Altibase 7.1.0.6.9 Patch Notes

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Changes

- Version Info
- Altibase Server Properties
- o Performance Views

Fixed Bugs

BUG-47420 Fixed the issue where the Altibase server abnormally terminates when using LENGTH() to output the length of LOB data and the LOB data type exceeds the maximum size when input into a disk table.

• module: sm

• Category: Functional Error

• Reproducibility: Always

- **Description**: Fixed the issue related to inputting LOB data and outputting with LENGTH().
 - 1. Problem with inputting LOB data exceeding the maximum size (4G-1bytes) in disk tables
 - 2. Problem with inputting LOB data exceeding the maximum size in memory/volatile tables, resulting in failure, but some data remains after rollback.
 - 3. Abnormal termination of the Altibase server when using LENGTH() to output the length of LOB data in disk/memory/volatile memory tables.

After this bug fix, inputting LOB data exceeding 4GB-1byte in disk tables will result in error [0x110D0, 'The lob size is bigger than the maximum lob size].

- How to reproduce this bug
 - Reproduction conditions
 - Actual Results
 - Expected Results
- Workaround
- Changes
 - Performance view
 - Property
 - o Compile Option
 - o Error Code

BUG-49133 Setting SORT_AREA_SIZE to its minimum value of 524288 and setting TEMP_HASH_BUCKET_DENSITY to 65 or higher may cause the Altibase server to abnormally terminate.

• module: sm

• Category : Fatal

• Reproducibility: Always

- **Description**: Setting SORT_AREA_SIZE to its minimum value of 524288 and setting TEMP_HASH_BUCKET_DENSITY to 65 or higher may cause the Altibase server to abnormally terminate. This issue has been fixed.
- How to reproduce this bug
 - o Reproduction conditions
 - o Actual Results

- Expected Results
- Workaround
- Changes
 - Performance view
 - Property
 - o Compile Option
 - Error Code

BUG-49439 In an AUDIT disconnect setting, the Altibase server may abnormally terminate when a database session is terminated.

• module: mm-altiaudit

• Category : Maintainability

• Reproducibility: Rare

- **Description**: Fix the issue where the Altibase server abnormally terminates when a database session is terminated in an AUDIT disconnect setting.
- How to reproduce this bug
 - o Reproduction conditions
 - Actual Results

The Altibase server abnormally terminates and leaves the following call stack in altibase_error.log.

```
BEGIN-STACK [CRASH] =============
Caller[0] 0000000000417208 => mmmSignalHandler
Caller[1] 00007F004DB5D5E0
                            => not found
Caller[2] 000000000442C3F =>
mmtAuditManager::auditBySession(mmcStatement*)
caller[3] 00000000046925F => mmcStatement::finalize()
caller[4] 000000000470E6B =>
mmcStatementManager::freeStatement(mmcStatement*)
caller[5] 0000000000462669 => mmcSession::finalize()
Caller[6] 00000000041D62F
                            =>
mmtSessionManager::freeSession(mmcTask*)
caller[7] 0000000000413558 => mmcTask::finalize()
caller[8] 000000000041C9ED => mmtSessionManager::freeTask(mmcTask*)
Caller[9] 00000000042A485
mmtServiceThread::terminateTask(mmcTask*)
caller[10] 000000000042AD82 => mmtServiceThread::executeTask()
caller[11] 000000000042B75C => mmtServiceThread::run()
Caller[12] 0000000000EA4A1B => idtContainer::staticRunner(void*)
Caller[13] 00007F004DB55E25 => not found
Caller[14] 00007F004CC2434D => not found
```

Expected Results

Disable the AUDIT disconnect setting.

Workaround

Changes

- o Performance view
- Property
- o Compile Option
- Error Code

BUG-49473 When a sequence object is specified in the GET_DDL function of the DBMS_METADATA package, statements with MIN and MAX values different from those of the sequence properties may be extracted.

• module : ux-dbms_metadata

• Category: Functional Error

• Reproducibility: Always

• **Description**: Fixes a bug where statements with MIN and MAX values different from sequence properties are extracted when a sequence object is specified in the GET_DDL function of the DBMS_METADATA package.

