

DBS, Memory Limit Reached

OPERATING INSTRUCTIONS

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DBS, Memory Limit Reached



1 Introduction

This instruction concerns alarm handling.

1.1 Alarm Description

The alarm is raised when Database Service (DBS) memory use exceeds a threshold.

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

Table 1 Alarm Causes

Alarm Cause	Description	Fault Reason	Fault Location	Impact
Out of memory	All available memory is allocated	One or more Database Network (DBN) instances consume all their record heap.	Heap memory	If a DBN instance runs out of record heap, database operations fail with retry status until memory becomes available
Uneven memory consumption	The memory consumption is uneven	Faulty allocation of persistent object to logical container (DU)	Memory	Service downtime or reduced service capacity when the problem is too often detected or when it persists
		Faulty pool allocation		
System overload	The system is overloaded	The system is overloaded	System dimensioning	
One or more processes of DBS leak memory	Memory leak in one or more DBS processes. The memory consumption increases.	A software component has a defective implementation and cannot, for example, clear data (Persistent Object Type instances) that is no longer used	Software component	Software crash leading to service downtime or reduced service capacity depending on redundancy



Note: This alarm can appear as a result of a 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	917505
Managed Object Instance	ManagedElement=1, SystemFunctions=1, Pm=1, PmJob=<threshold job name>, MeasurementReader=<measurement_reader_name>: PU=<node_name>, EE=DBN
Specific Problem	DBS, Memory Limit Reached
Event Type	processingErrorAlarm (4)
Probable Cause	outOfMemory(162)
Additional Text	Measurement type: Mem.RecordHeap.PUsed ⁽¹⁾
Perceived Severity	<thresholdSeverity>

(1) Possibly VS.DBs.Mem.RecordHeap.PUsed

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 documents:

- *Data Collection Guideline*

1.2.2 Tools

No tools are required.

1.2.3 Conditions

Before starting this procedure, ensure that the following condition is met:

- A DBS, Memory Limit Reached alarm is raised.



2 Procedure

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

Do the following:

1. Is there is a reconfiguration operation in progress?

Yes: Wait for completion.

No: Decrease load on the cluster.

2. Is the alarm cleared?

Yes: Proceed with Step 5.

No: Continue with the next step.

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

4. Consult the next level of maintenance support. Further actions are outside the scope of this Operating Instruction.

5. Job is completed.