

# Event and Alarm Handling

## Ericsson Dynamic Activation 1

---

### USER GUIDE

**Copyright**

© Ericsson AB 2017. All rights reserved. No part of this document may be reproduced in any form without the written permission of the copyright owner.

**Disclaimer**

The contents of this document are subject to revision without notice due to continued progress in methodology, design and manufacturing. Ericsson shall have no liability for any error or damage of any kind resulting from the use of this document.

**Trademark List**

All trademarks mentioned herein are the property of their respective owners. These are shown in the document Trademark Information.



# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Purpose	1
1.2	Target Groups	1
1.3	Typographic Conventions	1
1.4	Prerequisites	1
<b>2</b>	<b>System Model</b>	<b>3</b>
<b>3</b>	<b>Alarm Formats</b>	<b>7</b>
<b>4</b>	<b>List of Alarms</b>	<b>9</b>
<b>5</b>	<b>Alarm Details</b>	<b>15</b>
5.1	Module: ARH	15
5.2	Module: BatchHandler	16
5.3	Module: CPC	17
5.4	Module: Cassandra	17
5.5	Module: CommonService	21
5.6	Module: EMA	23
5.7	Module: LDEwS	48
5.8	Module: LOGGENERATION	51
5.9	Module: NAC	52
5.10	Module: NBIA	53
5.11	Module: PERFORMANCE	55
5.12	Module: PQ	57
5.13	Module: Platform	59
5.14	Module: REPLAY	72
5.15	Module: Reporter	75
5.16	Module: SM	76
5.17	Module: ZooKeeper	77
<b>6</b>	<b>Severity, Event Type, and Probable Cause</b>	<b>79</b>
6.1	Severity Levels	79
6.2	Event Types	79
6.3	Probable Causes	80



## Reference List

85



# 1 Introduction

This document contains information regarding generated events and alarms sent by Ericsson™ Dynamic Activation (EDA).

For explanations of terms and acronyms used in this document, refer to *Glossary of Terms and Acronyms*, Reference [3].

## 1.1 Purpose

The purpose of this document is to describe the alarms and generated events sent by Dynamic Activation.

## 1.2 Target Groups

The target groups for this document are as follows:

- System Administrator

## 1.3 Typographic Conventions

Typographic conventions are described in *Library Overview*, Reference [4].

## 1.4 Prerequisites

To use this document fully, users must meet the following prerequisites:

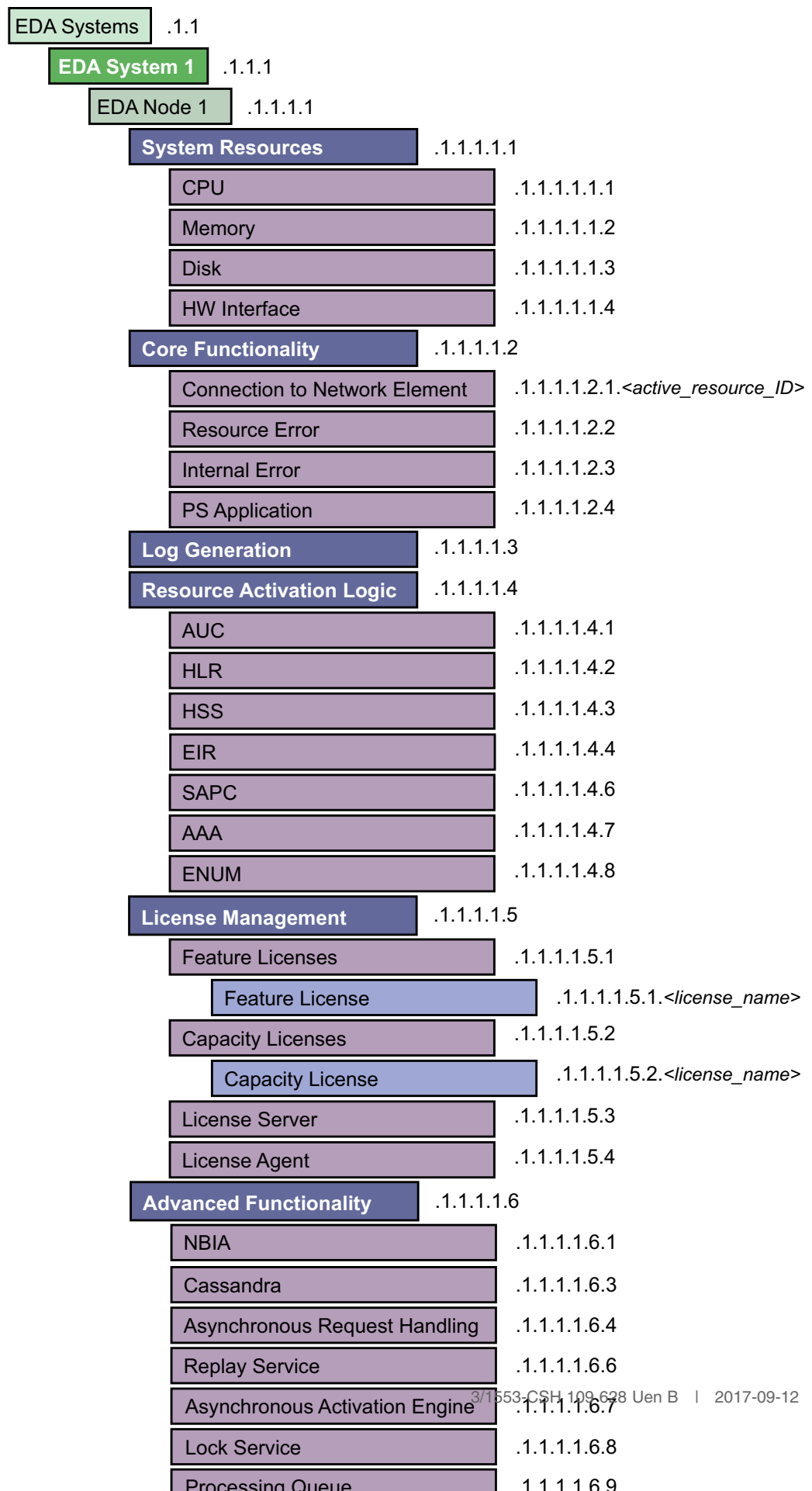
- Basic knowledge about the Dynamic Activation product
- Basic system administration knowledge of the Dynamic Activation product
- Basic knowledge of SNMP





## 2 System Model

The following figure illustrates the Dynamic Activation system model.







**Note:** All Dynamic Activation servers have the same resource Id.

The resource Ids shown in Figure 1 are part of the alarm that is sent to the OSS system and are used to identify an alarming object (feature, component, service and more).

Resource Ids are, where applicable, appended with a `<source_IP>`. This in order to identify the source of the alarm. As an example, `.1.1.1.1.1.1.1.192.168.0.1`. For information on how to enable or disable an originating source IP, see **Originating Source IP** in *System Administrators Guide for Native Deployment*, Reference [1] for Native deployment, or *System Administrators Guide for Virtual and Cloud Deployment*, Reference [2] for Virtual deployment.

For Dynamic Activation Native, the system model is specified in the file:

```
/opt/dve-repository/LOTC-CONFIG/esa/PG.xml
```

For Dynamic Activation Virtual, the system model is specified in the file:

```
/opt/dve-repository/RHEL-CONFIG/esa/PG.xml
```

This section gives detailed information regarding the alarms listed in Section 4 on page 9.





## 3 Alarm Formats

The alarm format is defined in `ERICSSON-SNF-ALARM-MIB.txt`. The standard location for this file is `/usr/local/esa/mibs/`.

An alarm message sent by Dynamic Activation is stateful. This means it is in state “active” when raised and in state “cleared” when canceled. An event message sent by Dynamic Activation is stateless. Both message types alarm and event contain the same data.





## 4 List of Alarms

This chapter contains an overview of all the alarms available in the system. The alarms are grouped in tables according to the defined alarm definitions.

The following table covers the `ARH` alarms:

*Table 1 Alarm module ARH.*

Alarm Error Code	Alarm Information
7701	arh-module is not in service.
7702	The asynchronous request queue is full. ARH stops the receivers on all nodes to avoid running out of database storage.
7703	ARH failed to send notification.

The following table covers the `BatchHandler` alarms:

*Table 2 Alarm module BatchHandler.*

Alarm Error Code	Alarm Information
8202	Batch Job status is changed.

The following table covers the `CPC` alarms:

*Table 3 Alarm module CPC.*

Alarm Error Code	Alarm Information
7601	cpc-module is not in service.

The following table covers the `Cassandra` alarms:

*Table 4 Alarm module Cassandra.*

Alarm Error Code	Alarm Information
3203	Cassandra server is not in service.
3301	Disk usage high on <code>/var/cassandra/data</code> . When 90% is reached the oldest processing logs will automatically be cleared.
3302	Disk usage too high on <code>/var/cassandra/data</code> . The oldest processing logs will automatically be cleared.
3303	Disk usage high on <code>/var/cassandra/commitlog</code> .
3304	Disk usage too high on <code>/var/cassandra/commitlog</code> .
3305	Disk usage growing high on <code>/var/cassandra/data</code> . When 90% is reached the oldest processing logs will automatically be cleared.
3306	Disk usage growing high on <code>/var/cassandra/commitlog</code> .

The following table covers the `CommonService` alarms:

*Table 5 Alarm module CommonService.*

Alarm Error Code	Alarm Information
7005	Global configuration service is not valid.
7006	Configuration file failed to update.
7007	Failed to log in.
7008	Notification failed to send in Async Cai3g interface.

The following table covers the EMA alarms:

*Table 6 Alarm module EMA.*

Alarm Error Code	Alarm Information
2101	Failed to connect to network element.
2102	Network element group is down.
2103	The value of the cluster strategy parameter is changed.
2302	Can not write the proclog to the storage
2402	Failed login threshold exceeded.
2404	CUDB-Block-Proxy not in service.
2405	Service Location Register is not in service.
2406	tomcat-server is not in service.
2407	dve-inbound-interfaces-application is not in service.
2408	dve-application is not in service.
2409	Multi Log Consolidation is not in service.
2410	Lock service is not in service.
2411	Out of memory
4001	Partially executed operations.
4002	Error creating service entry
4003	Error deleting service entry
4004	Error updating service entry
4005	Failed to take subscriber lock
4103	Error creating AUC entry
4104	Error deleting AUC entry
4105	Error updating AUC entry
4205	Error creating HLR entry
4206	Error deleting HLR entry
4207	Error updating HLR entry
4208	Error provisioning HLR exchange data type 1
4209	Error provisioning HLR subscriber profile
4301	Error in notification rule file or SOAP notification to/from HSS-FE
4303	Error creating HSS entry



**Table 6 Alarm module EMA.**

Alarm Error Code	Alarm Information
4304	Error deleting HSS entry
4305	Error updating HSS entry
4403	Error creating EIR entry
4404	Error deleting EIR entry
4405	Error updating EIR entry
4501	Error in notification rule file or SOAP notification to/from DAE-FE
4503	Error creating DAE entry
4504	Error deleting DAE entry
4505	Error updating DAE entry
4603	Error creating SAPC entry
4604	Error deleting SAPC entry
4605	Error updating SAPC entry
4703	Error creating AAA entry
4704	Error deleting AAA entry
4705	Error updating AAA entry
4803	Error creating ENUM entry
4804	Error deleting ENUM entry
4805	Error updating ENUM entry
5101	License expired
5201	Licensed capacity about to exceed
5202	Licensed capacity exceeded
5401	Not possible to synchronize licenses between clusters
5601	ema-authentication-module is not in service.
5701	ema-faultmgmt-module is not in service.
8201	ema-batch-handler-module is not in service.

The following table covers the LDEwS alarms:

**Table 7 Alarm module LDEwS.**

Alarm Error Code	Alarm Information
11001	Disk replication communication error.
11004	Disk replication inconsistent.
11012	Ethernet bonding failure.
11013	Ethernet bonding complete failure.
11021	Time server unreachable.
11022	All time servers unreachable.
11023	Time synchronization error.



The following table covers the LOGGENERATION alarms:

*Table 8 Alarm module LOGGENERATION.*

Alarm Error Code	Alarm Information
1350	AAA provisioning Error log is found

The following table covers the NAC alarms:

*Table 9 Alarm module NAC.*

Alarm Error Code	Alarm Information
7801	activation-orchestration-module is not in service.
7802	Requests in expired state for network element in queue.
7803	Event triggered by request in network element queue with a specific error code, error message or error details.

The following table covers the NBIA alarms:

*Table 10 Alarm module NBIA.*

Alarm Error Code	Alarm Information
7001	nbia-module is not in service.
7002	Failed to log in.
7003	Notification failed to send in Async Cai3g interface.
7004	Notification failed to send in Async Edifact interface.

The following table covers the PERFORMANCE alarms:

*Table 11 Alarm module PERFORMANCE.*

Alarm Error Code	Alarm Information
6001	CONTROLNODECOUNTER is low
6002	PAYLOADNODECOUNTER is low
6101	Control node is not responding.
6102	Payload node is not responding.

The following table covers the PQ alarms:

*Table 12 Alarm module PQ.*

Alarm Error Code	Alarm Information
7901	ema-pq-module is not in service.
7902	Requests in expired state for network element in queue.
7903	Reached 80% of the configured Processing Queue threshold limit.
7904	The configured Processing Queue threshold limit has been reached. Processing Queue will not accept more requests.