This bug is possible if the following two conditions are met when creating a sequence object:

- When the INCREMENT BY value is less than 0 and the MINVALUE is specified as 1
- When the INCREMENT BY value is less than 0 and the MAXVALUE is specified as 9223372036854775806
- How to reproduce this bug
 - Reproduction conditions

```
CREATE SEQUENCE S1 INCREMENT BY -1 MINVALUE 1 MAXVALUE 10000;
CREATE SEQUENCE S2 INCREMENT BY 1 MINVALUE 10 MAXVALUE
9223372036854775806;
SELECT DBMS_METADATA.GET_DDL('SEQUENCE', 'S1', 'SYS') FROM DUAL;
SELECT DBMS_METADATA.GET_DDL('SEQUENCE', 'S2', 'SYS') FROM DUAL;
```

Actual Results

```
isqL> select DBMS_METADATA.GET_DDL('SEQUENCE', 'S1', 'SYS') FROM DUAL;
DBMS_METADATA.GET_DDL('SEQUENCE', 'S1', 'SYS

CREATE SEQUENCE "SYS"."S1" START WITH 10000 INCREMENT BY -1 MAXVALUE
10000
1 row selected.
isqL> select DBMS_METADATA.GET_DDL('SEQUENCE', 'S2', 'SYS') FROM DUAL;
DBMS_METADATA.GET_DDL('SEQUENCE', 'S2', 'SYS')

CREATE SEQUENCE "SYS"."S2" START WITH 9223372036854775806 INCREMENT BY
-1
1 row selected.
```

Expected Results

```
iSQL> SELECT DBMS_METADATA.GET_DDL('SEQUENCE', 'S1', 'SYS') FROM DUAL;
DBMS_METADATA.GET_DDL('SEQUENCE', 'S1', 'SYS')

CREATE SEQUENCE "SYS"."S1" START WITH 10000 INCREMENT BY -1 MINVALUE 1
MAXVALUE 10000

1 row selected.
iSQL> SELECT DBMS_METADATA.GET_DDL('SEQUENCE', 'S2', 'SYS') FROM DUAL;
DBMS_METADATA.GET_DDL('SEQUENCE', 'S2', 'SYS')

CREATE SEQUENCE "SYS"."S2" START WITH 9223372036854775806 INCREMENT BY
-1 MINVALUE 1 MAXVALUE 922337
2036854775806

1 row selected.
```

- Workaround
- Changes
 - o Performance view
 - Property
 - o Compile Option
 - o Error Code

BUG-49543 Altibase server may abnormally terminate due to a bug that deletes a deleted disk index key again during a disk table change transaction.

• module: sm-disk-index

• Category : Fatal

• Reproducibility: Rare

• **Description**: Avoid abnormal termination of the Altibase server when attempting to delete a deleted disk index key again during a disk table change transaction, and add a log to analyze the cause. After reflecting this bug, when a phenomenon occurs, the following error message is displayed.

```
ERR-11069 : Internal server error in the storage manager (fail to delete key - invalid key state)
```

In addition, to analyze the cause of attempting to delete the disk index key again, the following error message is additionally recorded in the trace log, altibase_error.log.

```
deleteKeyFromLeafNode() INVALID KEY STATE ( IndexID: IndexID, LeafKey:
    LeafKey, key state : key state, sequence number : sequence number )

Delete Key by same TX (TID:TID),((smxTrans*)(aMtx->mTrans))->mTransID );
```

The result of dumping the page in question is also recorded in altibase_dump.log.

How to reproduce this bug

o Reproduction conditions

Actual Results

When the Altibase server abnormally terminates due to this bug, the following call stack is left in the altibase_error.log.

```
[2021/12/13 21:58:29 32E85D][PID:6885][Thread-140305053693696][LWP-6948]
leaf sequence number : 130
[2021/12/13 21:58:29 32E861] Dump of Stack
BEGIN-STACK [NORMAL] ==============
Caller[0] 000000000EC4DD8
_ZN6ideLog23writeErrorTraceInternalEj12ideLogModulejPKcS2_jS2_P13__va_li
st_tag.constprop.2
Caller[1] 0000000000EC8075 => ideLog::writeErrorTrace(char const*,
idBool, char const*, unsigned int, char const*, __va_list_tag*)
Caller[2] 00000000000EC3B2F => ideLogError
Caller[3] 000000000D42CEF
                             =>
_ZN9sdnbBTree21deleteKeyFromLeafNodeEP6idvSQLP13sdnbStatisticP6sdrMtxP10
sdnbHeaderP13sdpPhyPageHdrPs6idBoolPSB_.constprop.42
Caller[4] 000000000D62FC3
                            => sdnbBTree::deleteKey(idvSQL*, void*,
void*, char*, smiIterator*, unsigned long)
caller[5] 00000000DDEC3E =>
smiTableCursor::deleteKeys(smiTableCursor*, scGRID, idBool)
Caller[6] 000000000DDEEA8
smiTableCursor::deleteRowDRDB(smiTableCursor*, smiDMLRetryInfo const*)
Caller[7] 000000000DDAF45
smiTableCursor::deleteRow(smiDMLRetryInfo const*)
...중략...
[2021/12/13 21:58:29 32E860][PID:6885][Thread-140305053693696][LWP-6948]
IDE_ASSERT( 0 ), [sdnbModule.cpp:5950], errno=[16]
errno=[16]
[2021/12/13 21:58:29 32E862][PID:6885][Thread-140305053693696][LWP-6948]
[ASSERT] ERROR LINE => [sdnbModule.cpp:5950]
ERR-0109e(errno=16) Internal server error.
altibase:
/home/hdb651_p/work/altidev4/src/sm/sdn/sdnb/sdnbModule.cpp:5950: static
IDE_RC sdnbBTree::deleteKeyFromLeafNode(idvSQL*, sdnbStatistic*,
sdrMtx*, sdnbHeader*, sdpPhyPageHdr*, SShort*, idBool, idBool*):
Assertion `O' failed.
```

