

SAP Note



3207904 - Indexserver Crash in MultiDB::MultiDBConfigurationStatistics::MultiDBConfigurationStatistics()

Version 3 Validity: 13.09.2022 - active

Language English

Header Data

| | |
|--------------------------|---|
| Released On | 13.09.2022 13:42:55 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

SAP HANA Indexserver crashes or fails to restart with a crash stack similar to followings:

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1: in Synchronization::Mutex::setOwner(Execution::Context&, unsigned int, unsigned long, bool) at atomic.hpp (libhdbbasis.so)
2: in Synchronization::Mutex::lockInternal(Execution::Context&, unsigned long, unsigned long) at Mutex.cpp (libhdbbasis.so)
3: in MemoryManager::MemoryPool::allocate(unsigned long, unsigned short, ltt::allocator_statistics&, bool&, bool, void const*) at LockHandle.hpp (libhdbbasis.so)
4: in MemoryManager::PoolAllocator::allocateNoThrowImpl(unsigned long, void const*) at mmPoolAllocator.cpp (libhdbbasis.so)
5: in ltt::allocator::allocate(unsigned long) at memory.cpp (libhdbbasement.so)
6: in ltt::string_base<char, ltt::char_traits<char>, ltt::integral_constant<int, 64> >::enlarge_(unsigned long) at memory.hpp (libhdbbasement.so)
7: in ltt::string_base<char, ltt::char_traits<char>, ltt::integral_constant<int, 64> >::reserve_(unsigned long) at string.hpp (libhdbbasement.so)
8: in ltt::basic_string<char, ltt::char_traits<char>, ltt::integral_constant<int, 64> >::operator=(ltt::impl::StringAdd<char, ltt::char_traits<char>, ltt::integral_constant<int, 64> > const&) at string.hpp (libhdbbasement.so)
9: in config::Configuration::Configuration(ltt_adp::basic_string<char, ltt::char_traits<char>, ltt::integral_constant<bool, true> > const&, ltt_adp::basic_string<char, ltt::char_traits<char>, ltt::integral_constant<bool, true> > const&) at string.hpp (libhdbbasement.so)
10: in config::LayeredConfiguration::LayeredConfiguration(ltt_adp::basic_string<char, ltt::char_traits<char>, ltt::integral_constant<bool, true> > const&, ltt::basic_string_view<char, ltt::char_traits<char> >, Configuration::WriteLayer) at LayeredConfiguration.cpp (libhdbbasement.so)
11: in config::RealLayeredConfigurationFactory::get(ltt::basic_string<char, ltt::char_traits<char>, ltt::integral_constant<int, 64> > const&, ltt::basic_string_view<char, ltt::char_traits<char> >, Configuration::WriteLayer) at memory.hpp (libhdbbasement.so)
12: in Configuration::LayeredConfigurationFactory::get(ltt::basic_string<char, ltt::char_traits<char>, ltt::integral_constant<int, 64> > const&, Configuration::WriteLayer) at LayeredConfigurationFactory.cpp (libhdbbasis.so)
13: in config::Configuration::getCustomPathConfig(ltt_adp::basic_string<char, ltt::char_traits<char>, ltt::integral_constant<bool, true> >, Configuration::WriteLayer) at Configuration.cpp (libhdbbasement.so)
14: in config::Configuration::getConfiguration(NameServer::ServiceType, Configuration::WriteLayer) at Configuration.cpp (libhdbbasement.so)
15: in config::Configuration::getConfiguration(NameServer::ServiceType) at Configuration.cpp (libhdbbasement.so)
16: in config::Configuration::getGlobalConfig() at Configuration.cpp (libhdbbasement.so)
