

LDAP Front End, High Load in LDAP Processing Layer

Ericsson Centralized User Database

OPERATING INSTRUCTION

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1 Overview

1.1 Description

The load in the Lightweight Directory Access Protocol (LDAP) processing layer is above its processing capacity when the *drop ratio* in the LDAP layer goes above a certain threshold. The *drop ratio* for the LDAP processing layer is defined as the number of LDAP operations that could not be processed due to overload in the LDAP processing layer divided by the number of LDAP operations received in the CUDB node, over a period of time.

The alarm is raised when the load on the LDAP processing layer goes above the threshold configured in the `ldapFrontEndDropRatioAlarmThreshold` parameter. For more information, refer to *CUDB Node Configuration Data Model Description*, Reference [1].

The alarm attributes are listed and explained in Table 1:

Table 1 Alarm Attributes

Attribute Name	Attribute Value
Auto Cease	Yes
Module	LDAP-FE
Error Code	4
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 raised.
Resource ID	.1.3.6.1.4.1.193.169.2.4
Alarm Model Description	High load in LDAP processing layer, LDAP front-end.
Alarm Active Description	LDAP front-end: High load in LDAP processing layer.
ITU Alarm Event Type	qualityOfServiceAlarm (3)
ITU Alarm Probable Cause	systemResourcesOverload (207)
ITU Alarm Perceived Severity	(4) - Major
Originating Source IP	Node IP where the alarm was raised.
Sequence Number	Number which indicates the order in which alarms were raised.

For further information about attribute descriptions, refer to *CUDB System Administrator Guide*, Reference [2].

The possible causes of the alarm are as follows:



- The incoming LDAP traffic level is higher than that the CUDB node can cope with.

1.2 Prerequisites

1.2.1 Documents

Refer to *CUDB System Administrator Guide*, Reference [3] about alarm configuration.

1.2.2 Tools

Not applicable.

1.2.3 Conditions

Not applicable.



2 Procedure

Occasional high load situations may occur in every traffic-processing system, since sometimes the incoming traffic level may be higher than expected. Nevertheless, if this alarm is raised too frequently, or stays raised during long periods of time, perform the following actions:

- Check if the application Front Ends (FEs), LDAP clients using the CUDB system are configured in a way that results in a balanced distribution of the LDAP processing load across all CUDB nodes. Too many application FEs connecting to a given CUDB node might result in a high load situation in the LDAP processing layer. Consult the next level of maintenance support. Further actions are outside the scope of this Operating Instruction.
- The incoming LDAP traffic might be higher than originally expected, and the current CUDB system dimensioning might no longer be enough to cope with it. Consult the next level of maintenance support. Further actions are outside the scope of this Operating Instruction.





Glossary

For the terms, definitions, acronyms, and abbreviations used in this document, refer to *CUDB Glossary of Terms and Acronyms*, Reference [4].





Reference List

CUDB Documents

- [1] *CUDB Node Configuration Data Model Description*
- [2] *CUDB Node Fault Management Configuration Guide*
- [3] *CUDB System Administrator Guide*
- [4] *CUDB Glossary of Terms and Acronyms*