Expected Results

Workaround

Changes

- o Performance view
- Property
- Compile Option
- o Error Code

BUG-49544 Add a debugging log to analyze the cause of the [The tablespace does not have enough free space (TBS Name:).] error when there is free space when expanding files when multiple data files are used in the undo tablespace.

• module: sm-disk-page

• Category : Functional Error

• Reproducibility: Frequence

• **Description**: If you encounter an error where the tablespace does not have enough free space despite having available space when using multiple data files in an undo tablespace, this log will be added to assist in debugging the cause of the error. Note that this log is only written when activating a private property, so please contact Altibase Technical Support Center if necessary.

```
Failed to expand UndoTBS File.
UndoTBS FileName : file_name, FileID : file_id, CurrSize = curr_size,
NextSize = next_size, MaxSize = max_size
```

- How to reproduce this bug
 - Reproduction conditions
 - Actual Results
 - Expected Results
- Workaround
- Changes
 - o Performance view
 - Property
 - o Compile Option
 - o Error Code

BUG-49553 Altibase server may abnormally terminate due to a bug that frees memory released during the process of replacing SQL Plan Cache's PCO (Plan Cache Object).

• module: qp

• Category : Fatal

• Reproducibility: Impossible

- **Description**: Fixed an issue where the Altibase server abnormally terminates due to a bug that frees memory released during the process of replacing the SQL Plan Cache PCO (Plan Cache Object) again.
- How to reproduce this bug
 - Reproduction conditions
 - Actual Results
 - Expected Results
- Workaround
- Changes

- o Performance view
- Property
- o Compile Option
- o Error Code

BUG-49565 Supplements the error message displayed in altibase_error.log when a failure occurs in the Refine Memory Table step while running the Altibase server.

• module: sm

Category : Functional ErrorReproducibility : Unknown

• **Description**: Supplements the error message displayed in altibase_error.log when a failure occurs in the Refine Memory Table step while running the Altibase server.

After reflecting this bug, a more accurate error code and error message such as [ERR-11088 Invalid row SCN] are output in the ERR-00000 (errno=16) part.

```
[2022/01/11 00:14:56 416][PID:2150][Thread-47881693447936][LWP-2279]
[FATAL] ERROR LINE => [smtpJMgr.cpp:154] MSG[error]
====== CURRENT IDE ERROR STACK =====
ERR-00000(errno=16)
[========= FATAL Terminated =======]
```

- · How to reproduce this bug
 - Reproduction conditions
 - Actual Results
 - Expected Results
- Workaround
- Changes
 - o Performance view
 - Property
 - o Compile Option
 - o Error Code

BUG-49576 Add LOB to data types supported by Adapter for JDBC.

• module: rp-jdbcAdapter

• **Category**: Efficiency

• Reproducibility: Always

• **Description**: Add LOB to data types supported by Adapter for JDBC.

- How to reproduce this bug
 - Reproduction conditions
 - Actual Results

ALA Log converter error: Unsupported data type.

• Expected Results

- Workaround
- Changes
 - Performance view
 - o Property
 - Compile Option
 - o Error Code

Changes

Version Info

altibase	database binary	meta	cm protocol	replication protocol
version	version	version	version	version
7.1.0.6.9	6.5.1	8.10.1	7.1.7	7.4.7

You can check the module version change history in <u>Version Histories</u>.

Compatibility

Database binary version

The database binary version has not changed.

Meta Version

The meta version has not changed.

CM protocol Version

The cm protocol version has not changed.

Replication protocol Version

The replication protocol version has not changed.

Altibase Server Properties

Added Properties

Changed Properties

Deleted Properties

Performance Views

Added Performance Views

Changed Performance Views

Deleted Performance Views