

C-Diameter, Peer Connection Congestion

C-Diameter

OPERATING INSTRUCTIONS

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1 Alarm Description

This generic C-Diameter threshold based alarm indicates congestion in the Own or in the Peer Diameter Node. The congestion was measured on one of the peer connections, that is, the message amount dropped due to diameter link congestion crossed the threshold defined by the related threshold job level. Due to the messages dropped by the diameter stack, there can be disturbances in diameter application level session handling.

Note: C-Diameter does not deliver `Threshold Job` for its measurement types. It is up to the C-Diameter Applications to define and document these. Make sure, that the related application documentation is available.

The alarm was raised because at the end of the granularity period (GP) the measured value for one of the DiameterCC measurement types was higher than the configured threshold. The following C-Diameter measurement types are associated with this alarm:

- `Diameter.EgressReqMsgDiscarded.Congestion`
- `Diameter.EgressAnswMsgDiscarded.Congestion`
- `Diameter.IngressReqMsgDiscarded.Congestion`
- `Diameter.IngressAnswMsgDiscarded.Congestion`

In the subsequent GP the threshold based alarm is cleared automatically in the following cases:

- The observed measurement value is lower than the Low threshold of the smallest non-empty severity.
- No measurement result is available during the granularity period, that is, the time between the initiations of two successive gatherings of measurement data.

The alarm can also be cleared if the related `Threshold Reader` or its `Threshold Monitor` is deleted or disabled.

For more information about DiameterCC measurement types and their properties, see [DiameterCC Measurements](#).

For more details on Performance Management alarms in CBA environment, see [Reference \[1\]](#).



2 Procedure

2.1 Handle Alarm C-Diameter, Peer Connection Congestion

Peer connection congestion can be caused by various problems, for example:

- Congestion on transport level, when the available network throughput between the peers is not eligible for the amount of Diameter traffic.
- Congestion at the Peer node, when the Peer is not capable of handling the Diameter traffic.
- Congestion at the Own Node, when there are not enough resources in the Own node to handle the Diameter traffic.

The first of these two are out of scope of this document, the latter needs to be addressed at the Own node. Follow application dimensioning guidelines to increase the capabilities of the Own node.

To identify the **C-Diameter Application** for the specific instruction, and the C-Diameter measurement type reporting the congestion, execute the procedure described in C-Diameter, Diameter Measurement Threshold Crossed.



Reference List

Documents

- [1] Core MW Performance Management Description, 1/155 16-CAA 901 2624/1