

SAP Note

**3351371 - "Database error 258 at OPC" is Reported at System Log Monitor (SM21)**

Version 3 Validity: 10.07.2023 - active

Language English

Header Data

Released On	10.07.2023 01:03:13 By Jinsol Kim (I533393)
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Component	HAN-DB-SEC SAP HANA Security & User Management Display ACRF Content
Priority	Recommendations / Additional Info
Responsible	Jinsol Kim (I533393)
Processor	Jinsol Kim (I533393)
Category	Consulting
Relevant for Translation No	

Symptom

You observe system log errors at t-code SM21 with message text "Database error 258 at OPC" and its corresponding ABAP dump is similar to the following:

```

B Wed May 01 00:00:00:000 0000
B Connect to HDB as TESTUSER with <host>:<port>
C Try to connect as TESTUSER/<pwd>@<host>:<port> on connection 2 ...
C connect property [APPLICATION = ABAP:xxx]
C connect property [APPLICATIONVERSION = xxx]
C connect property [SQLMODE = SAPR3]
C connect property [TIMEOUT = 0]
C connect property [UNICODE = 1]
C connect property [PACKETSIZE = xxxxxx]
C connect property [COMPLETEARRAYEXECUTION = 1]
C connect property [VARCHARMODE = ABAP]
C connect property [CONNECTTIMEOUT = 30000]
C connect property [CACHEDVIEWTS = 1]
C connect to TESTUSER/<pwd>@<host>:<port> on connection 2 ...
C Attach to HDB : <HANA Ddatabase Version>
C Database release is HDB <HANA Ddatabase Version>
C INFO : Database 'HDB/28' instance is running on 'test_host'
C INFO : Connect to DB as 'TESTUSER', connection_id=350947
C INFO : FDA feature is supported by HANA
C INFO : FAE with FDA feature is supported by HANA
C INFO : CACHEDVIEWTS feature is supported by HANA
C INFO : DEFERRED LOB WRITING is activated

```

[...]

```

C Command info enabled (1)
C Now I'm connected to HDB

```

[...]

```

B Connection 7 opened (DBSL handle 2)
C
C Wed May 17 00:06:44:465 2023
C *** ERROR =>  prepare() of C_0748, rc=1, rcSQL=258
[dbstdbsql.cpp 1934]
C {root-id=xxxxxxxxxxxxxxxxxxxxxxx}_{conn-id=xxxxxxxxxxxxxxxxxxxxxxxxxxx}_1
C *** ERROR => PREPARE C_0748 on connection 2, rc=258
[dbstdb.cpp 9700]
C SQLCODE      : 258
C SQLERRTEXT : insufficient privilege: Detailed info for this error can be found with guid '58132E8410EFA84D8C42616\
C              867534671'

```

```

C sc_p=7f72bb3ae770,no=748,idc_p=(nil),con=2,act=1,slen=156,smax=512,#vars=1,stmt=7f6b82a51a00,table=
C select MAX( SNAPSHOT_ID ) AS MAX_SNAPSHOT_ID FROM
  _SYS_STATISTICS.HOST_RESOURCE_UTILIZATION_STATISTICS
C STICS where SNAPSHOT_ID < CAST( ? AS TIMESTAMP);
B ***LOG BY2=> sql error 258 performing OPC [dbds      451]
B ***LOG BY0=> insufficient privilege: Detailed info for this error can be found with guid
'58132E8410EFA84D8C42616867534671' [dbds      451]

```

Please note that you might see this error for any SQL statement that references any objects in schema **_SYS_STATISTICS**.

Other Terms

Insufficient Privilege, ABAP server, SM21, syslog

Reason and Prerequisites

Reason:

HANA DB user used by the ABAP application server has an insufficient privilege to conduct a transaction requested by an ABAP application. For example, information in ABAP dump in "Symptom" indicates that

1. ABAP server is connected to HANA instance **HDB** (SID) with connection_id **350947**
2. ABAP request is delivered through this connection and database user **TESTUSER** is used to execute it
3. ABAP application sends a request to get a result of below SQL statement from the connected HANA Database instance
> select MAX(SNAPSHOT_ID) AS MAX_SNAPSHOT_ID FROM
 _SYS_STATISTICS.HOST_RESOURCE_UTILIZATION_STATISTICS where SNAPSHOT_ID < CAST(? AS TIMESTAMP);
4. TESTUSER fails to run this statement because it has not enough privilege

Many system views, tables, and some monitoring views in the HANA Database are owned by technical database user **_SYS_STATISTICS** (thus, stored in schema "**_SYS_STATISTICS**"). In order for a certain database user to access objects in "**_SYS_STATISTICS**", **SELECT** privilege on schema "**_SYS_STATISTICS**" must be granted.

Solution

Grant **SELECT** privilege on schema "**_SYS_STATISTICS**" to HANA database user that is connected to ABAP application server

Please follow steps below:

1. Access HANA Database instance via **SYSTEM** user
2. Run **GRANT** statement to the database user connected from ABAP application server

From the example above,
> GRANT SELECT ON SCHEMA **_SYS_STATISTICS** TO **TESTUSER**;

The reason why **SYSTEM** user is used is that **SELECT** privilege on schema "**_SYS_STATISTICS**" cannot be granted directly by user **_SYS_STATISTICS** because **_SYS_STATISTICS** is a technical user for internal use only. It is not possible for a business user to log on with this database user. However, **SYSTEM** user is already given **SELECT** privilege on schema "**_SYS_STATISTICS**" with **GRANT** option.

For more details on Predefined Database Users in HANA Database, please see [SAP HANA Security Guide for SAP HANA Platform](#).

Please be careful not to grant more privileges by **SYSTEM** user than necessary.

Validity

This document is not restricted to a software component or software component version

References

This document refers to:

SAP Notes

2380229 HAN-DB [SAP HANA Platform 2.0 - Central Note](#)1523337 HAN-DB [SAP HANA Database 1.00 - Central Note](#)

This document is referenced by:

Customer Incident (3)

Number	Year	Title	Status	Processor	Customer Number	Customer Name
0005846422	2023	Datenbankfehler.258.beim.EXE aufgetreten - insufficient * De	Restricted	Wejden MESSAoud	0000145199	Bundesdruckerei GmbH
0001107094		Facing an issue with one Process chain where we couldn't abl	Sent to ServiceNow		0001064529	Entergy Services Inc
0000236001	2024	aDSO with Inbound table with status "New" cannot be overwrit	Confirmed		0000011133	BMW AG

ServiceNow Case (4)

Number	Year	Text	Status	Processor	Customer Number	Customer
0000236001	2024	aDSO with Inbound table with status "New" cannot be overwrit	Closed	Adam Szegedi (I587816)	0000011133	BMW AG (0000011133)
0000392164	2023	Database error 258 at OPC	Closed	Jinsol Kim (I533393)		
0005846422		Datenbankfehler.258.beim.EXE aufgetreten - insufficient.priv	Closed	Wejden MESSAoud (C5360785)		
0001107094		Facing an issue with one Process chain where we couldn't abl	In progress	Emily Gardner (I856588)	0001064529	Entergy Services Inc (0001064529)