The following table covers the `Platform` alarms:

*Table 13 Alarm module Platform.*

Alarm Error Code	Alarm Information
1101	CPU usage too high
1202	Memory usage too high
1301	Disk usage high on "/"
1302	Disk usage too high on "/"
1303	Disk usage growing high on "/"
1307	Disk usage high on "/var/dve"
1308	Disk usage too high on "/var/dve"
1309	Disk usage growing high on "/var/dve"
1321	Disk usage high on "/var/log"
1322	Disk usage too high on "/var/log"
1323	Disk usage high on "/cluster"
1324	Disk usage too high on "/cluster"
1325	Disk usage growing high on "/var/log"
1326	Disk usage growing high on "/cluster"
1327	Disk usage growing high on "/boot"
1328	Disk usage high on "/boot"
1329	Disk usage too high on "/boot"
1330	Disk usage high on "/home"
1331	Disk usage too high on "/home"
1402	Failed login threshold exceeded.
1501	License Agent is not in service.
1502	EDA application detected on unlicensed resource instances.
1503	EDA application enforced on unlicensed resource instances.
5301	License server is not in service.
5501	Loadbalancer is not in service.
5502	puppetmaster is not in service.
5503	puppet client is not in service.

The following table covers the `REPLAY` alarms:

*Table 14 Alarm module REPLAY.*

Alarm Error Code	Alarm Information
8001	Partially executed replay operation.
8002	Replay operation failed.
8003	Replay operation timeout.

*Table 14 Alarm module REPLAY.*

Alarm Error Code	Alarm Information
8004	Replay operation rejected.
8005	Replay operation successful.
8006	Replay license error.

The following table covers the Reporter alarms:

*Table 15 Alarm module Reporter.*

Alarm Error Code	Alarm Information
10001	Reporter Application is not in service
10010	Reporter license error
10011	Reporter maintenance error

The following table covers the SM alarms:

*Table 16 Alarm module SM.*

Alarm Error Code	Alarm Information
8101	statistics-monitor is not in service.

The following table covers the ZooKeeper alarms:

*Table 17 Alarm module ZooKeeper.*

Alarm Error Code	Alarm Information
3501	ZooKeeper server is not in service.



## 5 Alarm Details

This section gives detailed information regarding the alarms listed in Section 4 on page 9.

### 5.1 Module: ARH

This section covers all alarms available for the module ARH.

#### Error code: 7701

The alarm with the error code 7701 has the attributes listed in the following table:

Table 18 Alarm ARH:7701.

SNMP Message Content			
Module:	ARH	Error code:	7701
Severity:	(3) Critical		
Alarm model description:	arh-module is not in service.		
Event type:	1	Probable cause:	612
Alarm Documentation			
Alarm description:	arh-module is not in service.		
Alarm Object:	arh-module		
Alarm raised by:	arh-module unavailable		
Alarm cleared by:	arh-module is back in service.		
Proposed action:	If the alarm is not automatically ceased, find and correct the error. Then start the arh-module, see System Administrators Guide.		

#### Error code: 7702

The alarm with the error code 7702 has the attributes listed in the following table:

Table 19 Alarm ARH:7702.

SNMP Message Content			
Module:	ARH	Error code:	7702
Severity:	(4) Major		
Alarm model description:	The asynchronous request queue is full. ARH stops the receivers on all nodes to avoid running out of database storage.		
Event type:	4	Probable cause:	151



Table 19 Alarm ARH:7702.

Alarm Documentation	
Alarm description:	The arh queue is full.
Alarm Object:	arh-module
Alarm raised by:	The items in asynchronous request queue are greater than the threshold.
Alarm cleared by:	The items in asynchronous request queue are back to normal.
Proposed action:	Check that the Asynchronous Request consumer is enabled, see User Guide for Subscriber Activation.

**Error code: 7703**

The alarm with the error code 7703 has the attributes listed in the following table:

Table 20 Alarm ARH:7703.

SNMP Message Content			
Module:	ARH	Error code:	7703
Severity:	(4) Major		
Alarm model description:	ARH failed to send notification.		
Event type:	2	Probable cause:	10
Alarm Documentation			
Alarm description:	ARH failed to send notification.		
Alarm Object:	arh-module		
Alarm raised by:	ARH failed to send notification.		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	Check the status of notification receiver.		

## 5.2 Module: BatchHandler

This section covers all alarms available for the module `BatchHandler`.

**Error code: 8202**

The alarm with the error code 8202 has the attributes listed in the following table:

Table 21 Alarm BatchHandler:8202.

SNMP Message Content			
Module:	BatchHandler	Error code:	8202
Severity:	(4) Major		
Alarm model description:	Batch Job status is changed.		



Table 21 Alarm BatchHandler:8202.

Event type:	2	Probable cause:	607
Alarm Documentation			
Alarm description:	Batch Job status changed.		
Alarm Object:	ema-batch-handler-module		
Alarm raised by:	Batch Job status changed		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	No need, stateless alarm.		

## 5.3 Module: CPC

This section covers all alarms available for the module CPC.

### Error code: 7601

The alarm with the error code 7601 has the attributes listed in the following table:

Table 22 Alarm CPC:7601.

SNMP Message Content			
Module:	CPC	Error code:	7601
Severity:	(3) Critical		
Alarm model description:	cpc-module is not in service.		
Event type:	1	Probable cause:	612
Alarm Documentation			
Alarm description:	cpc-module is not in service.		
Alarm Object:	cpc-module		
Alarm raised by:	cpc-module unavailable		
Alarm cleared by:	cpc-module is back in service.		
Proposed action:	If the alarm is not automatically ceased, find and correct the error. Then start the cpc-module, see System Administrators Guide.		

## 5.4 Module: Cassandra

This section covers all alarms available for the module Cassandra.

### Error code: 3203

The alarm with the error code 3203 has the attributes listed in the following table:



Table 23 Alarm Cassandra:3203.

SNMP Message Content			
Module:	Cassandra	Error code:	3203
Severity:	(4) Major		
Alarm model description:	Cassandra server is not in service.		
Event type:	4	Probable cause:	612
Alarm Documentation			
Alarm description:	Cassandra server is not in service.		
Alarm Object:	Connection Cassandra		
Alarm raised by:	Cassandra data storage server is down.		
Alarm cleared by:	Cassandra server is back in service.		
Proposed action:	Check if the Cassandra server is up and running. Refer to the System Administration Guide for details.		

**Error code: 3301**

The alarm with the error code 3301 has the attributes listed in the following table:

Table 24 Alarm Cassandra:3301.

SNMP Message Content			
Module:	Cassandra	Error code:	3301
Severity:	(4) Major		
Alarm model description:	Disk usage high on "/var/cassandra/data". When 90% is reached the oldest processing logs will automatically be cleared.		
Event type:	4	Probable cause:	151
Alarm Documentation			
Alarm description:	The disk use is high on "/var/cassandra/data".		
Alarm Object:	Disk		
Alarm raised by:	At least 80% of the storage volume "/var/cassandra/data" is in use.		
Alarm cleared by:	Less than 75% of the storage volume "/var/cassandra/data" is used.		
Proposed action:	Check the /var/cassandra/data or disk. Consider dimensioning the system based on system usage. To store processing logs use the Processing Log Admin Tool to export logs. Refer to the System Administration Guide for details.		

**Error code: 3302**

The alarm with the error code 3302 has the attributes listed in the following table:



Table 25 Alarm Cassandra:3302.

SNMP Message Content			
Module:	Cassandra	Error code:	3302
Severity:	(3) Critical		
Alarm model description:	Disk usage too high on "/var/cassandra/data". The oldest processing logs will automatically be cleared.		
Event type:	3	Probable cause:	151
Alarm Documentation			
Alarm description:	The disk use is too high on "/var/cassandra/data".		
Alarm Object:	Disk		
Alarm raised by:	At least 90% of the storage volume "/var/cassandra/data" is in use.		
Alarm cleared by:	Less than 85% of the storage volume "/var/cassandra/data" is used.		
Proposed action:	proclog-cleanup.sh script will be triggered to clean up the database until the partition reaches 70%. Refer to the System Administration Guide for details.		

**Error code: 3303**

The alarm with the error code 3303 has the attributes listed in the following table:

Table 26 Alarm Cassandra:3303.

SNMP Message Content			
Module:	Cassandra	Error code:	3303
Severity:	(4) Major		
Alarm model description:	Disk usage high on "/var/cassandra/commitlog".		
Event type:	4	Probable cause:	151
Alarm Documentation			
Alarm description:	The disk use is high on "/var/cassandra/commitlog".		
Alarm Object:	Disk		
Alarm raised by:	At least 80% of the storage volume "/var/cassandra/commitlog" is in use.		
Alarm cleared by:	Less than 75% of the storage volume "/var/cassandra/commitlog" is used.		
Proposed action:	Commitlog partition can grow temporarily during high volume data writes. No action is needed.		

**Error code: 3304**

The alarm with the error code 3304 has the attributes listed in the following table:

Table 27 Alarm Cassandra:3304.

SNMP Message Content			
Module:	Cassandra	Error code:	3304



Table 27 Alarm Cassandra:3304.

<b>Severity:</b>	(3) Critical		
<b>Alarm model description:</b>	Disk usage too high on "/var/cassandra/commitlog".		
<b>Event type:</b>	3	<b>Probable cause:</b>	151
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The disk use is too high on "/var/cassandra/commitlog".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 90% of the storage volume "/var/cassandra/commitlog" is in use.		
<b>Alarm cleared by:</b>	Less than 85% of the storage volume "/var/cassandra/commitlog" is used.		
<b>Proposed action:</b>	Commitlog partition can grow temporarily during high volume data writes. If this alarms raises too often, consider flushing the commitlog. Refer to the System Administration Guide for details. Consider dimensioning the system based on system usage.		

**Error code: 3305**

The alarm with the error code 3305 has the attributes listed in the following table:

Table 28 Alarm Cassandra:3305.

<b>SNMP Message Content</b>			
<b>Module:</b>	Cassandra	<b>Error code:</b>	3305
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Disk usage growing high on "/var/cassandra/data". When 90% is reached the oldest processing logs will automatically be cleared.		
<b>Event type:</b>	4	<b>Probable cause:</b>	151
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The disk use is growing high on "/var/cassandra/data".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 70% of the storage volume "/var/cassandra/data" is in use.		
<b>Alarm cleared by:</b>	Less than 65% of the storage volume "/var/cassandra/data" is used.		
<b>Proposed action:</b>	Check the /var/cassandra/data or disk. Consider dimensioning the system based on system usage. To store processing logs use the Processing Log Admin Tool to export logs. Refer to the System Administration Guide for details.		

**Error code: 3306**

The alarm with the error code 3306 has the attributes listed in the following table:

Table 29 Alarm Cassandra:3306.

<b>SNMP Message Content</b>			
<b>Module:</b>	Cassandra	<b>Error code:</b>	3306





Table 29 Alarm Cassandra:3306.

<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Disk usage growing high on "/var/cassandra/commitlog".		
<b>Event type:</b>	4	<b>Probable cause:</b>	151
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The disk use is growing high on "/var/cassandra/commitlog".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 70% of the storage volume "/var/cassandra/commitlog" is in use.		
<b>Alarm cleared by:</b>	Less than 65% of the storage volume "/var/cassandra/commitlog" is used.		
<b>Proposed action:</b>	Commitlog partition can grow temporarily during high volume data writes. No action is needed.		

## 5.5 Module: CommonService

This section covers all alarms available for the module `CommonService`.

### Error code: 7005

The alarm with the error code 7005 has the attributes listed in the following table:

Table 30 Alarm CommonService:7005.

SNMP Message Content			
<b>Module:</b>	CommonService	<b>Error code:</b>	7005
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Global configuration service is not valid.		
<b>Event type:</b>	4	<b>Probable cause:</b>	612
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	Global configuration service is not valid.		
<b>Alarm Object:</b>	MPE		
<b>Alarm raised by:</b>	MPE global configuration unavailable		
<b>Alarm cleared by:</b>	Global configuration service is valid		
<b>Proposed action:</b>	Check the global configuration service.		

### Error code: 7006

The alarm with the error code 7006 has the attributes listed in the following table:



Table 31 Alarm CommonService:7006.

SNMP Message Content			
Module:	CommonService	Error code:	7006
Severity:	(4) Major		
Alarm model description:	Configuration file failed to update.		
Event type:	4	Probable cause:	612
Alarm Documentation			
Alarm description:	Configuration file failed to update.		
Alarm Object:	MPE		
Alarm raised by:	MPE configuration service updates configuration files failed		
Alarm cleared by:	MPE configuration service updates configuration files successfully		
Proposed action:	Check whether the configuration files can be updated, and whether this server is properly communicating with other servers within the same cluster.		

**Error code: 7007**

The alarm with the error code 7007 has the attributes listed in the following table:

Table 32 Alarm CommonService:7007.

SNMP Message Content			
Module:	CommonService	Error code:	7007
Severity:	(4) Major		
Alarm model description:	Failed to log in.		
Event type:	2	Probable cause:	600
Alarm Documentation			
Alarm description:	Failed to login.		
Alarm Object:	MPE		
Alarm raised by:	MPE login failed		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	Check the configuration.		

**Error code: 7008**

The alarm with the error code 7008 has the attributes listed in the following table:

Table 33 Alarm CommonService:7008.

SNMP Message Content			
Module:	CommonService	Error code:	7008
Severity:	(6) Warning		



Table 33 Alarm CommonService:7008.

Alarm model description:	Notification failed to send in Async Cai3g interface.		
Event type:	2	Probable cause:	10
Alarm Documentation			
Alarm description:	Notification failed to send in Async Cai3g interface.		
Alarm Object:	MPE		
Alarm raised by:	MPE notification sending failure.		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	-		

## 5.6 Module: EMA

This section covers all alarms available for the module EMA.

