

MTA Alarms

Critical errors

This table defines the Critical error messages for MTA.

Error Number	Alarm Text	Reason	Remedy
5	Uncaught %s	An unhandled exception has occurred.	Contact support with details.

Errors

This table defines the Error messages for MTA.

Error Number	Alarm Text	Reason	Remedy
16	Unable to create dialog to service key %d	The service key is not configured or it is unavailable.	Check the MTA trigger rules to ensure that the correct service key is being triggered. Check the application listening on that service key to make sure it is running.
19	A SLEE exception occurred: %s	An error occurred when polling the SLEE for events.	Check the SLEE to ensure it is running correctly. Check for other activities such as package installs which may interrupt the slee. Contact support with details.
20	Invalid SCI Received %s	The MAP Trigger node sent an invalid command to the MTA.	Contact support with details.
21	Unknown operation received	The MAP Trigger node sent an invalid operation code to the MTA.	Contact support with details.
22	SCCP Relay Failure %s	The MTA could not relay the message as the message would be looped back to the MTA. For example the routing indicator is unchanged and set to route on global title and the global title is also unchanged.	Check the global title translation rules and call plan to ensure that messages are being correctly altered.
23	In Timer Expired	A timeout occurred waiting for a response from the call plan.	Check that the IN timer is not set too low in the MTAconfiguration file. Check for high traffic on the box or any other errors that could cause a timeout.
24	Invalid configuration %s	An error occurred when trying to parse the configuration file while the mta is running.	Check for invalid syntax in the configuration file.
25	Invalid configuration %s	An error occurred when trying to parse the configuration file	Check for invalid syntax in the configuration file.

Error Number	Alarm Text	Reason	Remedy
		while the mta is starting up.	
26	Unable to find service key for this call	No matching trigger rule could be found for this message.	Check the triggerRules configuration to ensure all messages are being handled.
27	No matching Global Title Translation rule found for %s	No matching global title translation rule could be found for this message.	Check the gttRules configuration to ensure all messages are being handled.

Warnings

This table defines the Warning messages for MTA.

Error Number	Alarm Text	Reason	Remedy
12	Unhandled TCAP Primitive	An unhandled TCAP event was received.	Check that only a TCAP BEGIN, CONTINUE, END or ABORT message is being sent to the MTA.
13	Received a looped TCAP BEGIN	The MTA detected that a message is being looped back to it	Check STP/ITP routing rules and MTA global title translation to ensure that a message loop cannot occur.
14	Received a TCAP BEGIN with no Application Context	A TCAP BEGIN message was received with no Application Context field.	Ensure that the message being sent to MTA contains an application context.
15	Unsupported application context of %s	A TCAP BEGIN message was received with an unsupported Application Context type.	Ensure that only MAP v2/3 SRI/SRI_SM application contexts are sent to the MTA.
16	Received unexpected %s	An unexpected sequence of messages occurred.	Check the message flows and ensure that messages are not being sent to MTA in the wrong order.
17	Invalid message	A corrupt message was received.	Ensure that all messages sent to the MTA are syntactically correct and include all mandatory information.

Notices

This table defines the Notice messages for MTA.

Error Number	Alarm Text	Reason	Remedy
1	Starting MAP Trigger Application	The MTA process has started	
2	MTA Exiting	The MTA process is stopping.	
3	Caught SIGHUP, re-reading config	A SIGHUP signal has been received and the MTA is re-reading its configuration file.	
4	Caught SIGINT, closing	A SIGINT signal has been received and the MTA is	

Error Number	Alarm Text	Reason	Remedy
		closing.	
6	Received DIALOG CLOSED	A Dialog Closed message was received from the SLEE.	
7	Received APPLICATION END	An Application End message was received from the SLEE. The MTA is closing.	
8	Received APPLICATION END	An Application Kill message was received from the SLEE. The MTA is closing.	
9	Received REREAD CONFIG	A Reread Config message was received from the SLEE. The MTA is re-reading its configuration file.	