

vDicos, Diameter Link Congested

OPERATING INSTRUCTIONS

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1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The alarm is raised when the number of messages that are discarded because of congestion at the Diameter transport layer exceeds a configured threshold value in a given time interval.

The possible alarm causes and fault locations are explained in Table 1.

Table 1 Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact
Too high traffic at Diameter transport layer	The number of messages that get discarded because of congestion exceeds a configured threshold value in a given time interval	Congestion at Diameter transport layer	Transport layer – SCTP or TCP	Message loss

The alarm attributes are listed and explained in Table 2.

Table 2 Alarm Attributes

Attribute Name	Attribute Value
Major Type	193
Minor Type	2250572781
Source	ManagedElement=<node_name>, SystemFunctions=1, Pm=1, PmJob=<pmJobId>, MeasurementReader=<measurementReaderId>:<stackId>:<hostId>:<connId>
Specific Problem	vDicos, Diameter Link Congested
Event Type	communicationsAlarm (2)
Probable Cause	x733ThresholdCrossed (351)
Additional Text	Diameter Link Congested
Perceived Severity	minor (5)



1.2 Prerequisites

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

1.2.1 Documents

This instruction references the following document:

- *Data Collection Guideline*

1.2.2 Tools

No tools are required.

1.2.3 Conditions

Before starting this procedure, ensure that the following conditions are met:

- A vDicos, Diameter Link Congested alarm is raised.



2 Procedure

Do the following:

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

```
>ManagedElement=NODE06ST, SystemFunctions=1, Pm=1, PmJob=Dia_Cong_Thr_Job
```

2. Check the value of attribute `granularityPeriod`:

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

The following is an example output:

```
granularityPeriod=FIVE_MIN
```

3. Wait up to the time of the granularity period for the alarm to be cleared automatically.
4. Is the alarm cleared?

Yes: Proceed with Step 13.

No: Continue with the next step.

5. Navigate to the *PmThresholdMonitoring* MO, for example:

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

6. 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
```

7. 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?

Yes: Proceed with Step 9.



No: Continue with the next step.

8. 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
```

9. Wait for the alarm to be cleared automatically after elapsing of two granularity periods.

10. Is the alarm cleared?

Yes: Proceed with Step 13.

No: Continue with the next step.

11. Perform data collection, refer to *Data Collection Guideline*.

12. Contact the network administrator for further analysis.

13. Job is completed.