### Error code: 2101

The alarm with the error code 2101 has the attributes listed in the following table:

Table 34 Alarm EMA:2101.

SNMP Message Content			
Module:	EMA	Error code:	2101
Severity:	(4) Major		
Alarm model description:	Failed to connect to network element.		
Event type:	2	Probable cause:	22
Alarm Documentation			
Alarm description:	EMA failed to connect to a network element.		
Alarm Object:	Connection to network element		
Alarm raised by:	The connection to the network element is down.		
Alarm cleared by:	The connection to the network element is up or the network element is removed.		
Proposed action:	Check that the configuration for the specific network element is correct. Check that the network element is reachable and in service. Refer to log file entry field "Alarm Active Description" for network element IP and port.		

### Error code: 2102

The alarm with the error code 2102 has the attributes listed in the following table:



Table 35 Alarm EMA:2102.

SNMP Message Content			
Module:	EMA	Error code:	2102
Severity:	(4) Major		
Alarm model description:	Network element group is down.		
Event type:	2	Probable cause:	554
Alarm Documentation			
Alarm description:	EMA failed to connect to any network element in the network element group.		
Alarm Object:	Network Element Group		
Alarm raised by:	All network elements in the network element group is down.		
Alarm cleared by:	At least one network element is up for the network element group or all network elements are removed from the group.		
Proposed action:	Check that the configuration for the specific network elements in the network element group is correct. Check that the network elements are reachable and in service. Refer to log file entry field "Alarm Active Description" for network element IP and port.		

**Error code: 2103**

The alarm with the error code 2103 has the attributes listed in the following table:

Table 36 Alarm EMA:2103.

SNMP Message Content			
Module:	EMA	Error code:	2103
Severity:	(6) Warning		
Alarm model description:	The value of the cluster strategy parameter is changed.		
Event type:	1	Probable cause:	607
Alarm Documentation			
Alarm description:	The value of the cluster strategy parameter is changed by cluster strategy logic according to the designated criteria.		
Alarm Object:	EMA Business Logic		
Alarm raised by:	The value of the cluster strategy parameter is changed.		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	No action needed.		

**Error code: 2302**

The alarm with the error code 2302 has the attributes listed in the following table:



Table 37 Alarm EMA:2302.

SNMP Message Content			
Module:	EMA	Error code:	2302
Severity:	(4) Major		
Alarm model description:	Can not write the proclog to the storage		
Event type:	4	Probable cause:	612
Alarm Documentation			
Alarm description:	Can not write the proclog to the storage		
Alarm Object:	EMA Application		
Alarm raised by:	-		
Alarm cleared by:	-		
Proposed action:	Check if the Cassandra cluster is up and running. Refer to the System Administrators Guide for Native Deployment, or System Administrators Guide for Virtual Deployment, for details.		

**Error code: 2402**

The alarm with the error code 2402 has the attributes listed in the following table:

Table 38 Alarm EMA:2402.

SNMP Message Content			
Module:	EMA	Error code:	2402
Severity:	(6) Warning		
Alarm model description:	Failed login threshold exceeded.		
Event type:	10	Probable cause:	614
Alarm Documentation			
Alarm description:	The threshold for maximum failed login attempts has been exceeded for a user.		
Alarm Object:	Security		
Alarm raised by:	Login Authentication process		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Reset the user by logging into the EMA GUI as admin and in tabs Access Control - Users, choose the locked user and click on the Locked check-box.		

**Error code: 2404**

The alarm with the error code 2404 has the attributes listed in the following table:

Table 39 Alarm EMA:2404.

SNMP Message Content			
Module:	EMA	Error code:	2404



Table 39 Alarm EMA:2404.

<b>Severity:</b>	(6) Warning		
<b>Alarm model description:</b>	CUDB-Block-Proxy not in service.		
<b>Event type:</b>	4	<b>Probable cause:</b>	612
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	CUDB-Block-Proxy not in service.		
<b>Alarm Object:</b>	CUDB-Block-Proxy service		
<b>Alarm raised by:</b>	CUDB-Block-Proxy service is down.		
<b>Alarm cleared by:</b>	CUDB-Block-Proxy service is up.		
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start CUDB-Block-Proxy service, see System Administrators Guide.		

**Error code: 2405**

The alarm with the error code 2405 has the attributes listed in the following table:

Table 40 Alarm EMA:2405.

<b>SNMP Message Content</b>			
<b>Module:</b>	EMA	<b>Error code:</b>	2405
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Service Location Register is not in service.		
<b>Event type:</b>	4	<b>Probable cause:</b>	1024
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	Service Location Register is down.		
<b>Alarm Object:</b>	Service Location Register		
<b>Alarm raised by:</b>	Service Location Register is down		
<b>Alarm cleared by:</b>	Service Location Register is back in service		
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the Service Location Register(SLR), see System Administration Guide		

**Error code: 2406**

The alarm with the error code 2406 has the attributes listed in the following table:

Table 41 Alarm EMA:2406.

<b>SNMP Message Content</b>			
<b>Module:</b>	EMA	<b>Error code:</b>	2406
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	tomcat-server is not in service.		



Table 41 Alarm EMA:2406.

<b>Event type:</b>	4	<b>Probable cause:</b>	612
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The tomcat-server is not in service.		
<b>Alarm Object:</b>	tomcat-server		
<b>Alarm raised by:</b>	tomcat-server service is down.		
<b>Alarm cleared by:</b>	tomcat-server service is up.		
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the tomcat-server, see System Administrators Guide.		

**Error code: 2407**

The alarm with the error code 2407 has the attributes listed in the following table:

Table 42 Alarm EMA:2407.

<b>SNMP Message Content</b>			
<b>Module:</b>	EMA	<b>Error code:</b>	2407
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	dve-inbound-interfaces-application is not in service.		
<b>Event type:</b>	4	<b>Probable cause:</b>	612
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The dve-inbound-interfaces-application is not in service.		
<b>Alarm Object:</b>	dve-inbound-interfaces-application		
<b>Alarm raised by:</b>	dve-inbound-interfaces-application service is down.		
<b>Alarm cleared by:</b>	dve-inbound-interfaces-application service is up.		
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the dve-inbound-interfaces-application, see System Administrators Guide.		

**Error code: 2408**

The alarm with the error code 2408 has the attributes listed in the following table:

Table 43 Alarm EMA:2408.

<b>SNMP Message Content</b>			
<b>Module:</b>	EMA	<b>Error code:</b>	2408
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	dve-application is not in service.		
<b>Event type:</b>	4	<b>Probable cause:</b>	612
<b>Alarm Documentation</b>			



Table 43 Alarm EMA:2408.

<b>Alarm description:</b>	The dve-application is not in service.
<b>Alarm Object:</b>	dve-application
<b>Alarm raised by:</b>	dve-application service is down.
<b>Alarm cleared by:</b>	dve-application service is up.
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the dve-application, see System Administrators Guide.

**Error code: 2409**

The alarm with the error code 2409 has the attributes listed in the following table:

Table 44 Alarm EMA:2409.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	2409
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Multi Log Consolidation is not in service.		
<b>Event type:</b>	4	<b>Probable cause:</b>	1024
Alarm Documentation			
<b>Alarm description:</b>	Multi Log Consolidation is down.		
<b>Alarm Object:</b>	Multi Log Consolidation		
<b>Alarm raised by:</b>	Multi Log Consolidation is down		
<b>Alarm cleared by:</b>	Multi Log Consolidation is back in service		
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the Service Multi Log Consolidation, see System Administration Guide		

**Error code: 2410**

The alarm with the error code 2410 has the attributes listed in the following table:

Table 45 Alarm EMA:2410.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	2410
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Lock service is not in service.		
<b>Event type:</b>	4	<b>Probable cause:</b>	612
Alarm Documentation			
<b>Alarm description:</b>	Lock service not in service.		
<b>Alarm Object:</b>	Lock service		





Table 45 Alarm EMA:2410.

<b>Alarm raised by:</b>	Lock service is down.
<b>Alarm cleared by:</b>	Lock service is up.
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the Lock service, see System Administrators Guide.

**Error code: 2411**

The alarm with the error code 2411 has the attributes listed in the following table:

Table 46 Alarm EMA:2411.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	2411
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Out of memory		
<b>Event type:</b>	4	<b>Probable cause:</b>	162
Alarm Documentation			
<b>Alarm description:</b>	Out of memory		
<b>Alarm Object:</b>	Module		
<b>Alarm raised by:</b>	The module has generated a .hprof file		
<b>Alarm cleared by:</b>	No clear, stateless alarm.		
<b>Proposed action:</b>	Analyze the generated .hprof file		

**Error code: 4001**

The alarm with the error code 4001 has the attributes listed in the following table:

Table 47 Alarm EMA:4001.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4001
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Partially executed operations.		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	Partially executed operations need manual intervention.		
<b>Alarm Object:</b>	EMA Business Logic		
<b>Alarm raised by:</b>	Executed operations failed partially		



Table 47 Alarm EMA:4001.

<b>Alarm cleared by:</b>	Manual clear. For information on how to perform a manual clear, see section Configuring ESA in System Administrators Guide for Native Deployment, or System Administrators Guide for Virtual Deployment.
<b>Proposed action:</b>	Partially executed operations may leave inconsistency data stored in data repositories. Manual intervention is needed.

**Error code: 4002**

The alarm with the error code 4002 has the attributes listed in the following table:

Table 48 Alarm EMA:4002.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4002
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error creating service entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to create an entry and failed.		
<b>Alarm Object:</b>	EMA Business Logic		
<b>Alarm raised by:</b>	Failure to create an entry in CUDb		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Please, check the interface documentations and run proposed command to repair/delete the failed subscription.		

**Error code: 4003**

The alarm with the error code 4003 has the attributes listed in the following table:

Table 49 Alarm EMA:4003.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4003
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error deleting service entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to delete an entry and failed.		
<b>Alarm Object:</b>	EMA Business Logic		
<b>Alarm raised by:</b>	Failure to delete an entry in CUDb		



Table 49 Alarm EMA:4003.

<b>Alarm cleared by:</b>	No clear, stateless alarm
<b>Proposed action:</b>	Please, check the interface documentations and run proposed command to repair/delete the failed subscription.

**Error code: 4004**

The alarm with the error code 4004 has the attributes listed in the following table:

Table 50 Alarm EMA:4004.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4004
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error updating service entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to update an entry and failed.		
<b>Alarm Object:</b>	EMA Business Logic		
<b>Alarm raised by:</b>	Failure to update an entry in CUDB		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Please, check the interface documentations and run proposed command to repair/delete the failed subscription.		

**Error code: 4005**

The alarm with the error code 4005 has the attributes listed in the following table:

Table 51 Alarm EMA:4005.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4005
<b>Severity:</b>	(6) Warning		
<b>Alarm model description:</b>	Failed to take subscriber lock		
<b>Event type:</b>	4	<b>Probable cause:</b>	165
Alarm Documentation			
<b>Alarm description:</b>	PG timed out when trying to take a subscriber lock (protection for concurrent commands). Continued without subscriber locking.		
<b>Alarm Object:</b>	PG Business Logic		
<b>Alarm raised by:</b>	Failed to take subscriber lock		



Table 51 Alarm EMA:4005.

<b>Alarm cleared by:</b>	No clear, stateless alarm
<b>Proposed action:</b>	If the failure to take a subscriber lock caused a CUDB inconsistency, please see the documentation on how to manually repair/delete the failed subscription.

**Error code: 4103**

The alarm with the error code 4103 has the attributes listed in the following table:

Table 52 Alarm EMA:4103.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4103
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error creating AUC entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to create an entry and failed.		
<b>Alarm Object:</b>	AUC		
<b>Alarm raised by:</b>	Failure to create an entry in CUDB		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Please check the interface documentation and run proposed command to repair/delete the failed subscription.		

**Error code: 4104**

The alarm with the error code 4104 has the attributes listed in the following table:

Table 53 Alarm EMA:4104.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4104
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error deleting AUC entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to delete an entry and failed.		
<b>Alarm Object:</b>	AUC		
<b>Alarm raised by:</b>	Failure to delete an entry in CUDB		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Please check the interface documentation and run proposed command to repair/delete the failed subscription.		



### Error code: 4105

The alarm with the error code 4105 has the attributes listed in the following table:

Table 54 Alarm EMA:4105.

SNMP Message Content			
Module:	EMA	Error code:	4105
Severity:	(5) Minor		
Alarm model description:	Error updating AUC entry		
Event type:	4	Probable cause:	160
Alarm Documentation			
Alarm description:	EMA tried to update an entry and failed.		
Alarm Object:	AUC		
Alarm raised by:	Failure to update an entry in CUDB		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Please check the interface documentation and run proposed command to repair/delete the failed subscription.		

### Error code: 4205

The alarm with the error code 4205 has the attributes listed in the following table:

Table 55 Alarm EMA:4205.

SNMP Message Content			
Module:	EMA	Error code:	4205
Severity:	(5) Minor		
Alarm model description:	Error creating HLR entry		
Event type:	4	Probable cause:	160
Alarm Documentation			
Alarm description:	EMA tried to create an entry and failed.		
Alarm Object:	HLR		
Alarm raised by:	Failure to create an entry in CUDB		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Please check the interface documentation and run proposed command to repair/delete the failed subscription.		

### Error code: 4206

The alarm with the error code 4206 has the attributes listed in the following table:



Table 56 Alarm EMA:4206.

SNMP Message Content			
Module:	EMA	Error code:	4206
Severity:	(5) Minor		
Alarm model description:	Error deleting HLR entry		
Event type:	4	Probable cause:	160
Alarm Documentation			
Alarm description:	EMA tried to delete an entry and failed.		
Alarm Object:	HLR		
Alarm raised by:	Failure to delete an entry in CUDB		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Please check the interface documentation and run proposed command to repair/delete the failed subscription.		