17: in config::IniFileConfigurationHandler::getParameterValueInternal(char const*, char const*, char const*, unsigned int, ltt::basic_string<char, ltt::char_traits<char>, ltt::integral_constant<int, 64> > const& [clone .constprop.0]) at ConfigMgr.cpp (libhdbbasement.so)
18: in config::IniFileConfigurationHandler::copyParameterValue(Configuration::ConfigurationDataBase::Parameter const&, char const*, void const*, void const*) at ConfigMgr.cpp (libhdbbasement.so)
19: in Configuration::ConfigurationDataBase::Parameter::copyValue(Configuration::ConfigurationHandler const&, Configuration::ConfigurationDataBase::Parameter const&, void const*, void*) const at ConfigurationData.cpp (libhdbbasis.so)
20: in Configuration::ConfigurationDataBase::ReconfigurationBuffer::const_iterator::copyValue(Configuration::ConfigurationHandler const&, Configuration::ConfigurationDataBase const&, void const*) at ConfigurationData.cpp (libhdbbasis.so)
21: in Configuration::ConfigurationHandlerSPI::prepareReconfigurationBuffer(Configuration::ConfigurationDataBase&) at ConfigurationHandler.cpp (libhdbbasis.so)
22: in Configuration::ConfigurationHandlerSPI::prepareReconfigureImpl(Configuration::ConfigurationDataBase&) at ConfigurationHandler.cpp (libhdbbasis.so)
23: in Configuration::ConfigurationHandlerSPI::reconfigure(Configuration::ConfigurationDataBase&) at ConfigurationHandler.cpp (libhdbbasis.so)
24: in Configuration::ConfigurationHandlerSPI::reconfigureUnregisteredConfiguration(Configuration::ConfigurationDataBase&) at ConfigurationHandler.cpp (libhdbbasis.so)
25: in Configuration::ConfigurationDataBase::reconfigureUnregisteredConfigurationInternal() at ConfigurationData.cpp (libhdbbasis.so)
26: in Configuration::ConfigurationDataBase::reconfigureUnregisteredConfiguration() at ConfigurationData.cpp (libhdbbasis.so)
27: in MultiDB::MultiDBConfigurationStatistics::MultiDBConfigurationStatistics(Diagnose::StatisticsDataOwnerHandle<MultiDB::MultiDBConfigurationStatisticsData&, Configuration::ConfigurationHandler&) at MultiDBConfiguration.cpp (libhdbbasement.so)
28: in MultiDB::impl::MultiDBConfiguration_InitializeImpl::MultiDBConfiguration_InitializeImpl() [clone .constprop.0] at MultiDBConfiguration.cpp (libhdbbasement.so)
29: in create_InitializeImpl(void*) [clone .lto_priv.0] at MultiDBConfiguration.cpp (libhdbbasement.so)
30: in Execution::runOnceImpl(void (*) (void*), void*, bool&, bool) [clone .lto_priv.0] at RunOnce.cpp (libhdbbasis.so)
31: in MultiDB::MultiDBConfigurationStatistics::getMultiDBConfigurationStatisticsAllocator() at atomic.hpp (libhdbbasement.so)
32: in .LTHUNK23.lto_priv.0 at MultiDBConfiguration.cpp (libhdbbasement.so)
33: in Configuration::ConfigurationHandlerSPI::commitReconfigureImpl(Configuration::ConfigurationDataBase&) at ConfigurationHandler.cpp (libhdbbasis.so)
34: in Configuration::ConfigurationHandlerSPI::reconfigure(Configuration::ConfigurationDataBase&) at ConfigurationHandler.cpp (libhdbbasis.so)
35: in Configuration::ConfigurationHandlerSPI::reconfigureUnregisteredConfiguration(Configuration::ConfigurationDataBase&) at ConfigurationHandler.cpp (libhdbbasis.so)
36: in Configuration::ConfigurationDataBase::reconfigureUnregisteredConfigurationInternal() at ConfigurationData.cpp (libhdbbasis.so)

