SAP Note

3105628 - "feature not supported: CONTAINS predicates within unsupported contexts" Raised for Valid Fulltext Search Query

Version 8 - active

Validity: 13.09.2023

Language English

Header Data

Released On 13.09.2023 08:25:57 **By** Jinsol Kim (I533393)

Release Status Released for Customer

Component HAN-DB SAP HANA Database Display ACRF Content

PriorityCorrection with high priorityResponsibleJinsol Kim (1533393)ProcessorJinsol Kim (1533393)

Category Program error

Relevant for Translation No

Symptom

A fulltext search query, which doesn't have any unsupported logic defined in its data model, fails with an error "feature not supported: CONTAINS predicates within unsupported contexts (OR predicates, stacked column searches, ...)".

[Reproducible Scenario]

1. Create a test schema

CREATE SCHEMA FULLTEXT_TEST;

Set the test schema as a default schema

SET SCHEMA FULLTEXT TEST;

3. Create a test table

CREATE COLUMN TABLE T (CONTENT TEXT FAST PREPROCESS OFF);

4. Insert data into the test table

INSERT INTO T VALUES ('example'); INSERT INTO T VALUES ('exomple');

5. Run a fulltext search query on the test table

SELECT **SCORE()**, CONTENT FROM T WHERE **1<>1** AND **CONTAINS**(CONTENT, 'example',Fuzzy(0.8)) WITH HINT (NO CS FILTER);

Returning 0 record is expected, but the query fails with the below error:

=> Could not execute 'SELECT SCORE(), CONTENT FROM T WHERE 1<>1 AND ...' in 107 ms 73 µs .

SAP DBTech JDBC: [7]: feature not supported: CONTAINS predicates within unsupported contexts (OR predicates, stacked column searches, ...)

Please note that an expression that evaluates to a constant boolean value 'false' (for example, 1<>1) is called 'Constant False'. Another example of a constant false is expression N'CDS_Access_Control_CDSEntity' = N'DENY' which is added in WHERE clause by CDS Access Control. Such a constant false condition is at times used to return no data intentionally in order for an application to block an unauthorized access to a specific object (in this case, CDS view 'CDSEntity').

Other Terms

Fulltext Search, CDS Access Control, Fuzzy Search

Reason and Prerequisites

Issue number 281256

Reason:

Due to a programming error in SAP HANA, HANA ESX Engine, which is used in processing a constantfalse expression, also executes SCORE() and CONTAINS() that have to be handled in HANA Column Engine and are not supported in ESX Engine.

Affected Releases:

- SAP HANA 2:
 - Revisions of SPS02 SPS04
 - Revisions <= 059.01 (SPS05)
 - Revision = 060.00 (SPS06)

Prerequisites:

- A guery includes function SCORE() and predicate CONTAINS() AND
- A constant-false expression is used as a predicate in WHERE clause with CONTAINS() AND
- A constant-false expression in WHERE clause guarantees that an empty result set is returned

[Example]

```
SELECT CONTENT, SCORE() FROM T WHERE 1=2 AND CONTAINS(CONTENT, 'example',Fuzzy(0.8)); -- empty result set guaranteed by constant false '1=2' SELECT CONTENT, SCORE() FROM T WHERE 1=2 OR CONTAINS(CONTENT, 'example',Fuzzy(0.8)); -- empty result set not guaranteed by constant false '1=2'
```

Solution

Apply one of the following SAP HANA Revisions:

- - Revisions >= 059.02 (SPS05)
 - Revisions >= 061.00 (SPS06)
 - o rhigher

SAP HANA 2:

· or higher

Workaround:

· There is no workaround available

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	SP059	000002
	SP061	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
2628684	HAN-DB	Known issues detected in SAP HANA 2 SPS03
2525424	HAN-DB	Known issues detected in SAP HANA 2 SPS02
2462139	HAN-DB	Known issues detected in SAP HANA 2 SPS01
2432112	HAN-DB	Known issues detected in SAP HANA 2 SPS00
2380229	HAN-DB	SAP HANA Platform 2.0 - Central Note

This document is referenced by:

Customer Incident (20)

Number	Year	Title	Status	Processor	Customer Number	Customer Name
0000115871	2023	Database_error_7_with_PRE access_to_table FAA_M_AANLA	Restricted		0000454718	Yara International ASA
0000118867		Database_error 7 with PRE access_to_table	Restricted		0000032567	LEONHARD KURZ Stiftung &

		FAA_M_AANLA				Co. KG
0000193822	2022	Database_error_7_with_PRE access_to_table SHSM_V_PRPMP	Restricted	Rahul Ramesh	0000180021	Ministry of Home Affairs
0000214193		wrong_query_to_database when_field_House_bank_not exist_char	Restricted	Olaf Wellm	0001611527	CCC.EU SP. Z O.O.
0000272370		HANA error in CDS View SHSM_V_PRPMP after upgrade_to_S/4	Restricted	Li-fang Li	0000037700	Universität Zürich

SAP Knowledge Base Articles (2)

Database error 7 with PRE access to table SHSM V PRPMP 3239183 HAN-DB-ENG

when running CAT2 transaction

2399990 HAN-DB How-To: Analyzing ABAP Short Dumps in SAP HANA Environments

SAP Notes (2)

3140720 HAN-DB <u>SAP HANA 2 SPS05 Revision 059.02</u> 3126756 HAN-DB <u>SAP HANA 2 SPS06 Revision 061.00</u>

ServiceNow Case (21)

Number	Year	Text	Status	Processor	Customer Number	Customer
0000638095	2022	Datenbankfehler Z	Closed	Salome Szanto (I072459)		
0000475719		Bei Anlagensuche: Datenbankfehler Z beim PRE- Zugriff auf Tab	Closed	Wiebke Winkler (D025450)		
0000605072		BY4 - Database Error 7	Closed	Luis Amadeu Darui Junior (1843897)		
0000370369		Database error Z with PRE access_to_table FAA_M_AANLA	Closed			
0000560322	2023	Ealsche Ergebnismenge CONTAINS	Closed	Jinsol Kim (I533393)		

more...