

CSCF ENUM Responses Resulting In Malformatted RN

Call Session Control Function

OPERATING INSTRUCTIONS

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1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The threshold alarm `CSCF ENUM Responses Resulting In Malformatted RN` is issued when the number of `ENUM` responses received with malformatted number portability parameters reached or exceeds the threshold value.

The alarm is associated to the Performance Management counter `CscfGnpEnumResponseMalformatted`.

The alarm is raised when the number of malformatted Routing Numbers (RN) has reached or exceeded its configured `thresholdHigh` within the time period configured by `thresholdRateOfVariation` and `granularityPeriod`.

The alarm is automatically ceased when it reaches or goes below the configured `thresholdLow` value.

The default values related to this alarm are: `thresholdRateOfVariation=PER_GP`, `granularityPeriod=FIVE MIN`, `thresholdHigh=6`, and `thresholdLow=0`. This means that when the counter value is 6 or higher, the alarm is raised when the granularity period is ended. The alarm is ceased when the counter `CscfGnpEnumResponseMalformatted` has reached a value of 0 at the end of a granularity period.

Note: The thresholds for raising and ceasing this alarm are configurable. The default distinguished name for the threshold is `ManagedElement=<node_name>`, `SystemFunctions=1`, `Pm=1`, `PmJob= CscfRoutingInformationThreshold`, `MeasurementReader=cscfGnpEnumResponseMalformattedMeasReader`, `PmThresholdMonitoring=cscfGnpEnumResponseMalformatted`.

It is not possible to change threshold values once they have been set. To change a threshold, first the `PmThresholdMonitoring` instance must be deleted and recreated with required `thresholdHigh` and `thresholdLow`.

For more information, refer to *Performance Management*.

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
The PM counter CscfGnpEnumResponseMalformatted has reached or exceeded its configured upper threshold value.	The number of ENUM responses received with malformatted number portability RN or Number Portability Database Indicator (NPDI) parameters has reached or exceeded the configured threshold value.	The ENUM number portability RN or NPDI parameters in the ENUM response are malformatted.	ENUM routing table has erroneous configuration data.	ENUM provisioning errors are resulting in malformatted ENUM responses towards the CSCF. Calls to ported numbers are not properly routed.

Note: An alarm can appear as a result of maintenance activity.

The alarm attributes are listed and explained in Table 2.

Table 2 Alarm Attributes

Attribute Name	Attribute Value
Major Type	193
Minor Type	6684695
Managed Object Class	MeasurementReader
Managed Object Instance	ManagedElement=<node_name>,SystemFunctions=1, Pm=1, PmJob= CscfRoutingInformationThreshold, MeasurementReader=cscfGnpEnumResponseMalformattedMeasReader
Specific Problem	CSCF ENUM Responses Resulting In Malformatted RN
Event Type	processingError (4)
Probable Cause	x733ThresholdCrossed (351)



Attribute Name	Attribute Value
Additional Text	cscfGnpEnumResponseMalformatted, ENUM provisioning errors are resulting in malformed ENUM responses towards the CSCF. Calls to ported numbers may not be routed properly.
Perceived Severity	major (4)

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:

- *Managed Object Model (MOM)*
- *CSCF Configuration Management*

1.2.2 Tools

Before starting this procedure, ensure that the following tool is available:

- ENUM Provisioning tool such as IPWorks

1.2.3 Conditions

No conditions.





2 Procedure

Note: If the reason for the alarm has disappeared after the granularity period, the alarm automatically ceases.

Do the following:

1. Analyze the application logs to determine which TEL URIs that generate faulty ENUM responses.
2. Examine and correct the ENUM entries by using the ENUM provisioning tool or interface (for example, IPWorks) to ensure that the ENUM entries are no longer malformed and that they follow the correct SIP syntax.
3. The alarm ceases after the number of faulty ENUM responses reaches or goes below the configured `thresholdLow` for a given PM scan interval.
4. Confirm that the alarm has ceased. If the alarm remains, consult the next level of maintenance support. Further actions are outside the scope of this instruction.
5. Job is completed.