**Error code: 4207**

The alarm with the error code 4207 has the attributes listed in the following table:

Table 57 Alarm EMA:4207.

SNMP Message Content			
Module:	EMA	Error code:	4207
Severity:	(5) Minor		
Alarm model description:	Error updating HLR entry		
Event type:	4	Probable cause:	160
Alarm Documentation			
Alarm description:	EMA tried to update an entry and failed.		
Alarm Object:	HLR		
Alarm raised by:	Failure to update an entry in CUDB		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Please check the interface documentation and run proposed command to repair/delete the failed subscription.		

**Error code: 4208**

The alarm with the error code 4208 has the attributes listed in the following table:

Table 58 Alarm EMA:4208.

SNMP Message Content			
Module:	EMA	Error code:	4208



Table 58 Alarm EMA:4208.

<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error provisioning HLR exchange data type 1		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	An error occurred during provisioning of Exchange Data Type 1.		
<b>Alarm Object:</b>	HLR		
<b>Alarm raised by:</b>	Failure to provision		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Resend the command with the failed HLRFEID.		

**Error code: 4209**

The alarm with the error code 4209 has the attributes listed in the following table:

Table 59 Alarm EMA:4209.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4209
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error provisioning HLR subscriber profile		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	An error occurred during provisioning of Subscriber Profile.		
<b>Alarm Object:</b>	HLR		
<b>Alarm raised by:</b>	Failure to provision		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Resend the command with the failed HLRFEID.		

**Error code: 4301**

The alarm with the error code 4301 has the attributes listed in the following table:

Table 60 Alarm EMA:4301.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4301
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error in notification rule file or SOAP notification to/from HSS-FE		
<b>Event type:</b>	2	<b>Probable cause:</b>	612



Table 60 Alarm EMA:4301.

Alarm Documentation	
Alarm description:	EMA failed to load notification rule file or EMA received a "client" SOAP faultcode from HSS-FE
Alarm Object:	EMA
Alarm raised by:	Failed to load notification rule file or received client SOAP faultcode from HSS-FE
Alarm cleared by:	No clear, stateless alarm
Proposed action:	Check if content of rule is correct. Refer to the System Administrators Guide for Native Deployment, or System Administrators Guide for Virtual Deployment, for details.

**Error code: 4303**

The alarm with the error code 4303 has the attributes listed in the following table:

Table 61 Alarm EMA:4303.

SNMP Message Content			
Module:	EMA	Error code:	4303
Severity:	(5) Minor		
Alarm model description:	Error creating HSS entry		
Event type:	4	Probable cause:	160
Alarm Documentation			
Alarm description:	EMA tried to create an entry and failed.		
Alarm Object:	HSS		
Alarm raised by:	Failure to create an entry in CUDB		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Please check the interface documentation and run proposed command to repair/delete the failed subscription.		

**Error code: 4304**

The alarm with the error code 4304 has the attributes listed in the following table:

Table 62 Alarm EMA:4304.

SNMP Message Content			
Module:	EMA	Error code:	4304
Severity:	(5) Minor		
Alarm model description:	Error deleting HSS entry		
Event type:	4	Probable cause:	160
Alarm Documentation			
Alarm description:	EMA tried to delete an entry and failed.		





Table 62 Alarm EMA:4304.

<b>Alarm Object:</b>	HSS
<b>Alarm raised by:</b>	Failure to delete an entry in CUDB
<b>Alarm cleared by:</b>	No clear, stateless alarm
<b>Proposed action:</b>	Please check the interface documentation and run proposed command to repair/delete the failed subscription.

**Error code: 4305**

The alarm with the error code 4305 has the attributes listed in the following table:

Table 63 Alarm EMA:4305.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4305
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error updating HSS entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to update an entry and failed.		
<b>Alarm Object:</b>	HSS		
<b>Alarm raised by:</b>	Failure to update an entry in CUDB		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Please check the interface documentation and run proposed command to repair/delete the failed subscription.		

**Error code: 4403**

The alarm with the error code 4403 has the attributes listed in the following table:

Table 64 Alarm EMA:4403.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4403
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error creating EIR entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to create an entry and failed.		
<b>Alarm Object:</b>	EIR		
<b>Alarm raised by:</b>	Failure to create an entry in CUDB		



Table 64 Alarm EMA:4403.

<b>Alarm cleared by:</b>	No clear, stateless alarm
<b>Proposed action:</b>	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed subscription.

**Error code: 4404**

The alarm with the error code 4404 has the attributes listed in the following table:

Table 65 Alarm EMA:4404.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4404
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error deleting EIR entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to delete an entry and failed.		
<b>Alarm Object:</b>	EIR		
<b>Alarm raised by:</b>	Failure to delete an entry in CUDb		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed subscription.		

**Error code: 4405**

The alarm with the error code 4405 has the attributes listed in the following table:

Table 66 Alarm EMA:4405.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4405
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error updating EIR entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to update an entry and failed.		
<b>Alarm Object:</b>	EIR		
<b>Alarm raised by:</b>	Failure to update an entry in CUDb		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed subscription.		



### Error code: 4501

The alarm with the error code 4501 has the attributes listed in the following table:

Table 67 Alarm EMA:4501.

SNMP Message Content			
Module:	EMA	Error code:	4501
Severity:	(5) Minor		
Alarm model description:	Error in notification rule file or SOAP notification to/from DAE-FE		
Event type:	2	Probable cause:	612
Alarm Documentation			
Alarm description:	EMA failed to load notification rule file or EMA received a "client" SOAP faultcode from DAE-FE		
Alarm Object:	EMA		
Alarm raised by:	Failed to load notification rule file or received client SOAP faultcode from DAE-FE		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Check if content of rule is correct. Refer to the System Administrators Guide for Native Deployment, or System Administrators Guide for Virtual Deployment, for details.		

### Error code: 4503

The alarm with the error code 4503 has the attributes listed in the following table:

Table 68 Alarm EMA:4503.

SNMP Message Content			
Module:	EMA	Error code:	4503
Severity:	(5) Minor		
Alarm model description:	Error creating DAE entry		
Event type:	4	Probable cause:	160
Alarm Documentation			
Alarm description:	EMA tried to create an entry and failed.		
Alarm Object:	DAE		
Alarm raised by:	Failure to create an entry in CUDB		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed subscription.		

### Error code: 4504

The alarm with the error code 4504 has the attributes listed in the following table:



Table 69 Alarm EMA:4504.

SNMP Message Content			
Module:	EMA	Error code:	4504
Severity:	(5) Minor		
Alarm model description:	Error deleting DAE entry		
Event type:	4	Probable cause:	160
Alarm Documentation			
Alarm description:	EMA tried to delete an entry and failed.		
Alarm Object:	DAE		
Alarm raised by:	Failure to delete an entry in CUDB		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed subscription.		

**Error code: 4505**

The alarm with the error code 4505 has the attributes listed in the following table:

Table 70 Alarm EMA:4505.

SNMP Message Content			
Module:	EMA	Error code:	4505
Severity:	(5) Minor		
Alarm model description:	Error updating DAE entry		
Event type:	4	Probable cause:	160
Alarm Documentation			
Alarm description:	EMA tried to update an entry and failed.		
Alarm Object:	DAE		
Alarm raised by:	Failure to update an entry in CUDB		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed subscription.		

**Error code: 4603**

The alarm with the error code 4603 has the attributes listed in the following table:

Table 71 Alarm EMA:4603.

SNMP Message Content			
Module:	EMA	Error code:	4603



Table 71 Alarm EMA:4603.

<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error creating SAPC entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	EMA tried to create an entry and failed.		
<b>Alarm Object:</b>	SAPC		
<b>Alarm raised by:</b>	Failure to create an entry in CUDB		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Please check the interface documentation and run proposed command to repair/delete the failed subscription.		

**Error code: 4604**

The alarm with the error code 4604 has the attributes listed in the following table:

Table 72 Alarm EMA:4604.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4604
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error deleting SAPC entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	EMA tried to delete an entry and failed.		
<b>Alarm Object:</b>	SAPC		
<b>Alarm raised by:</b>	Failure to delete an entry in CUDB		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Please check the interface documentation and run proposed command to repair/delete the failed subscription.		

**Error code: 4605**

The alarm with the error code 4605 has the attributes listed in the following table:

Table 73 Alarm EMA:4605.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4605
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error updating SAPC entry		



Table 73 Alarm EMA:4605.

Event type:	4	Probable cause:	160
Alarm Documentation			
Alarm description:	EMA tried to update an entry and failed.		
Alarm Object:	SAPC		
Alarm raised by:	Failure to update an entry in CUDB		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Please check the interface documentation and run proposed command to repair/delete the failed subscription.		

**Error code: 4703**

The alarm with the error code 4703 has the attributes listed in the following table:

Table 74 Alarm EMA:4703.

SNMP Message Content			
Module:	EMA	Error code:	4703
Severity:	(5) Minor		
Alarm model description:	Error creating AAA entry		
Event type:	4	Probable cause:	160
Alarm Documentation			
Alarm description:	EMA tried to create an entry and failed.		
Alarm Object:	AAA		
Alarm raised by:	Failure to create an entry in CUDB		
Alarm cleared by:	No clear, stateless alarm		
Proposed action:	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed AAA Data.		

**Error code: 4704**

The alarm with the error code 4704 has the attributes listed in the following table:

Table 75 Alarm EMA:4704.

SNMP Message Content			
Module:	EMA	Error code:	4704
Severity:	(5) Minor		
Alarm model description:	Error deleting AAA entry		
Event type:	4	Probable cause:	160
Alarm Documentation			



Table 75 Alarm EMA:4704.

<b>Alarm description:</b>	EMA tried to delete an entry and failed.
<b>Alarm Object:</b>	AAA
<b>Alarm raised by:</b>	Failure to delete an entry in CUDB
<b>Alarm cleared by:</b>	No clear, stateless alarm
<b>Proposed action:</b>	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed AAA Data.

**Error code: 4705**

The alarm with the error code 4705 has the attributes listed in the following table:

Table 76 Alarm EMA:4705.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4705
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error updating AAA entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to update an entry and failed.		
<b>Alarm Object:</b>	AAA		
<b>Alarm raised by:</b>	Failure to update an entry in CUDB		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed AAA Data.		

**Error code: 4803**

The alarm with the error code 4803 has the attributes listed in the following table:

Table 77 Alarm EMA:4803.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4803
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error creating ENUM entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to create an entry and failed.		
<b>Alarm Object:</b>	ENUM		



Table 77 Alarm EMA:4803.

<b>Alarm raised by:</b>	Failure to create an entry in CUDB
<b>Alarm cleared by:</b>	No clear, stateless alarm
<b>Proposed action:</b>	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed ENUM Data.

**Error code: 4804**

The alarm with the error code 4804 has the attributes listed in the following table:

Table 78 Alarm EMA:4804.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4804
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error deleting ENUM entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to delete an entry and failed.		
<b>Alarm Object:</b>	ENUM		
<b>Alarm raised by:</b>	Failure to delete an entry in CUDB		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed ENUM Data.		

**Error code: 4805**

The alarm with the error code 4805 has the attributes listed in the following table:

Table 79 Alarm EMA:4805.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	4805
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Error updating ENUM entry		
<b>Event type:</b>	4	<b>Probable cause:</b>	160
Alarm Documentation			
<b>Alarm description:</b>	EMA tried to update an entry and failed.		
<b>Alarm Object:</b>	ENUM		
<b>Alarm raised by:</b>	Failure to update an entry in CUDB		





Table 79 Alarm EMA:4805.

<b>Alarm cleared by:</b>	No clear, stateless alarm
<b>Proposed action:</b>	Use the document UDC Subscription Repair and Remove Procedures and use the identifiers from this event to manually repair/delete the failed ENUM Data.

**Error code: 5101**

The alarm with the error code 5101 has the attributes listed in the following table:

Table 80 Alarm EMA:5101.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	5101
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	License expired		
<b>Event type:</b>	4	<b>Probable cause:</b>	609
Alarm Documentation			
<b>Alarm description:</b>	The license for EMA has expired, or is about to expire.		
<b>Alarm Object:</b>	Licenses		
<b>Alarm raised by:</b>	Invalid/Expired license		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Contact your local support organization to order a new license. For more information about licenses, see Function Specification Subscriber Activation.		

**Error code: 5201**

The alarm with the error code 5201 has the attributes listed in the following table:

Table 81 Alarm EMA:5201.

SNMP Message Content			
<b>Module:</b>	EMA	<b>Error code:</b>	5201
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Licensed capacity about to exceed		
<b>Event type:</b>	4	<b>Probable cause:</b>	1024
Alarm Documentation			
<b>Alarm description:</b>	Warning level reached for capacity license.		
<b>Alarm Object:</b>	Licenses		
<b>Alarm raised by:</b>	Warning level reached. Threshold value: 80%.		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Contact your local support organization to order a new license. For more information about licenses, see Function Specification Subscriber Activation.		

**Error code: 5202**

The alarm with the error code 5202 has the attributes listed in the following table:

Table 82 Alarm EMA:5202.

SNMP Message Content			
Module:	EMA	Error code:	5202
Severity:	(3) Critical		
Alarm model description:	Licensed capacity exceeded		
Event type:	4	Probable cause:	1024
Alarm Documentation			
Alarm description:	The usage level for one of the licenses is exceeding the licensed capacity.		
Alarm Object:	Licenses		
Alarm raised by:	Exceeded capacity		
Alarm cleared by:	Order/apply new license		
Proposed action:	Contact your local support organization to order a new license. For more information about licenses, see Function Specification Subscriber Activation.		

