

SAP Note

**3007741 - Null Pointer Is Returned When getTableInfo Is Called by DataStatisticAdviser on a qo_table Object That Is Not a Columnar Table****Version** 4 **Validity:** 19.03.2021
- active**Language** English

Header Data

Released On	19.03.2021 06:50:41	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

A SELECT statement on a view or calculation view returns an error 'SAP DBTech JDBC: [2]: general error: could not access invalid address' on SQL session layer.

Database trace collected with 'metadata_ptr' set to 'debug' level shows information as follows:

```
[000000]{000000}[000/0] 2000-01-01 00:00:00.0000 e Metadata_Ptr class_ptr.h(00044) : ClassPtr is nullptr

0000000000 [thr=00000][parent thr=00000]: JobWrk160060 at

1: 0x0000000000000000 in Diagnose::impl::dumpInfoSelfCtx(ltt::basic_ostream<char, ltt::char_traits<char> >&, bool, bool, bool, bool, bool, bool, unsigned long)+0x65 at Trace.cpp:32 (libhdbbasis.so)

2: 0x0000000000000000 in ptime::ClassPtr<Metadata::TableInfo>::operator->()+0x100 at class_ptr.h:44 (libhdbdatastatistics.so)

3: 0x0000000000000000 in DataStatistics::DataStatisticsAdviserCache::createJoinPredicateEntries(ptime::qo_Context&)+0x166 at DataStatisticsAdviserCache.cpp:1019 (libhdbdatastatistics.so)

4: 0x0000000000000000 in ptime::QueryOptimizer::optimize_qo_plan(ptime::qo_Context&, ptime::qo_Rel*, ptime::Query::Plan*)+0x1795 at query_optimizer.cc:562 (libhdbsqloptimizer.so)

5: 0x0000000000000000 in ptime::QueryOptimizer::optimize_plan(ptime::Transaction&, char const*, ptime::qc_relation const*, ptime::qo_Context&, ptime::Query::Plan*, ptime::ClassPtr<Metadata::TableInfo>, bool, ptime::qc_trex_parameters*, ptime::TrexKey*, bool, bool, bool)+0x33a at query_optimizer.cc:178 (libhdbsqloptimizer.so)

6: 0x0000000000000000 in ptime::QueryApi::optimize_plan(ptime::Transaction&, char const*, ptime::qc_relation const*, SQL::Optimizer::Context&, ptime::Query::Plan*,
```

ptime::ClassPtr<Metadata::TableInfo>, bool, ptime::qc_trex_parameters*, ptime::TrexKey*, bool, bool, bool)+0x132 at query_api.cc:283 (libhdbkernel.so)

Other Terms

Data Statistics Adviser, Data Statistics Adviser Cache, Null Pointer Access

Reason and Prerequisites

Issue number 260659

Reason:

Due to a programming error in SAP HANA, NULL pointer is returned and accessed when Data Statistics Adviser calls a function *getTableInfo* on a *qo_table* object that is not a column-store table (in this case, **view** or **calculation view**)

Affected Releases:

- SAP HANA 2:
 - Revisions of SPS00 - SPS03
 - Revisions <= 048.03 (SPS04)
 - Revisions <= 054.00 (SPS05)

Prerequisites:

- Data Statistics Adviser and Data Statistics Adviser Cache are enabled

Solution

Apply one of the following SAP HANA Revisions:

- SAP HANA 2:
 - Revisions >= 048.04 (SPS04)
 - Revisions >= 055.00 (SPS05)
 - or higher
- or higher

Workaround:

- Disable Data Statistics Adviser and Data Statistics Adviser Cache by using the commands following:

```
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'SYSTEM') SET ('cache',
'datastatistics_adviser') = 'false' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'SYSTEM') SET ('cache',
'datastatisticsadvisercache_enabled') = 'false' WITH RECONFIGURE;
```

- **Starting with SAP HANA 2 SPS03 comments can be added** disable Data Statistics Adviser and Data Statistics Adviser Cache by using the commands following:

```
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'SYSTEM' ) SET ('cache',
'datastatistics_adviser') = 'false' WITH RECONFIGURE COMMENT 'SAP Note 3007741.
<ADDITIONAL ACTION e.g.Revert after upgrade to a revision containing the fix>';
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'SYSTEM' ) SET ('cache',
'datastatisticsadvisercache_enabled') = 'false' WITH RECONFIGURE COMMENT 'SAP
Note 3007741. <ADDITIONAL ACTION e.g.Revert after upgrade to a revision containing the fix>;
```

- Please make sure that disabling Data Statistics Adviser might lead SQL optimizer to generate a suboptimal query plan

Disclaimer

The SAP HANA configuration parameter [cache] *datastatistics_adviser* and *datastatisticsadvisercache_enabled* are internal parameters and may only be used in the context of this SAP Note. Using such a parameter 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. Please unset this parameter once you have upgraded to a revision containing the permanent solution.

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	SP048	000004

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 (1)

Number	Year	Title	Status	Processor	Customer Number	Customer Name
0000552606	2020	SAP DBTech JDBC: [2]: general_error: could not access_invali	Closed	Jinsol Kim	0000516281	TFX Teleflex Holding GmbH Corporate

SAP Notes (2)

3021026 HAN-DB [SAP HANA 2 SPS05 Revision 055.00](#)

2997712 HAN-DB [SAP HANA 2 SPS04 Database Maintenance Revision 048.04](#)

ServiceNow Case (1)

Number	Year	Text	Status	Processor	Customer Number	Customer