

CSCF External Network Selection Memory Limit Reached

Call Session Control Function

OPERATING INSTRUCTIONS

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CSCF External Network Selection Memory Limit Reached



1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The alarm is raised when the available memory for either of the processes `CscfExternalNetworkSelectionProc` or `CscfExternalNetworkSelection2Proc` is less than 1 MB.

The possible cause is that the External Network Selection (ENS) configuration could not be stored in the ENS process because of insufficient memory.

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
CSCF ENS memory limit reached	The ENS configuration could not be stored in the ENS process because of insufficient memory.	1 MB available memory limit was reached because of ENS configuration changes.	The configuration of analysis tables of the modified ENS analysis indicated that in the Managed Object Instance field is larger than what the memory is dimensioned for.	<p>If the ENS is configured to use a single configuration instance (ExtNetSelection or ExtNetSelection2), all SIP messages to be routed to an external GW are answered by a 500 Server Execution Error, traffic is negatively affected.</p> <p>If the ENS is configured to use both configuration instances, the alarm is raised in passive instance and no traffic is affected, but the intended changes on the ENS will not become active.</p>

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



Attribute Name	Attribute Value
Minor Type	6684699
Managed Object Class	ExtNetSel-Application
Managed Object Instance	ManagedElement=<node_name>, CscfFunction=1, ExtNetSel-Application=ExtNetSelection or ExtNetSelection2
Specific Problem	CSCF External Network Selection Memory Limit Reached
Event Type	processingErrorAlarm (4)
Probable Cause	x733OutOfMemory (332)
Additional Text	Remove entries from the ENS configuration to reduce the memory
Perceived Severity	critical (3)

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:

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

1.2.2 Tools

No tools are required.

1.2.3 Conditions

No conditions.





2 Procedure

This section describes the procedure to follow when this alarm is received.

Do the following:

1. Check in the Managed Object Class field if it is the `ExtNetSelection` or the `ExtNetSelection2` that is causing the alarm to be raised.
2. Remove enough ENS entries from the affected configuration.
3. Set the parameter `extNetSelectionTablesSynchronization` to `true` in the targeted configuration instance.

The ENS application is notified that a new configuration must be used, and when that is done, the alarm ceases.

4. If the alarm is raised again with the same cause, repeat the previous steps to reduce the memory consumption further. For more information about the configuration management parameters, refer to *Managed Object Model (MOM)* and *CSCF Configuration Management*.
5. Confirm that the alarm has ceased. If the alarm remains, consult the next level of maintenance support for assistance on how to increase the memory limit. Further actions are outside the scope of this instruction.
6. Job is completed.