**Error code: 5401**

The alarm with the error code 5401 has the attributes listed in the following table:

Table 83 Alarm EMA:5401.

SNMP Message Content			
Module:	EMA	Error code:	5401
Severity:	(5) Minor		
Alarm model description:	Not possible to synchronize licenses between clusters		
Event type:	2	Probable cause:	4
Alarm Documentation			
Alarm description:	The licenses could not be synchronized between redundant clusters		
Alarm Object:	License synchronizer service		
Alarm raised by:	Not possible to synchronize licenses for 24 hours		
Alarm cleared by:	Licenses has been synchronized within the latest 24 hours		
Proposed action:	Check connectivity between clusters and check logs for syncuser		

**Error code: 5601**

The alarm with the error code 5601 has the attributes listed in the following table:



Table 84 Alarm EMA:5601.

SNMP Message Content			
Module:	EMA	Error code:	5601
Severity:	(4) Major		
Alarm model description:	ema-authentication-module is not in service.		
Event type:	4	Probable cause:	612
Alarm Documentation			
Alarm description:	The ema-authentication-module is not in service.		
Alarm Object:	ema-authentication-module		
Alarm raised by:	ema-authentication-module service is down.		
Alarm cleared by:	ema-authentication-module service is up.		
Proposed action:	If the alarm is not automatically ceased, find and correct the error. Then start the ema-authentication-module, see System Administrators Guide.		

**Error code: 5701**

The alarm with the error code 5701 has the attributes listed in the following table:

Table 85 Alarm EMA:5701.

SNMP Message Content			
Module:	EMA	Error code:	5701
Severity:	(4) Major		
Alarm model description:	ema-faultmgmt-module is not in service.		
Event type:	4	Probable cause:	612
Alarm Documentation			
Alarm description:	The ema-faultmgmt-module is not in service.		
Alarm Object:	ema-faultmgmt-module		
Alarm raised by:	EMA fault management module is down		
Alarm cleared by:	EMA fault management module is started		
Proposed action:	If the alarm is not automatically ceased, find and correct the error. Then start the ema-faultmgmt-module, see System Administrators Guide.		

**Error code: 8201**

The alarm with the error code 8201 has the attributes listed in the following table:

Table 86 Alarm EMA:8201.

SNMP Message Content			
Module:	EMA	Error code:	8201



Table 86 Alarm EMA:8201.

<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	ema-batch-handler-module is not in service.		
<b>Event type:</b>	4	<b>Probable cause:</b>	612
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The ema-batch-handler-module is not in service.		
<b>Alarm Object:</b>	ema-batch-handler-module		
<b>Alarm raised by:</b>	ema-batch-handler-module service is down.		
<b>Alarm cleared by:</b>	ema-batch-handler-module service is up.		
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the ema-batch-handler-module, see System Administrators Guide.		

## 5.7 Module: LDEwS

This section covers all alarms available for the module LDEwS.

### Error code: 11001

The alarm with the error code 11001 has the attributes listed in the following table:

Table 87 Alarm LDEwS:11001.

<b>SNMP Message Content</b>			
<b>Module:</b>	LDEwS	<b>Error code:</b>	11001
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Disk replication communication error.		
<b>Event type:</b>	5	<b>Probable cause:</b>	505
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The control node pair has been operating in a non-redundant mode for more than 20 minutes.		
<b>Alarm Object:</b>	Disk Replication		
<b>Alarm raised by:</b>	Hardware or network failure.		
<b>Alarm cleared by:</b>	Disk synchronization is completed.		
<b>Proposed action:</b>	If the alarm is not automatically ceased, consult the next level of maintenance support.		

### Error code: 11004

The alarm with the error code 11004 has the attributes listed in the following table:



Table 88 Alarm LDEwS:11004.

SNMP Message Content			
Module:	LDEwS	Error code:	11004
Severity:	(5) Minor		
Alarm model description:	Disk replication inconsistent.		
Event type:	5	Probable cause:	505
Alarm Documentation			
Alarm description:	The control node pair has been operating in a non-redundant mode for more than 20 minutes.		
Alarm Object:	Disk Replication		
Alarm raised by:	Disk mirroring failure leading to disk inconsistency between the control nodes.		
Alarm cleared by:	Disk synchronization is completed.		
Proposed action:	If the alarm is not automatically ceased, consult the next level of maintenance support.		

**Error code: 11012**

The alarm with the error code 11012 has the attributes listed in the following table:

Table 89 Alarm LDEwS:11012.

SNMP Message Content			
Module:	LDEwS	Error code:	11012
Severity:	(4) Major		
Alarm model description:	Ethernet bonding failure.		
Event type:	2	Probable cause:	505
Alarm Documentation			
Alarm description:	An Ethernet interface belonging to a bonded interface fails.		
Alarm Object:	Ethernet Bonding		
Alarm raised by:	Faulty Ethernet interface, faulty Ethernet switch, or faulty Ethernet cable.		
Alarm cleared by:	Ethernet bonding back to normal.		
Proposed action:	Replace the Ethernet cable between the faulty Ethernet interface and the external device.		

**Error code: 11013**

The alarm with the error code 11013 has the attributes listed in the following table:

Table 90 Alarm LDEwS:11013.

SNMP Message Content			
Module:	LDEwS	Error code:	11013
Severity:	(3) Critical		



Table 90 Alarm LDEwS:11013.

Alarm model description:	Ethernet bonding complete failure.		
Event type:	2	Probable cause:	505
Alarm Documentation			
Alarm description:	Both Ethernet interfaces belonging to a bonded interface fail.		
Alarm Object:	Ethernet Bonding		
Alarm raised by:	Faulty Ethernet interface, faulty Ethernet switch, or faulty Ethernet cable.		
Alarm cleared by:	Both Ethernet interfaces are back to normal.		
Proposed action:	Replace the Ethernet cable between the faulty Ethernet interface and the external device.		

**Error code: 11021**

The alarm with the error code 11021 has the attributes listed in the following table:

Table 91 Alarm LDEwS:11021.

SNMP Message Content			
Module:	LDEwS	Error code:	11021
Severity:	(5) Minor		
Alarm model description:	Time server unreachable.		
Event type:	1	Probable cause:	505
Alarm Documentation			
Alarm description:	Some of the configured NTP servers are unreachable.		
Alarm Object:	Time Synchronization		
Alarm raised by:	Time servers not reachable.		
Alarm cleared by:	Time synchronization back to normal.		
Proposed action:	Check that the NTP server(s) listed in the cluster configuration are correct and have network connectivity from the cluster nodes, then restart the NTP service.		

**Error code: 11022**

The alarm with the error code 11022 has the attributes listed in the following table:

Table 92 Alarm LDEwS:11022.

SNMP Message Content			
Module:	LDEwS	Error code:	11022
Severity:	(4) Major		
Alarm model description:	All time servers unreachable.		
Event type:	1	Probable cause:	505
Alarm Documentation			



Table 92 Alarm LDEwS:11022.

<b>Alarm description:</b>	The NTP servers from cluster.conf are not accepted by ntpd (unusable), no NTP server is reachable (unreachable) or a peer cannot be selected (rejected).
<b>Alarm Object:</b>	Time Synchronization
<b>Alarm raised by:</b>	Time servers not reachable.
<b>Alarm cleared by:</b>	Time synchronization back to normal.
<b>Proposed action:</b>	Check that the NTP server(s) listed in the cluster configuration are correct and have network connectivity from the cluster nodes, then restart the NTP service.

### Error code: 11023

The alarm with the error code 11023 has the attributes listed in the following table:

Table 93 Alarm LDEwS:11023.

SNMP Message Content			
<b>Module:</b>	LDEwS	<b>Error code:</b>	11023
<b>Severity:</b>	(3) Critical		
<b>Alarm model description:</b>	Time synchronization error.		
<b>Event type:</b>	1	<b>Probable cause:</b>	505
Alarm Documentation			
<b>Alarm description:</b>	There are time differences between the blades in the cluster that exceeds the threshold value.		
<b>Alarm Object:</b>	Time Synchronization		
<b>Alarm raised by:</b>	The time difference between the local system time and the remote time server is greater than a threshold (10 seconds).		
<b>Alarm cleared by:</b>	Time synchronization back to normal.		
<b>Proposed action:</b>	Check that the NTP server(s) listed in the cluster configuration are correct and have network connectivity from the cluster nodes, then restart the NTP service.		

## 5.8 Module: LOGGENERATION

This section covers all alarms available for the module LOGGENERATION.

### Error code: 1350

The alarm with the error code 1350 has the attributes listed in the following table:

Table 94 Alarm LOGGENERATION:1350.

SNMP Message Content			
<b>Module:</b>	LOGGENERATION	<b>Error code:</b>	1350
<b>Severity:</b>	(3) Critical		



Table 94 Alarm LOGGENERATION:1350.

Alarm model description:	AAA provisioning Error log is found		
Event type:	4	Probable cause:	1024
Alarm Documentation			
Alarm description:	EMA fails to provision the second AAA node.		
Alarm Object:	/opt/links/asuser/domains/dve-domain/logs/request/aaa.		
Alarm raised by:	Finding Error log in directory /opt/links/asuser/domains/dve-domain/logs/request/aaa. This error log is generated when EMA fails to provision the second AAA node.		
Alarm cleared by:	Manual clear. Executing the command consolidateAAErrorCommand.sh -c -d.		
Proposed action:	Perform repair actions for AAA, see Non-Sim User Guide.		

## 5.9 Module: NAC

This section covers all alarms available for the module NAC.

### Error code: 7801

The alarm with the error code 7801 has the attributes listed in the following table:

Table 95 Alarm NAC:7801.

SNMP Message Content			
Module:	NAC	Error code:	7801
Severity:	(4) Major		
Alarm model description:	activation-orchestration-module is not in service.		
Event type:	4	Probable cause:	612
Alarm Documentation			
Alarm description:	activation-orchestration-module is not in service.		
Alarm Object:	activation-orchestration-module		
Alarm raised by:	activation-orchestration-module service is down.		
Alarm cleared by:	activation-orchestration-module service is up.		
Proposed action:	If the alarm is not automatically ceased, find and correct the error. Then start the activation-orchestration-module, see System Administrators Guide.		

### Error code: 7802

The alarm with the error code 7802 has the attributes listed in the following table:





Table 96 Alarm NAC:7802.

SNMP Message Content			
<b>Module:</b>	NAC	<b>Error code:</b>	7802
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Requests in expired state for network element in queue.		
<b>Event type:</b>	4	<b>Probable cause:</b>	203
Alarm Documentation			
<b>Alarm description:</b>	Requests in expired state for the network element queue need manual intervention.		
<b>Alarm Object:</b>	Network element queue		
<b>Alarm raised by:</b>	One or several requests are in expired state for the network element queue.		
<b>Alarm cleared by:</b>	Trigger or cancel all expired requests for the network element queue.		
<b>Proposed action:</b>	Trigger or cancel all expired requests for the network element queue, see User Guide Subscriber Activation.		

**Error code: 7803**

The alarm with the error code 7803 has the attributes listed in the following table:

Table 97 Alarm NAC:7803.

SNMP Message Content			
<b>Module:</b>	NAC	<b>Error code:</b>	7803
<b>Severity:</b>	(6) Warning		
<b>Alarm model description:</b>	Event triggered by request in network element queue with a specific error code, error message or error details.		
<b>Event type:</b>	4	<b>Probable cause:</b>	1024
Alarm Documentation			
<b>Alarm description:</b>	Event triggered by request in network element queue with a specific error code, error message or error details need manual intervention.		
<b>Alarm Object:</b>	Network element queue		
<b>Alarm raised by:</b>	Failed request with specific error code, error message or error details.		
<b>Alarm cleared by:</b>	No clear, stateless alarm		
<b>Proposed action:</b>	Check current state for the specific request using MessageId identifier, see User Guide Subscriber Activation.		

## 5.10 Module: NBIA

This section covers all alarms available for the module NBIA.

**Error code: 7001**

The alarm with the error code 7001 has the attributes listed in the following table:

Table 98 Alarm NBIA:7001.

SNMP Message Content			
Module:	NBIA	Error code:	7001
Severity:	(3) Critical		
Alarm model description:	nbia-module is not in service.		
Event type:	1	Probable cause:	612
Alarm Documentation			
Alarm description:	nbia-module is not in service.		
Alarm Object:	nbia-module		
Alarm raised by:	nbia-module unavailable		
Alarm cleared by:	nbia-module is back in service.		
Proposed action:	If the alarm is not automatically ceased, find and correct the error. Then start the nbia-module, see System Administrators Guide.		

**Error code: 7002**

The alarm with the error code 7002 has the attributes listed in the following table:

Table 99 Alarm NBIA:7002.

SNMP Message Content			
Module:	NBIA	Error code:	7002
Severity:	(4) Major		
Alarm model description:	Failed to log in.		
Event type:	2	Probable cause:	600
Alarm Documentation			
Alarm description:	Failed to login.		
Alarm Object:	nbia-module		
Alarm raised by:	nbia-module login failed		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	Check the user configuration.		

**Error code: 7003**

The alarm with the error code 7003 has the attributes listed in the following table:



Table 100 Alarm NBIA:7003.

SNMP Message Content			
Module:	NBIA	Error code:	7003
Severity:	(6) Warning		
Alarm model description:	Notification failed to send in Async Cai3g interface.		
Event type:	2	Probable cause:	10
Alarm Documentation			
Alarm description:	Notification failed to send in Async Cai3g interface.		
Alarm Object:	nbia-module		
Alarm raised by:	nbia-module notification sending failure.		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	-		

**Error code: 7004**

The alarm with the error code 7004 has the attributes listed in the following table:

Table 101 Alarm NBIA:7004.