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37: in Configuration::ConfigurationDataBase::reconfigureUnregisteredConfiguration() at ConfigurationData.cpp (libhdbbasis.so)
38: in MultiDB::MultiDBConfigurationStatistics::MultiDBConfigurationStatistics(Diagnose::StatisticsDataOwnerHandle<MultiDB::MultiDBConfigurationStatisticsData&, Configuration::ConfigurationHandler&) at MultiDBConfiguration.cpp (libhdbbasement.so)

[...]

or

1: in Synchronization::ReadWriteLock::setSharedOwner(Execution::Context&, unsigned int, unsigned long, bool, unsigned long, bool) at ReadWriteLock.cpp (libhdbbasis.so)
2: in Synchronization::ReadWriteLock::tryLockSharedLL(Execution::Context*, unsigned long, bool, bool) at ReadWriteLock.cpp (libhdbbasis.so)
3: in Synchronization::ReadWriteLock::lockShared(Execution::Context&, unsigned long) at ReadWriteLock.cpp (libhdbbasis.so)
4: in config::ConfigMgr::anyFile(Itt_adp::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<bool, true>> const&, Itt_adp::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<bool, true>> const&, Itt_adp::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<bool, true>> const&, Configuration::WriteLayer) at ReadWriteLock.hpp (libhdbbasement.so)
5: in config::ConfigMgr::layeredConfigFile(Itt_adp::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<bool, true>> const&, Itt_adp::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<bool, true>> const&, Configuration::WriteLayer) at ConfigMgr.cpp (libhdbbasement.so)
6: in config::LayeredConfiguration::configFile() const at LayeredConfiguration.cpp (libhdbbasement.so)
7: in config::Configuration::getStringValueAux(Itt_adp::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<bool, true>> const&, Itt_adp::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<bool, true>> const&, Itt::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<bool, true>> const& at Configuration.cpp (libhdbbasement.so)
8: in config::Configuration::getStringValue(Itt_adp::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<bool, true>> const&, Itt_adp::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<bool, true>> const&, Itt::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<int, 64>> const& [clone .lto_priv.0] at Configuration.cpp (libhdbbasement.so)
9: in config::IniFileConfigurationHandler::getParameterValueInternal(char const*, char const*, char const*, unsigned int, Itt::basic_string<char, Itt::char_traits<char>, Itt::integral_constant<int, 64>> const& [clone .constprop.0] at ConfigMgr.cpp (libhdbbasement.so)
10: in config::IniFileConfigurationHandler::copyParameterValue(Configuration::ConfigurationDataBase::Parameter const&, char const*, void const*, void const*, void*) const at ConfigurationData.cpp (libhdbbasis.so)
11: in Configuration::ConfigurationDataBase::Parameter::copyValue(Configuration::ConfigurationHandler const&, Configuration::ConfigurationDataBase::Parameter const&, void*) const at ConfigurationData.cpp (libhdbbasis.so)
12: in Configuration::ConfigurationDataBase::ReconfigurationBuffer::const_iterator::copyValue(Configuration::ConfigurationHandler const&, Configuration::ConfigurationDataBase const&, void const*) at ConfigurationData.cpp (libhdbbasis.so)
13: in Configuration::ConfigurationHandlerSPI::prepareReconfigurationBuffer(Configuration::ConfigurationDataBase&) at ConfigurationHandler.cpp (libhdbbasis.so)
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21: in create_InitializeImpl(void*) [clone .lto_priv.0] at MultiDBConfiguration.cpp (libhdbbasement.so)
22: in Execution::runOnceImpl(void (*)(void*), void*, bool&, bool) [clone .lto_priv.0] at RunOnce.cpp (libhdbbasis.so)
23: in MultiDB::MultiDBConfigurationStatistics::getMultiDBConfigurationStatisticsAllocator() at atomic.hpp (libhdbbasement.so)
24: in .LTHUNK23.lto_priv.0 at MultiDBConfiguration.cpp (libhdbbasement.so)
25: in Configuration::ConfigurationHandlerSPI::commitReconfigureImpl(Configuration::ConfigurationDataBase&) at ConfigurationHandler.cpp (libhdbbasis.so)
26: in Configuration::ConfigurationHandlerSPI::reconfigure(Configuration::ConfigurationDataBase&) at ConfigurationHandler.cpp (libhdbbasis.so)
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28: in Configuration::ConfigurationDataBase::reconfigureUnregisteredConfigurationInternal() at ConfigurationData.cpp (libhdbbasis.so)
29: in Configuration::ConfigurationDataBase::reconfigureUnregisteredConfiguration() at ConfigurationData.cpp (libhdbbasis.so)
30: in MultiDB::MultiDBConfigurationStatistics::MultiDBConfigurationStatistics(Diagnose::StatisticsDataOwnerHandle<MultiDB::MultiDBConfigurationStatisticsData&, Configuration::ConfigurationHandler&) at MultiDBConfiguration.cpp (libhdbbasement.so)
31: in MultiDB::impl::MultiDBConfiguration_InitializeImpl::MultiDBConfiguration_InitializeImpl() [clone .constprop.0] at MultiDBConfiguration.cpp (libhdbbasement.so)

