

SAP Note

**3278535 - Number Values Stored in Docstore Collection Object are Returned in an Unexpected Floating-point Format****Version 4** **Validity:**
15.03.2023 - active**Language** English

Header Data

Released On	15.03.2023 09:37:38	By Beate Groetschnig (I035208)
Release Status	Released for Customer	
Component	HAN-DB SAP HANA Database	Display ACRF Content
Priority	Correction with high priority	
Responsible	Jinsol Kim (I533393)	
Processor	Beate Groetschnig (I035208)	
Category	Program error	
Relevant for Translation	No	

Symptom

Values stored in a JSON collection object are returned in an unexpected floating-format.

Example Scenario:

In a tenant database with HANA docstore enabled:

```
CREATE SCHEMA 3278535_TEST;  
  
SET SCHEMA 3278535_TEST;  
  
CREATE COLLECTION TEST_COLLECTION;  
  
INSERT INTO TEST_COLLECTION VALUES ('{"key" : 4.1}');  
INSERT INTO TEST_COLLECTION VALUES ('{"key" : 4.0}');  
INSERT INTO TEST_COLLECTION VALUES ('{"key" : 4.2}');  
INSERT INTO TEST_COLLECTION VALUES ('{"key" : 1.1}');
```

If you select from the collection now, values are returned in an unexpected floating-point format like below:

```
SELECT * FROM TEST_COLLECTION;
```

=>

```
TEST_COLLECTION  
{"key" : 4.099999999999999}  
{"key" : 4}  
{"key" : 4.2}  
{"key" : 1.1}
```

However, values stored in the collection remain unchanged.

```
SELECT * FROM TEST_COLLECTION WHERE "key" = 4.1 or "key" = 4.0;
```

=>

```
TEST_COLLECTION  
{"key": 4.0999999999999999}  
{"key": 4}
```

Other Terms

JSON Document Store, Data Type Conversion, Floating Point, Numeric Overflow

Reason and Prerequisites

Issue number 298616

Reason:

Due to a programming error in SAP HANA, when returning floating numbers stored in a JSON collection object, internal data type conversion takes place. This leads to values being returned in an unexpected format although they continue to be stored correctly.

Affected Releases:

- SAP HANA 2:
 - Revisions of SPS01 - SPS04
 - Revisions <= 059.06 (SPS05)
 - Revisions <= 066.00 (SPS06)

Prerequisites:

- A floating number is stored in a JSON collection object

Solution

Apply one of the following SAP HANA Revisions:

- SAP HANA 2:
 - Revisions >= 059.07 (SPS05)
 - Revisions >= 067.00 (SPS06)
 - or higher
- 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	000007
	SP067	000000

References

This document refers to:

SAP Notes

3128366 HAN-DB [Known issues detected in SAP HANA 2 SPS06](#)
 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](#)
 2380229 HAN-DB [SAP HANA Platform 2.0 - Central Note](#)

ServiceNow Case

This document is referenced by:

Customer Incident (1)

Number	Year	Title	Status	Processor	Customer Number	Customer Name
0000794537	2022	Cannot insert decimal number	Restricted		0000326807	Ministry of Defense IDF MAMHI (Navy)

SAP Notes (2)

3284085 HAN-DB [SAP HANA 2 SPS06 Revision 067.00](#)
 3267762 HAN-DB [SAP HANA 2 SPS05 Revision 059.07](#)

ServiceNow Case (1)

Number	Year	Text	Status	Processor	Customer Number	Customer
0000794537	2022	Cannot insert decimal number.	Closed	Jinsol Kim (I533393)		

