

SipContainer, CPU Load Limit Exceeded

OPERATING INSTRUCTIONS

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SipContainer, CPU Load Limit Exceeded



1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The alarm is raised when the CPU use exceeds a configured upper threshold value.

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



Table 1 Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact
CPU use exceeds upper threshold value for SIP initial requests	CPU use exceeds the <code>cpuIrLowerThreshold</code> threshold value	Incorrect configuration	CPU	All initial SIP requests are rejected before reaching the application with a 503 response (service unavailable). Initial SIP requests are defined as a SIP initial request and non-sticky HTTP requests when CLB is used.
CPU use exceeds upper threshold value for subsequent SIP requests	CPU use exceeds the <code>cpuSrLowerThreshold</code> threshold value	System is not dimensioned to handle the engineered capacity		All subsequent SIP requests are rejected before reaching the application with a 503 response. Subsequent requests are defined as a SIP subsequent request and sticky HTTP requests.
CPU use exceeds upper threshold value for all SIP requests	CPU use exceeds the <code>cpuMmLowerThreshold</code> threshold value			All SIP requests are dropped before reaching the application without sending a response.

The alarm attributes are listed and explained in Table 2.

Table 2 Alarm Attributes

Attribute Name	Attribute Value
Major Type	193
Minor Type	1283552918
Managed Object Class	<i>JavaSipOverloadProtection</i>



Table 2 Alarm Attributes

Attribute Name	Attribute Value
Managed Object Instance	ManagedElement=<node_name>, JavaSip=clusterName:<cluster_name>:instanceId:<id>, JavaSipOverloadProtection=1
Specific Problem	SipContainer, CPU Load Limit Exceeded
Event Type	processingErrorAlarm (4)
Probable Cause	x736UnspecifiedReason (418)
Additional Text	(1)
Perceived Severity	<p>One of the following:</p> <ul style="list-style-type: none"> critical(3): All SIP requests are dropped before reaching the application without sending a response. major(4): All subsequent SIP requests are rejected before reaching the application with a 503 response. minor(5): All initial SIP requests are rejected before reaching the application with a 503 response.

(1) No additional text exists.

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 SipContainer, CPU Load Limit Exceeded alarm is raised.
- An Ericsson Command-Line Interface (ECLI) session in Exec mode is in progress.



2 Procedure

Do the following:

1. Navigate to the *JavaSipOverloadProtection* managed object, for example:

```
>dn ManagedElement=N0DE06ST,JavaSip=clusterName:traffic  
:instanceId:3,JavaSipOverloadProtection=1
```

2. View the heap memory overload protection configuration:

```
(JavaSipOverloadProtection=1)> show
```

The following is an example output:

```
JavaSipOverloadProtection=1  
[...]  
  cpuOverloadProtection=true  
[...]  
  enabled=true  
  cpuIrLowerThreshold=65  
  cpuIrUpperThreshold=75  
  cpuMmLowerThreshold=93  
  cpuMmUpperThreshold=98  
[...]  
  cpuSrLowerThreshold=85  
  cpuSrUpperThreshold=95  
[...]
```

3. Provide configuration information and order the planning department to replan the setting.
4. Perform data collection, refer to *Data Collection Guideline*.
5. Consult the next level of maintenance support. Further actions are outside the scope of this instruction.
6. Job is completed.