

# SAF, LOTC Ethernet Bonding Failed

## Ericsson Centralized User Database

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### OPERATING INSTRUCTION

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SAF, LOTC Ethernet Bonding Failed



# 1 Introduction

This instruction concerns alarm handling for the SAF, LOTC Ethernet Bonding Failed alarm.

## 1.1 Alarm Description

This alarm is related to Service Availability Forum (SAF).

The alarm is issued when one or more Ethernet interfaces belonging to a bonded interface fails.

The possible alarm causes and the corresponding fault reasons, fault locations, and impacts are described in Table 1.

*Table 1 Alarm Causes*

| Alarm Cause  | Description   | Fault Reason                   | Fault Location       | Impact   |
|--|---|--------------------------------|----------------------|--|
| One of the Ethernet interfaces of the GEP blade (eht5 or eth6) has no L2 connectivity. | The GEP blade has a bonding interface (bond0) defined on the physical interfaces eth5 and eth6. The alarm is raised, if one of the physical interfaces cannot contact the CMX blade it is connected to. | Blade not correctly plugged in | CMX, GEP blade, EGEM | Loss of redundancy in the GEP blade network connectivity |
|  |   | CMX replacement                | CMX                  |  |
|  |   | CMX restart                    | CMX                  |  |
|  |   | Faulty hardware                | CMX, GEP blade, EGEM |  |
|  |   | Wrong DMX configuration        | DMX                  |  |

The alarm attributes are listed and explained in Table 2.

*Table 2 Alarm Attributes*

| Attribute Name           | Attribute Value   |
|--------------------------|---|
| Auto Cease               | Yes   |
| Module                   | SAF   |
| Error Code               | 6   |
| Timestamp First          | Date and time when the alarm was raised for the first time. |
| Repeated Counter         | Number which indicates how many times the alarm was raised. |
| Timestamp Last           | Date and time of the most recent alarm raise.               |
| Resource ID              | .1.3.6.1.4.1.193.169.9.6.<length>.<NOI>                     |
| Alarm Model Description  | LOTIC Ethernet Bonding, SAF                                 |
| Alarm Active Description | SAF platform: LOTIC Ethernet Bonding @<NON>                 |
| ITU Alarm Event Type     | communicationsAlarm (2)                                     |



| Attribute Name               | Attribute Value  |
|------------------------------|--|
| ITU Alarm Probable Cause     | communicationsSubsystemFailure (505)                             |
| ITU Alarm Perceived Severity | (3) - Critical   |
| Originating source IP        | Node IP where the alarm was raised.                              |
| Sequence Number              | Number which indicates the order in which the alarms are raised. |

In Table 2, the indicated variables are as follows:

- `<NON>` is the notifying object name that indicates where is the component that generates the alarm. For example:

`PL_2_4`

- `<NOI>` is the notifying object identifier. It corresponds to `<NON>` in a dot-separated, ASCII-decimal-encoded, character-per-character format. For example:

In Resource ID `1.3.6.1.4.1.193.169.9.6.6.80.76.95.50.95.52`, substring `<NOI> 80.76.95.50.95.52` refers for `PL_2_4`.

- `<length>` is the number of characters in `<NON>`, which is equivalent to the number of octets in `<NOI>`. In the previous example, `<length>` is 6.

For further information about attribute descriptions, refer to *CUDB Node Fault Management Configuration Guide*, Reference [1].

## 1.2 Prerequisites

This section provides information on the documents, tools, and conditions that apply to the procedure.

### 1.2.1 Documents

Before starting this procedure, ensure that you have read the following documents:

- *CUDB Node Fault Management Configuration Guide*, Reference [1], regarding alarm configuration.
- *System Safety Information*, Reference [3]
- *Personal Health and Safety Information*, Reference [4]

### 1.2.2 Tools

Not applicable.

**1.2.3****Conditions**

Not applicable.





## 2 Procedure

If the alarm is raised, do the following:

1. Check if the alarm has been raised on other blades also. If all the blades of a single shelf have the same alarm, this can mean one of the following:
  - One of the CMX devices of the shelf has either failed or is configured incorrectly. Check that both CMX devices of the shelf are running, are well configured, and there is no malfunction in them.
  - There is improper inter-shelf CMX connectivity. If subrack 1 or 2 suffers the alarm, one of the CMX devices on that subrack could be lacking of proper connectivity with the CMX on subrack 0. Check cabling and DMX configuration for the connectivity between the CMX in shelf 0 and the CMX in the affected shelf.
2. If the alarm is only raised for a single blade, check the DMX to make sure that the configuration is correct and none of the CMX interfaces connecting the blade are disabled on the DMX.
3. If Step 2 does not solve the issue, there could be a connectivity issue. Check that the blade is healthy and correctly plugged into the magazine.
4. If the alarm does not cease, there may be a hardware failure in the network interfaces. Consult the next level of support to replace the affected devices.





## Glossary

For the terms, definitions, acronyms, and abbreviations used in this document, refer to *CUDB Glossary of Terms and Acronyms*, Reference [2].





## Reference List

### **CUDB Documents**

- [1] *CUDB Node Fault Management Configuration Guide*
- [2] *CUDB Glossary of Terms and Acronyms*

### **Other Ericsson Documents**

- [3] *System Safety Information*
- [4] *Personal Health and Safety Information*