

CSCF Credit Control Answers Indicate End User Service Denied

Call Session Control Function

OPERATING INSTRUCTIONS

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1 Alarm Description

The threshold alarm `CSCF Credit Control Answers Indicate End User Service Denied` is raised when the server denies the service request because of service restrictions.

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

The alarm is raised when the number of received Diameter Credit Control Answer messages, including the error code `DIAMETER_END_USER_SERVICE_DENIED`, 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=2`, and `thresholdLow=0`. This means that when the counter value is 2 or higher, the alarm is raised when the Granularity Period is ended. The alarm is ceased when the counter `cscfCCAEndUserServiceDenied` 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 thresholds is: `ManagedElement=<node_name>`, `SystemFunctions=1`, `Pm=1`, `PmJob=CscfChargingStatisticsThreshold`, `MeasurementReader=cscfCCAEndUserServiceDeniedMeasReader`, `PmThresholdMonitoring=cscfCCAEndUserServiceDenied`.

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](#).



Table 1 CSCF Credit Control Answers Indicate End User Service Denied Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact
The PM counter <code>cscfCCAEndUserServiceDenied</code> has reached or exceeded its configured upper threshold value.	The number of Credit Control Answers (CCA) with a transient failure where the server denies the service request because of service restrictions during a Granularity Period have reached or exceeded the configured threshold.	Charging Server denies the service request. This can, for example, be because of faulty subscriber configuration.	The subscriber provisioning or configuration is not correct.	Sessions receiving this error code from the Charging Server is terminated.

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

Table 2 CSCF Credit Control Answers Indicate End User Service Denied Alarm Attributes

Attribute Name	Attribute Value
Major Type	193
Minor Type	6684683
Managed Object Class	MeasurementReader
Managed Object Instance	ManagedElement=<node_name>, SystemFunctions=1, Pm=1, PmJob=CscfChargingStatisticsThreshold, MeasurementReader=cscfCCAEndUserServiceDeniedMeasReader
Specific Problem	CSCF Credit Control Answers Indicate End User Service Denied
Event Type	communication (2)
Probable Cause	x733ThresholdCrossed (351)
Additional Text	cscfCCAEndUserServiceDenied, the credit control server denies the request because of service restrictions.
Perceived Severity	major (4)



2 Procedure

2.1 Handle Alarm CSCF Credit Control Answers Indicate End User Service Denied

Prerequisites

- This instruction references the following documents:
 - Performance Management
 - Managed Object Model (MOM)
- No tools are required.
- The following condition must apply:
 - The alarm is raised.

Steps

Note: If the reason for the alarm has disappeared after the Granularity Period, the alarm automatically ceases.

1. Find the reason why the credit control server denies the user service request because of service restrictions.
2. Is the alarm threshold is set too low?

Yes: Adjust the alarm threshold and then continue with the next step.

No: Continue with the next step.
3. Has the alarm ceased?

Yes: Proceed with Step 5.

No: Continue with the next step.
4. If the alarm is not ceased, consult the next level of maintenance support.

Further actions are outside the scope of this instruction.
5. Job is completed.