[...]

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Other Terms

multidb, Internal Host Name Resolution

Reason and Prerequisites

Issue number 289989

Reason:

Due to a programming error in SAP HANA, a wrong memory allocator is used during system restart while enabling the new value **'internal'** of configuration parameter **'systemdb_sql_listeninterface'**.

Affected Releases:

- SAP HANA 2:
 - Revisions of SPS00 - SPS04
 - Revisions <= 059.04 (SPS05)
 - Revisions <= 063.00 (SPS06)

Prerequisites:

- [multidb] systemdb_sql_listeninterface is set to **'internal'** **AND**
- HANA instance is restarted to activate the new configuration parameter value of **'systemdb_sql_listeninterface'**

Solution

Apply one of the following SAP HANA Revisions:

- SAP HANA 2:
 - Revisions >= 059.05 (SPS05)
 - Revisions >= 064.00 (SPS06)
 - or higher
- or higher

Workaround:

- In order to boot up HANA instance, please set [multidb] systemdb_sql_listeninterface = **'internal'** back to **'all'** and then try restarting HANA instance.

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 | 000005 |
| | SP064 | 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](#)
 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 (3)

| Number | Year | Title | Status | Processor | Customer Number | Customer Name |
|------------|------|--|------------|-------------|-----------------|------------------------------------|
| 0003327128 | 2022 | Indexserver crashed after parameter update | Restricted | Jinsol Kim | 0001388230 | Delivery Hero SE |
| 0000386654 | 2023 | Hana DB * did not start after server crash | Restricted | Carlos Pena | 0000011195 | HDI AG |
| 0000554162 | | Secondary HANA DB Instance ECP is unable to start due to err | Restricted | Carlos Pena | 0000811530 | Mother Dairy Fruit & Vegetable Pvt |

SAP Knowledge Base Articles (1)

3274339 HAN-DB-HA [Secondary nameserver cannot be started and fails with "assign failed with ltt exception: exception 1000087: basic_ios::clear"](#)

SAP Notes (3)
3267762 HAN-DB [SAP HANA 2 SPS05 Revision 059.07](#)
3221209 HAN-DB [SAP HANA 2 SPS05 Revision 059.05](#)
3218836 HAN-DB [SAP HANA 2 SPS06 Revision 064.00](#)

ServiceNow Case (3)

| Number | Year | Text | Status | Processor | Customer Number | Customer |
|------------|------|---|--------|-----------------------|-----------------|----------|
| 0000554162 | 2023 | Secondary_HANA.DB.Instance_ECP_is_unable_to_start_due_to_err. | Closed | Carlos Pena (I355679) | | |
| 0003327128 | 2022 | Indexserver_crashed_after_parameter_update. | Closed | Jinsol Kim (I533393) | | |
| 0000386654 | 2023 | Hana DB replication did not start after server crash | Closed | Carlos Pena (I355679) | | |