SNMP Message Content			
Module:	NBIA	Error code:	7004
Severity:	(6) Warning		
Alarm model description:	Notification failed to send in Async Edifact interface.		
Event type:	2	Probable cause:	10
Alarm Documentation			
Alarm description:	Notification failed to send in Async Edifact interface.		
Alarm Object:	nbia-module		
Alarm raised by:	nbia-module notification sending failure.		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	Check the status of notification receiver of BSCS. Check bscs configuration file bscs.xml in directory /home/bootloader/config/module_config_files/nbia-module.		

## 5.11 Module: PERFORMANCE

This section covers all alarms available for the module PERFORMANCE.

**Error code: 6001**

The alarm with the error code 6001 has the attributes listed in the following table:



Table 102 Alarm PERFORMANCE:6001.

SNMP Message Content			
Module:	PERFORMANCE	Error code:	6001
Severity:	(4) Major		
Alarm model description:	CONTROLNODECOUNTER is low		
Event type:	3	Probable cause:	549
Alarm Documentation			
Alarm description:	No of control nodes responding to heartbeat signal has breached minimum threshold.		
Alarm Object:	Control node		
Alarm raised by:	No of available control nodes below minimum threshold.		
Alarm cleared by:	No of available control nodes above minimum threshold.		
Proposed action:	Troubleshoot control node(s) and make sure SNMP Agent is running.		

**Error code: 6002**

The alarm with the error code 6002 has the attributes listed in the following table:

Table 103 Alarm PERFORMANCE:6002.

SNMP Message Content			
Module:	PERFORMANCE	Error code:	6002
Severity:	(4) Major		
Alarm model description:	PAYLOADNODECOUNTER is low		
Event type:	3	Probable cause:	549
Alarm Documentation			
Alarm description:	No of payload nodes responding to heartbeat signal has breached minimum threshold.		
Alarm Object:	Payload node		
Alarm raised by:	No of available payload nodes below minimum threshold.		
Alarm cleared by:	No of available payload nodes above minimum threshold.		
Proposed action:	Troubleshoot payload node(s) and make sure SNMP Agent is running.		

**Error code: 6101**

The alarm with the error code 6101 has the attributes listed in the following table:

Table 104 Alarm PERFORMANCE:6101.

SNMP Message Content			
Module:	PERFORMANCE	Error code:	6101
Severity:	(6) Warning		



Table 104 Alarm PERFORMANCE:6101.

Alarm model description:	Control node is not responding.		
Event type:	2	Probable cause:	14
Alarm Documentation			
Alarm description:	Heartbeat signal to control node not responding.		
Alarm Object:	Control node		
Alarm raised by:	Control node is not responding.		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	Troubleshoot control node(s) and make sure SNMP Agent is running.		

### Error code: 6102

The alarm with the error code 6102 has the attributes listed in the following table:

Table 105 Alarm PERFORMANCE:6102.

SNMP Message Content			
Module:	PERFORMANCE	Error code:	6102
Severity:	(6) Warning		
Alarm model description:	Payload node is not responding.		
Event type:	2	Probable cause:	14
Alarm Documentation			
Alarm description:	Heartbeat signal to payload node not responding.		
Alarm Object:	Payload node		
Alarm raised by:	Payload node is not responding.		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	Troubleshoot payload node(s) and make sure SNMP Agent is running.		

## 5.12 Module: PQ

This section covers all alarms available for the module PQ.

### Error code: 7901

The alarm with the error code 7901 has the attributes listed in the following table:

Table 106 Alarm PQ:7901.

SNMP Message Content			
Module:	PQ	Error code:	7901



Table 106 Alarm PQ:7901.

<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	ema-pq-module is not in service.		
<b>Event type:</b>	4	<b>Probable cause:</b>	612
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	ema-pq-module is not in service.		
<b>Alarm Object:</b>	ema-pq-module		
<b>Alarm raised by:</b>	ema-pq-module service is down.		
<b>Alarm cleared by:</b>	ema-pq-module service is up.		
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the ema-pq-module, see System Administrators Guide.		

**Error code: 7902**

The alarm with the error code 7902 has the attributes listed in the following table:

Table 107 Alarm PQ:7902.

<b>SNMP Message Content</b>			
<b>Module:</b>	PQ	<b>Error code:</b>	7902
<b>Severity:</b>	(3) Critical		
<b>Alarm model description:</b>	Requests in expired state for network element in queue.		
<b>Event type:</b>	4	<b>Probable cause:</b>	203
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	A request was expired for a specific network element.		
<b>Alarm Object:</b>	ema-pq-module		
<b>Alarm raised by:</b>	One or several requests are in expired state for the network element queue.		
<b>Alarm cleared by:</b>	Send or cancel all expired requests for the network element queue.		
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the ema-pq-module, see System Administrators Guide.		

**Error code: 7903**

The alarm with the error code 7903 has the attributes listed in the following table:

Table 108 Alarm PQ:7903.

<b>SNMP Message Content</b>			
<b>Module:</b>	PQ	<b>Error code:</b>	7903
<b>Severity:</b>	(3) Critical		
<b>Alarm model description:</b>	Reached 80% of the configured Processing Queue threshold limit.		



Table 108 Alarm PQ:7903.

<b>Event type:</b>	4	<b>Probable cause:</b>	165
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The configured processing queue capacity limit is soon reached. Requests seem to not be processed.		
<b>Alarm Object:</b>	Processing Queue		
<b>Alarm raised by:</b>	The processing queue capacity limit is soon reached.		
<b>Alarm cleared by:</b>	Requests in queue are processed normally or manually deleted.		
<b>Proposed action:</b>	Make sure the underlying NE can process requests or delete requests manually.		

**Error code: 7904**

The alarm with the error code 7904 has the attributes listed in the following table:

Table 109 Alarm PQ:7904.

<b>SNMP Message Content</b>			
<b>Module:</b>	PQ	<b>Error code:</b>	7904
<b>Severity:</b>	(3) Critical		
<b>Alarm model description:</b>	The configured Processing Queue threshold limit has been reached. Processing Queue will not accept more requests.		
<b>Event type:</b>	4	<b>Probable cause:</b>	165
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The configured processing queue capacity limit is reached. Requests seem to not be processed.		
<b>Alarm Object:</b>	Processing Queue		
<b>Alarm raised by:</b>	The processing queue capacity limit is reached.		
<b>Alarm cleared by:</b>	Requests in queue are processed normally or manually deleted.		
<b>Proposed action:</b>	Make sure the underlying NE can process requests or delete requests manually.		

## 5.13 Module: Platform

This section covers all alarms available for the module Platform.

**Error code: 1101**

The alarm with the error code 1101 has the attributes listed in the following table:

Table 110 Alarm Platform:1101.

<b>SNMP Message Content</b>			
<b>Module:</b>	Platform	<b>Error code:</b>	1101



Table 110 Alarm Platform:1101.

Severity:	(3) Critical		
Alarm model description:	CPU usage too high		
Event type:	1	Probable cause:	541
Alarm Documentation			
Alarm description:	The CPU use is too high.		
Alarm Object:	CPU		
Alarm raised by:	CPU use has been over 80% for at least 15 minutes.		
Alarm cleared by:	CPU use is below 75% for at least 3 minutes.		
Proposed action:	Reevaluate the system dimensioning parameters.		

**Error code: 1202**

The alarm with the error code 1202 has the attributes listed in the following table:

Table 111 Alarm Platform:1202.

SNMP Message Content			
Module:	Platform	Error code:	1202
Severity:	(3) Critical		
Alarm model description:	Memory usage too high		
Event type:	1	Probable cause:	541
Alarm Documentation			
Alarm description:	The memory use is too high.		
Alarm Object:	Memory		
Alarm raised by:	Memory use has been above 90% for at least one minute.		
Alarm cleared by:	Memory use is below 85% for at least one minute.		
Proposed action:	Reevaluate the system dimensioning parameters.		

**Error code: 1301**

The alarm with the error code 1301 has the attributes listed in the following table:

Table 112 Alarm Platform:1301.

SNMP Message Content			
Module:	Platform	Error code:	1301
Severity:	(4) Major		
Alarm model description:	Disk usage high on "/"		
Event type:	4	Probable cause:	151





Table 112 Alarm Platform:1301.

Alarm Documentation	
<b>Alarm description:</b>	The disk use is high on "/".
<b>Alarm Object:</b>	Disk
<b>Alarm raised by:</b>	At least 80% of the storage volume "/" is in use.
<b>Alarm cleared by:</b>	Less than 75% of the storage volume "/" is used.
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.

**Error code: 1302**

The alarm with the error code 1302 has the attributes listed in the following table:

Table 113 Alarm Platform:1302.

SNMP Message Content			
<b>Module:</b>	Platform	<b>Error code:</b>	1302
<b>Severity:</b>	(3) Critical		
<b>Alarm model description:</b>	Disk usage too high on "/"		
<b>Event type:</b>	3	<b>Probable cause:</b>	151
Alarm Documentation			
<b>Alarm description:</b>	The disk use is too high on "/".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 90% of the storage volume "/" is in use.		
<b>Alarm cleared by:</b>	Less than 85% of the storage volume "/" is used.		
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.		

**Error code: 1303**

The alarm with the error code 1303 has the attributes listed in the following table:

Table 114 Alarm Platform:1303.

SNMP Message Content			
<b>Module:</b>	Platform	<b>Error code:</b>	1303
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Disk usage growing high on "/".		
<b>Event type:</b>	4	<b>Probable cause:</b>	151
Alarm Documentation			
<b>Alarm description:</b>	The disk use is growing high on "/".		
<b>Alarm Object:</b>	Disk		



Table 114 Alarm Platform:1303.

<b>Alarm raised by:</b>	At least 70% of the storage volume "/" is in use.
<b>Alarm cleared by:</b>	Less than 65% of the storage volume "/" is used.
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.

**Error code: 1307**

The alarm with the error code 1307 has the attributes listed in the following table:

Table 115 Alarm Platform:1307.

SNMP Message Content			
<b>Module:</b>	Platform	<b>Error code:</b>	1307
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Disk usage high on "/var/dve"		
<b>Event type:</b>	4	<b>Probable cause:</b>	151
Alarm Documentation			
<b>Alarm description:</b>	The disk use is high on "/var/dve".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 80% of the storage volume "/var/dve" is in use.		
<b>Alarm cleared by:</b>	Less than 75% of the storage volume "/var/dve" is used.		
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.		

**Error code: 1308**

The alarm with the error code 1308 has the attributes listed in the following table:

Table 116 Alarm Platform:1308.

SNMP Message Content			
<b>Module:</b>	Platform	<b>Error code:</b>	1308
<b>Severity:</b>	(3) Critical		
<b>Alarm model description:</b>	Disk usage too high on "/var/dve"		
<b>Event type:</b>	3	<b>Probable cause:</b>	151
Alarm Documentation			
<b>Alarm description:</b>	The disk use is too high on "/var/dve".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 90% of the storage volume "/var/dve" is in use.		
<b>Alarm cleared by:</b>	Less than 85% of the storage volume "/var/dve" is used.		
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.		



### Error code: 1309

The alarm with the error code 1309 has the attributes listed in the following table:

Table 117 Alarm Platform:1309.

SNMP Message Content			
Module:	Platform	Error code:	1309
Severity:	(5) Minor		
Alarm model description:	Disk usage growing high on "/var/dve".		
Event type:	4	Probable cause:	151
Alarm Documentation			
Alarm description:	The disk use is growing high on "/var/dve".		
Alarm Object:	Disk		
Alarm raised by:	At least 70% of the storage volume "/var/dve" is in use.		
Alarm cleared by:	Less than 65% of the storage volume "/var/log" is used.		
Proposed action:	Reevaluate the system dimensioning parameters.		

### Error code: 1321

The alarm with the error code 1321 has the attributes listed in the following table:

Table 118 Alarm Platform:1321.

SNMP Message Content			
Module:	Platform	Error code:	1321
Severity:	(4) Major		
Alarm model description:	Disk usage high on "/var/log"		
Event type:	4	Probable cause:	151
Alarm Documentation			
Alarm description:	The disk use is high on "/var/log".		
Alarm Object:	Disk		
Alarm raised by:	At least 80% of the storage volume "/var/log" is in use.		
Alarm cleared by:	Less than 75% of the storage volume "/var/log" is used.		
Proposed action:	Reevaluate the system dimensioning parameters.		

### Error code: 1322

The alarm with the error code 1322 has the attributes listed in the following table:



Table 119 Alarm Platform:1322.

SNMP Message Content			
Module:	Platform	Error code:	1322
Severity:	(3) Critical		
Alarm model description:	Disk usage too high on "/var/log"		
Event type:	3	Probable cause:	151
Alarm Documentation			
Alarm description:	The disk use is too high on "/var/log".		
Alarm Object:	Disk		
Alarm raised by:	At least 90% of the storage volume "/var/log" is in use.		
Alarm cleared by:	Less than 85% of the storage volume "/var/log" is used.		
Proposed action:	Reevaluate the system dimensioning parameters.		

**Error code: 1323**

The alarm with the error code 1323 has the attributes listed in the following table:

Table 120 Alarm Platform:1323.

SNMP Message Content			
Module:	Platform	Error code:	1323
Severity:	(4) Major		
Alarm model description:	Disk usage high on "/cluster"		
Event type:	4	Probable cause:	151
Alarm Documentation			
Alarm description:	The disk use is high on "/cluster".		
Alarm Object:	Disk		
Alarm raised by:	At least 80% of the storage volume "/cluster" is in use.		
Alarm cleared by:	Less than 75% of the storage volume "/cluster" is used.		
Proposed action:	Reevaluate the system dimensioning parameters.		

