

C-Diameter, Diameter Measurement Threshold Crossed

OPERATING INSTRUCTIONS

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C-Diameter, Diameter Measurement Threshold Crossed



1 Alarm Description

This generic C-Diameter threshold based 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.

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.

For the list of the DiameterCC measurement types and their properties, see [DiameterCC Measurements](#).

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

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

2 Procedure

2.1 Generic Handling of Alarm C-Diameter, PMF Threshold Crossed

Prerequisites

- This instruction references the following document:
 - [C-Diameter Trouble Report and Support Case Writing Guideline](#)
 - **C-Diameter Application** documentation related to the configured Threshold Job
 - [Ericsson Command-Line Interface, Reference \[2\]](#)



- No tools are required.
- The following conditions must apply:
 - The alarm is raised.
 - Diameter configuration data are correctly defined.
 - Diameter Performance Management and Fault Management instance models are deployed.
 - An Ericsson Command-Line Interface (ECLI) session in exec mode is in progress.

Steps

1. Based on the information found in the alarm's fields, identify the **C-Diameter Application** which issued the alarm.

Check the related **PmJob** and its **MeasurementReader** in the source attribute of the alarm, for example:

```
>show all ManagedElement=1, SystemFunctions=1, Fm=1, FmAlarm=16  
FmAlarm=16, source  
source="ManagedElement=1, SystemFunctions=1, Pm=1, PmJob=AppTHJob  
, MeasurementReader=1: DiaNode=server1.operator1.com"
```

2. List the configured **MeasurementReader** to find the related C-Diameter measurement type and its properties in **DiameterCC Measurements**.

```
>show ManagedElement=1, SystemFunctions=1, Pm=1, PmJob=AppTHJob, Me  
asurementReader=1, measurementSpecification, measurementTypeRef  
  
measurementTypeRef= "ManagedElement=1, SystemFunctions=1, Pm=1, PmG  
roup= DiaNode, MeasurementType=Diameter. TxBytes. Total "
```

3. Locate the C-Diameter Application's documentation describing appropriate measures for the situation.

4. Is there a specific Application OPI found?

Yes: Follow the instructions mentioned in that document to clear the alarm. After performing the procedure defined by the C-Diameter Application for the above measurement, proceed with Step 17.

No: Continue with the next step.

5. Navigate to the **PmJob** Managed Object (MO) indicated by alarm source attribute, for example:

```
>ManagedElement=1, SystemFunctions=1, Pm=1, PmJob=ApplicationTh  
resholdJob
```

6. Check the value of attribute **granularityPeriod**:



```
(PmJob=ApplicationThresholdJob)>show granularityPeriod
```

The following is an example output:

```
granularityPeriod=FIVE_MIN
```

7. Wait up to the time of the granularity period for the alarm to be cleared automatically.

8. Is the alarm cleared?

Yes: The measurement peak was most probably caused by transient events. No manual intervention is required, proceed with Step 17.

No: Continue with the next step.

9. In case no related application documentation is found and the alarm is not ceased automatically during the next granularity period, navigate to the appropriate **PmThresholdMonitoring** MO, for example:

```
(PmJob=ApplicationThresholdJob)>MeasurementReader=1,PmThresholdMonitoring=1
```

10. Check the values of attributes thresholdHigh and thresholdLow:

```
(PmThresholdMonitoring=1)>show
```

The following is an example output:

```
PmThresholdMonitoring=1
  pmThresholdMonitoringId="1"
  thresholdHigh=1
  thresholdLow=0
  thresholdSeverity=MINOR
```

11. With the collected information, contact the network administrator to establish root cause of the fault, for example network dimensioning, alarm threshold values or network configuration fault. Are the attributes thresholdHigh and thresholdLow set to correct values for the measurement type shown in Step 2?

Yes: Proceed with Step 13.

No: Continue with the next step.

12. Set appropriate values for attributes thresholdHigh and thresholdLow, for example:

```
(PmThresholdMonitoring=1)>config
```

```
(config-PmThresholdMonitoring=1)>thresholdHigh=2
```

```
(config-PmThresholdMonitoring=1)>commit
```



(config-PmThresholdMonitoring=1)>up

13. Wait for the alarm to be cleared automatically after elapsing of two granularity periods.
14. Is the alarm cleared?

Yes: Proceed with Step 17.

No: Continue with the next step.
15. Perform data collection, refer to C-Diameter Trouble Report and Support Case Writing Guideline.
16. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.
17. Job is completed.



Reference List

Documents

- [1] Core MW Performance Management Description, 1/155 16-CAA 901 2624/1
- [2] Ericsson Command-Line Interface, 4/155 19-CAA 901 2587/7