

SAP Note



3070374 - SQLScript internal error: Symbol not found: <symbol>

Version 6 Validity: 31.03.2022 - active

Language English

Header Data

Released On	31.03.2022 07:52:19	By Jinsol Kim (I533393)
Release Status	Released for Customer	
Component	HAN-DB SAP HANA Database	Display ACRF Content
Priority	Correction with high priority	
Responsible	Jinsol Kim (I533393)	
Processor	Jinsol Kim (I533393)	
Category	Program error	
Relevant for Translation	No	

Symptom

Executing a Table User Defined Function (TUDF) (hereinafter referred to as *Table Function*) fails with an error similar to following:

SQLScript internal error: Symbol not found: <symbol> (schema name usually appears in <symbol>)

There can be other scenarios where a similar error message is observed, including the following:

1. Recreating a table that the problematic table function is dependent on
2. Activating an Advanced DataStore Object (ADSO) where the problematic table function is dependent on one of its resulting HANA tables
3. Creating a column view that is dependent on the problematic table function

[Example]

```
CREATE SCHEMA TEST_TUDF;
SET SCHEMA TEST_TUDF;

CREATE FUNCTION TUDF (in it table (a int)) RETURNS TABLE (a int)
AS
BEGIN
    RETURN SELECT a + 1 a FROM :it;
END;

CREATE TABLE MYTAB (a int);

CREATE PROCEDURE MYPROC AS
BEGIN
    SELECT * FROM TUDF(TEST_TUDF.MYTAB);
END;

CALL MYPROC;

-- SAP DBTech JDBC: [2]: general error: SQLScript internal error: Symbol not found: TEST_TUDF;
```

Other Terms

Table User Defined Function (TUDF), SQL Script Compiler

Reason and Prerequisites

Issue number 266149

Reason:

Due to a programming error in SAP HANA, the SQL Script Compiler interprets <schema>.<table> as <table>.<expression> and tries to find a table with na

In the above example, the SQL Script Compiler unexpectedly interprets *TEST_TUDF.MYTAB* as a column MYTAB in a table TEST_TUDF. Since TEST_TUDF error.

Affected Releases:

- SAP HANA 2:

- Revisions of SPS04
- Revisions <= 055.00 (SPS05)

Prerequisites:

- Object reference <schema>.<table> is used as an argument to a table function inside an SQL script.
 - From the example above,

```
CREATE PROCEDURE MYPROC as
BEGIN
  SELECT * FROM TUDF(TEST_TUDF.MYTAB)
END;
```

CALL MYPROC;

=> *Symbol not found:* **TEST_TUDF**

- In case object reference <schema>.<object> is executed alone outside of an SQL script, no error will be raised.

```
SELECT * FROM TUDF(TEST_TUDF.MYTAB);
```

=> No error returned

- Object reference is expressed with <schema> explicitly specified
 - From the example above, if TEST_TUDF is omitted from TEST_TUDF.MYTAB, no error will be raised even if used inside SQL script.

```
SET SCHEMA TEST_TUDF;
CREATE PROCEDURE MYPROC as
BEGIN
  SELECT * FROM TUDF(MYTAB)
END;
```

CALL MYPROC;

=> No error returned

Solution

Apply one of the following SAP HANA Revisions:

- SAP HANA 2:
 - Revisions >= 056.00 (SPS05)
- or higher

Workaround:

- Disable new SQLFrontend rules to fall back to the old Query Checker by setting following two configurations.

```
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'SYSTEM') SET ('sqlscript', 'use_querychecker_for_sqlscript_plan') = 'true' WITH RECC
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'SYSTEM') SET ('sqlscript', 'disable_sqlscript_rule_based_checker') = 'true' WITH REC
```

- Avoid using the the object reference as an argument to a table function directly and use an intermediate table variable instead.
 - From the example above, modify MYPROC as follows:

```
CREATE PROCEDURE MYPROC as
BEGIN
  VAR_TMP = SELECT * FROM TEST_TUDF.MYTABLE;
  SELECT * FROM TUDF(:VAR_TMP);
END;
```

Disclaimer

The SAP HANA configuration parameters [sqlscript] use_querychecker_for_sqlscript_plan and [sqlscript] disable_sqlscript_rule_based_checker are an inte requires that the SAP HANA system has the revision specified in the SAP Note. Using internal parameters outside of this given scope is not supported. Ple

Validity

Software Component	From Rel.	To Rel.	And Subsequent
HDB	2.00	2.00	

Support Packages & Patches

Support Package Patches		
Software Component	Support Package	Patch Level
SAP HANA DATABASE 2.0	SP056	000000

References

This document refers to:

SAP Notes

- 2945435 HAN-DB [Known issues detected in SAP HANA 2 SPS05](#)
- 2784704 HAN-DB [Known issues detected in SAP HANA 2 SPS04](#)
- 2380229 HAN-DB [SAP HANA Platform 2.0 - Central Note](#)

This document is referenced by:

Customer Incident (1)

Number	Year	Title	Status	Processor	Customer Number	Customer Name
0000244505	2021	HS_Error_2.048_has_occurred_in_the_BWA/SAP_HANA_server_Creat	Closed	Jinsol Kim	0000046450	Luxottica Group S.p.A.

ServiceNow Case (2)

Number	Year	Text	Status	Processor	Customer Number	Customer
0000244505	2021	HS_Error_2.048_has_occurred_in_the_BWA/SAP_HANA_server_Creat	Closed	Jinsol Kim (I533393)		
0000044389	2023	Parameters_in_table_funtion_do_not_work_correctly.	Closed	Yumeng Li (I317087)		