**Error code: 1324**

The alarm with the error code 1324 has the attributes listed in the following table:

Table 121 Alarm Platform:1324.

SNMP Message Content			
Module:	Platform	Error code:	1324
Severity:	(3) Critical		



Table 121 Alarm Platform:1324.

<b>Alarm model description:</b>	Disk usage too high on "/cluster"		
<b>Event type:</b>	3	<b>Probable cause:</b>	151
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The disk use is too high on "/cluster".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 90% of the storage volume "/cluster" is in use.		
<b>Alarm cleared by:</b>	Less than 85% of the storage volume "/cluster" is used.		
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.		

**Error code: 1325**

The alarm with the error code 1325 has the attributes listed in the following table:

Table 122 Alarm Platform:1325.

<b>SNMP Message Content</b>			
<b>Module:</b>	Platform	<b>Error code:</b>	1325
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Disk usage growing high on "/var/log".		
<b>Event type:</b>	4	<b>Probable cause:</b>	151
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The disk use is growing high on "/var/log".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 70% of the storage volume "/var/log" is in use.		
<b>Alarm cleared by:</b>	Less than 65% of the storage volume "/var/log" is used.		
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.		

**Error code: 1326**

The alarm with the error code 1326 has the attributes listed in the following table:

Table 123 Alarm Platform:1326.

<b>SNMP Message Content</b>			
<b>Module:</b>	Platform	<b>Error code:</b>	1326
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Disk usage growing high on "/cluster".		
<b>Event type:</b>	4	<b>Probable cause:</b>	151
<b>Alarm Documentation</b>			



Table 123 Alarm Platform:1326.

<b>Alarm description:</b>	The disk use is growing high on "/cluster".
<b>Alarm Object:</b>	Disk
<b>Alarm raised by:</b>	At least 70% of the storage volume "/cluster" is in use.
<b>Alarm cleared by:</b>	Less than 65% of the storage volume "/cluster" is used.
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.

**Error code: 1327**

The alarm with the error code 1327 has the attributes listed in the following table:

Table 124 Alarm Platform:1327.

SNMP Message Content			
<b>Module:</b>	Platform	<b>Error code:</b>	1327
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Disk usage growing high on "/boot".		
<b>Event type:</b>	4	<b>Probable cause:</b>	151
Alarm Documentation			
<b>Alarm description:</b>	The disk use is growing high on "/boot".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 70% of the storage volume "/boot" is in use.		
<b>Alarm cleared by:</b>	Less than 65% of the storage volume "/boot" is used.		
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.		

**Error code: 1328**

The alarm with the error code 1328 has the attributes listed in the following table:

Table 125 Alarm Platform:1328.

SNMP Message Content			
<b>Module:</b>	Platform	<b>Error code:</b>	1328
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Disk usage high on "/boot".		
<b>Event type:</b>	4	<b>Probable cause:</b>	151
Alarm Documentation			
<b>Alarm description:</b>	The disk use is high on "/boot".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 80% of the storage volume "/boot" is in use.		



*Table 125 Alarm Platform:1328.*

<b>Alarm cleared by:</b>	Less than 75% of the storage volume "/"boot" is used.
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.

### Error code: 1329

The alarm with the error code 1329 has the attributes listed in the following table:

*Table 126 Alarm Platform:1329.*

SNMP Message Content			
<b>Module:</b>	Platform	<b>Error code:</b>	1329
<b>Severity:</b>	(3) Critical		
<b>Alarm model description:</b>	Disk usage too high on "/"boot".		
<b>Event type:</b>	4	<b>Probable cause:</b>	151
Alarm Documentation			
<b>Alarm description:</b>	The disk use is too high on "/"boot".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 90% of the storage volume "/"boot" is in use.		
<b>Alarm cleared by:</b>	Less than 85% of the storage volume "/"boot" is used.		
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.		

### Error code: 1330

The alarm with the error code 1330 has the attributes listed in the following table:

*Table 127 Alarm Platform:1330.*

SNMP Message Content			
<b>Module:</b>	Platform	<b>Error code:</b>	1330
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Disk usage high on "/"home"		
<b>Event type:</b>	4	<b>Probable cause:</b>	151
Alarm Documentation			
<b>Alarm description:</b>	The disk use is high on "/"home".		
<b>Alarm Object:</b>	Disk		
<b>Alarm raised by:</b>	At least 80% of the storage volume "/"home" is in use.		
<b>Alarm cleared by:</b>	Less than 75% of the storage volume "/"home" is used.		
<b>Proposed action:</b>	Reevaluate the system dimensioning parameters.		

**Error code: 1331**

The alarm with the error code 1331 has the attributes listed in the following table:

*Table 128 Alarm Platform:1331.*

SNMP Message Content			
Module:	Platform	Error code:	1331
Severity:	(3) Critical		
Alarm model description:	Disk usage too high on "/home"		
Event type:	3	Probable cause:	151
Alarm Documentation			
Alarm description:	The disk use is too high on "/home".		
Alarm Object:	Disk		
Alarm raised by:	At least 90% of the storage volume "/home" is in use.		
Alarm cleared by:	Less than 85% of the storage volume "/home" is used.		
Proposed action:	Reevaluate the system dimensioning parameters.		

**Error code: 1402**

The alarm with the error code 1402 has the attributes listed in the following table:

*Table 129 Alarm Platform:1402.*

SNMP Message Content			
Module:	Platform	Error code:	1402
Severity:	(6) Warning		
Alarm model description:	Failed login threshold exceeded.		
Event type:	1	Probable cause:	614
Alarm Documentation			
Alarm description:	The threshold for maximum failed login attempts has been exceeded for a user.		
Alarm Object:	Security		
Alarm raised by:	Login Authentication process		
Alarm cleared by:	Event		
Proposed action:	Reset the user with pam_tally2 command. Example: pam_tally2 --file /cluster/home/faillog --user "username" --reset		

**Error code: 1501**

The alarm with the error code 1501 has the attributes listed in the following table:





Table 130 Alarm Platform:1501.

SNMP Message Content			
Module:	Platform	Error code:	1501
Severity:	(4) Major		
Alarm model description:	License Agent is not in service.		
Event type:	4	Probable cause:	612
Alarm Documentation			
Alarm description:	License Agent is not in service.		
Alarm Object:	License Agent		
Alarm raised by:	License Agent service is down.		
Alarm cleared by:	License Agent service is up.		
Proposed action:	If the alarm is not automatically ceased, find and correct the error. Then (re)start License Agent service, see System Administrators Guide.		

**Error code: 1502**

The alarm with the error code 1502 has the attributes listed in the following table:

Table 131 Alarm Platform:1502.

SNMP Message Content			
Module:	Platform	Error code:	1502
Severity:	(6) Warning		
Alarm model description:	EDA application detected on unlicensed resource instances.		
Event type:	8	Probable cause:	1024
Alarm Documentation			
Alarm description:	EDA application detected on unlicensed resource instances and will be enforced within defined grace period.		
Alarm Object:	License Agent		
Alarm raised by:	EDA application module detected on unlicensed resource instances.		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	Contact your local support organization to order a new license. For more information about licenses, see Function Specification Dynamic Activation Execution Environment.		

**Error code: 1503**

The alarm with the error code 1503 has the attributes listed in the following table:

Table 132 Alarm Platform:1503.

SNMP Message Content			
Module:	Platform	Error code:	1503



Table 132 Alarm Platform:1503.

<b>Severity:</b>	(6) Warning		
<b>Alarm model description:</b>	EDA application enforced on unlicensed resource instances.		
<b>Event type:</b>	8	<b>Probable cause:</b>	1024
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	EDA application enforced on unlicensed resource instances after expiring defined grace period.		
<b>Alarm Object:</b>	License Agent		
<b>Alarm raised by:</b>	EDA application module detected on unlicensed resource instances.		
<b>Alarm cleared by:</b>	No clear, stateless alarm.		
<b>Proposed action:</b>	Contact your local support organization to order a new license. For more information about licenses, see Function Specification Dynamic Activation Execution Environment.		

**Error code: 5301**

The alarm with the error code 5301 has the attributes listed in the following table:

Table 133 Alarm Platform:5301.

<b>SNMP Message Content</b>			
<b>Module:</b>	Platform	<b>Error code:</b>	5301
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	License server is not in service.		
<b>Event type:</b>	1	<b>Probable cause:</b>	1024
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The license server is down.		
<b>Alarm Object:</b>	License Server		
<b>Alarm raised by:</b>	Failure to communicate with license server		
<b>Alarm cleared by:</b>	License server is back in service		
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the license server, see platform's System Administration Guide		

**Error code: 5501**

The alarm with the error code 5501 has the attributes listed in the following table:

Table 134 Alarm Platform:5501.

<b>SNMP Message Content</b>			
<b>Module:</b>	Platform	<b>Error code:</b>	5501
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Loadbalancer is not in service.		



*Table 134 Alarm Platform:5501.*

<b>Event type:</b>	1	<b>Probable cause:</b>	612
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	The LVS server is down.		
<b>Alarm Object:</b>	Loadbalancer Server		
<b>Alarm raised by:</b>	Failure to communicate with lvs server		
<b>Alarm cleared by:</b>	Loadbalancer is back in service		
<b>Proposed action:</b>	If the alarm is not automatically ceased, check keepalived_conf configuration and look for keepalived entries in messages log		

### Error code: 5502

The alarm with the error code 5502 has the attributes listed in the following table:

*Table 135 Alarm Platform:5502.*

<b>SNMP Message Content</b>			
<b>Module:</b>	Platform	<b>Error code:</b>	5502
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	puppetmaster is not in service.		
<b>Event type:</b>	1	<b>Probable cause:</b>	612
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	puppetmaster server is down.		
<b>Alarm Object:</b>	puppetmaster Server		
<b>Alarm raised by:</b>	Failure to communicate with puppetmaster		
<b>Alarm cleared by:</b>	puppetmaster is back in service		
<b>Proposed action:</b>	If the alarm is not automatically ceased, look for puppet entries in messages log and try to find out the root cause of the problem		

### Error code: 5503

The alarm with the error code 5503 has the attributes listed in the following table:

*Table 136 Alarm Platform:5503.*

<b>SNMP Message Content</b>			
<b>Module:</b>	Platform	<b>Error code:</b>	5503
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	puppet client is not in service.		
<b>Event type:</b>	1	<b>Probable cause:</b>	612



Table 136 Alarm Platform:5503.

Alarm Documentation	
Alarm description:	puppet client is down.
Alarm Object:	puppet client
Alarm raised by:	Failure to communicate with puppet client
Alarm cleared by:	puppetmaster is back in service
Proposed action:	If the alarm is not automatically ceased, look for puppet entries in messages log and try to find out the root cause of the problem

## 5.14 Module: REPLAY

This section covers all alarms available for the module REPLAY.

### Error code: 8001

The alarm with the error code 8001 has the attributes listed in the following table:

Table 137 Alarm REPLAY:8001.

SNMP Message Content			
Module:	REPLAY	Error code:	8001
Severity:	(5) Minor		
Alarm model description:	Partially executed replay operation.		
Event type:	4	Probable cause:	504
Alarm Documentation			
Alarm description:	Partially executed replay operation need manual intervention.		
Alarm Object:	EMA Replay Logic		
Alarm raised by:	Replay operation was partially executed.		
Alarm cleared by:	Manual clear. For information on how to perform a manual clear, see section Configuring ESA in System Administrators Guide for Native Deployment, or System Administrators Guide for Virtual Deployment.		
Proposed action:	Manual replay operation, see System Administrators Guide for Native Deployment, or System Administrators Guide for Virtual Deployment.		

### Error code: 8002

The alarm with the error code 8002 has the attributes listed in the following table:

Table 138 Alarm REPLAY:8002.

SNMP Message Content			
Module:	REPLAY	Error code:	8002



Table 138 Alarm REPLAY:8002.

<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Replay operation failed.		
<b>Event type:</b>	4	<b>Probable cause:</b>	504
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	Replay operation failed due to unexpected error code response (not defined as LEH) or connectivity problems.		
<b>Alarm Object:</b>	EMA Replay Logic		
<b>Alarm raised by:</b>	Replay operation was unsuccessful.		
<b>Alarm cleared by:</b>	No clear, stateless alarm.		
<b>Proposed action:</b>	Manual replay operation, see System Administrators Guide for Native Deployment, or System Administrators Guide for Virtual Deployment.		

**Error code: 8003**

The alarm with the error code 8003 has the attributes listed in the following table:

Table 139 Alarm REPLAY:8003.

SNMP Message Content			
<b>Module:</b>	REPLAY	<b>Error code:</b>	8003
<b>Severity:</b>	(5) Minor		
<b>Alarm model description:</b>	Replay operation timeout.		
<b>Event type:</b>	4	<b>Probable cause:</b>	164
<b>Alarm Documentation</b>			
<b>Alarm description:</b>	Replay operation has reached timeout and was aborted.		
<b>Alarm Object:</b>	EMA Replay Logic		
<b>Alarm raised by:</b>	Replay operation timed out.		
<b>Alarm cleared by:</b>	No clear, stateless alarm.		
<b>Proposed action:</b>	Manual replay operation, see System Administrators Guide for Native Deployment, or System Administrators Guide for Virtual Deployment.		

**Error code: 8004**

The alarm with the error code 8004 has the attributes listed in the following table:

Table 140 Alarm REPLAY:8004.

SNMP Message Content			
<b>Module:</b>	REPLAY	<b>Error code:</b>	8004
<b>Severity:</b>	(6) Warning		
<b>Alarm model description:</b>	Replay operation rejected.		

Table 140 Alarm *REPLAY:8004*.

Event type:	1	Probable cause:	549
Alarm Documentation			
Alarm description:	Replay request was rejected since it cannot be fulfilled.		
Alarm Object:	EMA Replay Logic		
Alarm raised by:	Replay request rejected.		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	Manual replay operation, see System Administrators Guide for Native Deployment, or System Administrators Guide for Virtual Deployment.		

**Error code: 8005**

The alarm with the error code 8005 has the attributes listed in the following table:

Table 141 Alarm *REPLAY:8005*.

SNMP Message Content			
Module:	REPLAY	Error code:	8005
Severity:	(6) Warning		
Alarm model description:	Replay operation successful.		
Event type:	1	Probable cause:	160
Alarm Documentation			
Alarm description:	Replay request was successfully executed.		
Alarm Object:	EMA Replay Logic		
Alarm raised by:	Replay request executed.		
Alarm cleared by:	No clear, stateless alarm.		
Proposed action:	-		

**Error code: 8006**

The alarm with the error code 8006 has the attributes listed in the following table:

Table 142 Alarm *REPLAY:8006*.

SNMP Message Content			
Module:	REPLAY	Error code:	8006
Severity:	(4) Major		
Alarm model description:	Replay license error.		
Event type:	4	Probable cause:	1024
Alarm Documentation			
Alarm description:	License for Re-player is not active.		



Table 142 Alarm *REPLAY:8006*.

<b>Alarm Object:</b>	EMA Replay Logic
<b>Alarm raised by:</b>	Invalid/Expired license.
<b>Alarm cleared by:</b>	No clear, stateless alarm.
<b>Proposed action:</b>	-

## 5.15 Module: Reporter

This section covers all alarms available for the module `Reporter`.

### Error code: 10001

The alarm with the error code `10001` has the attributes listed in the following table:

Table 143 Alarm *Reporter:10001*.

SNMP Message Content			
<b>Module:</b>	Reporter	<b>Error code:</b>	10001
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Reporter Application is not in service		
<b>Event type:</b>	4	<b>Probable cause:</b>	612
Alarm Documentation			
<b>Alarm description:</b>	Reporter Application is not in service.		
<b>Alarm Object:</b>	Reporter Application		
<b>Alarm raised by:</b>	Reporter Application service is down.		
<b>Alarm cleared by:</b>	Reporter Application service is up.		
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the reporter, see System Administrators Guide.		

### Error code: 10010

The alarm with the error code `10010` has the attributes listed in the following table:

Table 144 Alarm *Reporter:10010*.

SNMP Message Content			
<b>Module:</b>	Reporter	<b>Error code:</b>	10010
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Reporter license error		
<b>Event type:</b>	4	<b>Probable cause:</b>	1024
Alarm Documentation			



Table 144 Alarm Reporter:10010.

<b>Alarm description:</b>	License for Reporter is not active.
<b>Alarm Object:</b>	Invalid/Expired license
<b>Alarm raised by:</b>	License for Reporter is not active.
<b>Alarm cleared by:</b>	Order/apply new license
<b>Proposed action:</b>	Contact your local support organization to order a new license.

**Error code: 10011**

The alarm with the error code 10011 has the attributes listed in the following table:

Table 145 Alarm Reporter:10011.

SNMP Message Content			
<b>Module:</b>	Reporter	<b>Error code:</b>	10011
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	Reporter maintenance error		
<b>Event type:</b>	4	<b>Probable cause:</b>	544
Alarm Documentation			
<b>Alarm description:</b>	Cannot perform maintenance on statistics files.		
<b>Alarm Object:</b>	Reporter Application		
<b>Alarm raised by:</b>	Cannot perform maintenance on statistics files.		
<b>Alarm cleared by:</b>	Manual clear. For information on how to perform a manual clear, see section Configuring ESA in System Administrators Guide.		
<b>Proposed action:</b>	Restart the Reporter after the faults have been corrected, see System Administrators Guide.		

## 5.16 Module: SM

This section covers all alarms available for the module SM.

**Error code: 8101**

The alarm with the error code 8101 has the attributes listed in the following table:

Table 146 Alarm SM:8101.

SNMP Message Content			
<b>Module:</b>	SM	<b>Error code:</b>	8101
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	statistics-monitor is not in service.		
<b>Event type:</b>	4	<b>Probable cause:</b>	612





Table 146 Alarm SM:8101.

Alarm Documentation	
<b>Alarm description:</b>	statistics-monitor is not in service.
<b>Alarm Object:</b>	statistics-monitor
<b>Alarm raised by:</b>	statistics-monitor service is down.
<b>Alarm cleared by:</b>	statistics-monitor service is up.
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the statistics-monitor, see System Administrators Guide.

## 5.17 Module: ZooKeeper

This section covers all alarms available for the module `ZooKeeper`.

### Error code: 3501

The alarm with the error code 3501 has the attributes listed in the following table:

Table 147 Alarm ZooKeeper:3501.

SNMP Message Content			
<b>Module:</b>	ZooKeeper	<b>Error code:</b>	3501
<b>Severity:</b>	(4) Major		
<b>Alarm model description:</b>	ZooKeeper server is not in service.		
<b>Event type:</b>	4	<b>Probable cause:</b>	612
Alarm Documentation			
<b>Alarm description:</b>	ZooKeeper server is not in service.		
<b>Alarm Object:</b>	Connection ZooKeeper		
<b>Alarm raised by:</b>	ZooKeeper data storage server is down.		
<b>Alarm cleared by:</b>	ZooKeeper server is back in service.		
<b>Proposed action:</b>	If the alarm is not automatically ceased, find and correct the error. Then start the zookeeper, see System Administrators Guide for Native Deployment, or System Administrators Guide for Virtual Deployment.		





## 6 Severity, Event Type, and Probable Cause

This section explains the codes used for the following:

- Severity levels, Section 6.1 on page 79
- Event types, Section 6.2 on page 79
- Probable causes, Section 6.3 on page 80

### 6.1 Severity Levels

The following severity levels used in the alarms are specified in the International Telecommunication Union (ITU) as per M.3100 and X.733. The following severity levels are mentioned in this document:

1. Cleared/Normal (do not use)
2. Indeterminate (do not use)
3. Critical
4. Major
5. Minor
6. Warning

### 6.2 Event Types

The following event types used in the alarms are specified in the International Telecommunication Union (ITU) as per M.3100. The following severity levels are mentioned in this document:

1. other
2. communicationsAlarm
3. qualityOfServiceAlarm
4. processingErrorAlarm
5. equipmentAlarm
6. environmentalAlarm
7. integrityViolation
8. operationalViolation



- 9. physicalViolation
- 10. securityServiceOrMechanismViolation
- 11. timeDomainViolation

## 6.3 Probable Causes

The following probable causes used in the alarms are specified in the International Telecommunication Union (ITU) as per M.3100, X.733, and X.736. Duplicate values defined in X.733 are appended with \_X733 to ensure uniqueness. Probable causes 1-207 are defined in M.3100.

The following probable causes are related to communications alarms:

alS (1)	unavailable (14)
callSetUpFailure (2)	signalLabelMismatch (15)
degradedSignal (3)	lossOfMultiFrame (16)
farEndReceiverFailure (4)	receiveFailure (17)
framingError (5)	transmitFailure (18)
lossOfFrame (6)	modulationFailure (19)
lossOfPointer (7)	demodulationFailure (20)
lossOfSignal (8)	broadcastChannelFailure (21)
payloadTypeMismatch (9)	connectionEstablishmentError (22)
transmissionError (10)	invalidMessageReceived (23)
remoteAlarmInterface (11)	localNodeTransmissionError (24)
excessiveBER (12)	remoteNodeTransmissionError (25)
pathTraceMismatch (13)	routingFailure (26)

Values 27-50 are reserved for communications alarm related probable causes. The following are used with equipment alarms:



backplaneFailure (51)	transmitterFailure (67)
dataSetProblem (52)	trunkCardProblem (68)
equipmentIdentifierDuplication (53)	replaceableUnitProblem (69)
externalIFDeviceProblem (54)	realTimeClockFailure (70)
lineCardProblem (55)	antennaFailure (71)
multiplexerProblem (56)	batteryChargingFailure (72)
nEIdentifierDuplication (57)	diskFailure (73)
powerProblem (58)	frequencyHoppingFailure (74)
processorProblem (59)	iODeviceError (75)
protectionPathFailure (60)	lossOfSynchronisation (76)
receiverFailure (61)	lossOfRedundancy (77)
replaceableUnitMissing (62)	powerSupplyFailure (78)
replaceableUnitTypeMismatch (63)	signalQualityEvaluationFailure (79)
synchronizationSourceMismatch (64)	tranceiverFailure (80)
terminalProblem (65)	protectionMechanismFailure (81)
timingProblem (66)	protectingResourceFailure (82)

Values 83-100 are reserved for equipment alarm related probable causes. The following are used with environmental alarms:

airCompressorFailure (101)	explosiveGas (119)
airConditioningFailure (102)	fire (120)
airDryerFailure (103)	flood (121)
batteryDischarging (104)	highHumidity (122)
batteryFailure (105)	highTemperature (123)
commercialPowerFailure (106)	highWind (124)
coolingFanFailure (107)	iceBuildUp (125)
engineFailure (108)	intrusionDetection (126)
fireDetectorFailure (109)	lowFuel (127)
fuseFailure (110)	lowHumidity (128)
generatorFailure (111)	lowCablePressure (129)
lowBatteryThreshold (112)	lowTemperature (130)
pumpFailure (113)	lowWater (131)
rectifierFailure (114)	smoke (132)
rectifierHighVoltage (115)	toxicGas (133)
rectifierLowFVVoltage (116)	coolingSystemFailure (134)
ventilationsSystemFailure (117)	externalEquipmentFailure (135)
enclosureDoorOpen (118)	externalPointFailure (136)

Values 137-150 are reserved for environmental alarm related probable causes. The following are used with processing error alarms:



storageCapacityProblem (151)	configurationOrCustomisationError (159)
memoryMismatch (152)	databaseInconsistency (160)
corruptData (153)	fileError (161)
outOfCPUCycles (154)	outOfMemory (162)
sfwrEnvironmentProblem (155)	softwareError (163)
sfwrDownloadFailure (156)	timeoutExpired (164)
lossOfRealTimeI (157)	underlyingResourceUnavailable (165)
applicationSubsystemFailure (158)	versionMismatch (166)

Values 168-200 are reserved for processing error alarm related probable causes.

bandwidthReduced (201)	excessiveRetransmissionRate (205)
congestion (202)	reducedLoggingCapability (206)
excessiveErrorRate (203)	systemResourcesOverload (207)
excessiveResponseTime (204)	

The following probable causes are defined in X.733:



adapterError (500)	materialSupplyExhausted (528)
applicationSubsystemFailure (501)	multiplexerProblemX733 (529)
bandwidthReducedX733 (502)	outOfMemoryX733 (530)
callEstablishmentError (503)	outputDeviceError (531)
communicationsProtocolError (504)	performanceDegraded (532)
communicationsSubsystemFailure (505)	powerProblems (533)
configurationOrCustomizationError (506)	pressureUnacceptable (534)
congestionX733 (507)	processorProblems (535)
corruptData (508)	pumpFailureX733 (536)
cpuCyclesLimitExceeded (509)	queueSizeExceeded (537)
dataSetOrModemError (510)	receiveFailureX733 (538)
degradedSignalX733 (511)	receiverFailureX733 (539)
dteDceInterfaceError (512)	remoteNodeTransmissionErrorX733 (540)
enclosureDoorOpenX733 (513)	resourceAtOrNearingCapacity (541)
equipmentMalfunction (514)	responseTimeExcessive (542)
excessiveVibration (515)	retransmissionRateExcessive (543)
fileErrorX733 (516)	softwareErrorX733 (544)
fireDetected (517)	softwareProgramAbnormallyTerminated (545)
framingErrorX733 (518)	softwareProgramError (546)
heatingVentCoolingSystemProblem (519)	storageCapacityProblemX733 (547)
humidityUnacceptable (520)	temperatureUnacceptable (548)
inputOutputDeviceError (521)	thresholdCrossed (549)
inputDeviceError (522)	timingProblemX733 (550)
lanError (523)	toxicLeakDetected (551)
leakDetected (524)	transmitFailureX733 (552)
localNodeTransmissionErrorX733 (525)	transmitterFailure (553)
lossOfFrameX733 (526)	underlyingResourceUnavailable (554)
lossOfSignalX733 (527)	versionMismatchX733 (555)

The following are probable causes defined in X.736:

authenticationFailure (600)	informationOutOfSequence (608)
breachOfConfidentiality (601)	keyExpired (609)
cableTamper (602)	nonRepudiationFailure (610)
delayedInformation (603)	outOfHoursActivity (611)
denialOfService (604)	outOfService (612)
duplicateInformation (605)	proceduralError (613)
informationMissing (606)	unauthorizedAccessAttempt (614)
informationModificationDetected (607)	unexpectedInformation (615)

Other probable causes are covered by other (1024).







## Reference List

### Ericsson Documents

- [1] *System Administrators Guide for Native Deployment*, 1/1543-CSH 109 628 Uen
- [2] *System Administrators Guide for Virtual and Cloud Deployment*, 3/1543-CSH 109 628 Uen
- [3] *Glossary of Terms and Acronyms*, 0033-CSH 109 628 Uen
- [4] *Library Overview*, 18/1553-CSH 109 628 Uen
- [5] *CUDB Subscription Repair and Remove Procedures* , 4/1553-CSH 109 628 Uen
- [6] *Function Specification Resource Activation*, 3/155 17-CSH 109 628 Uen