Altibase 7.1.0.5.9 Patch Notes

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• Changes

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Fixed Bugs

BUG-49102 If you perform SPLIT PARTITION on a RANGE partitioned table with more than one partitioning key and then perform the COPY_TABLE_STATS procedure, incorrect results may occur.

• module: qp

• Category : Functional Error

• Reproducibility: Frequence

- **Description**: Fixes a bug where performing a SPLIT PARTITION and performing a COPY_TABLE_STATS procedure on a RANGE partitioned table with more than one partitioning key gives incorrect results.
- How to reproduce this bug
 - Reproduction conditions

```
DROP TABLE T1 CASCADE;
CREATE TABLE T1
   i1 INTEGER,
  I2 INTEGER
PARTITION BY RANGE( I1, I2 )
   PARTITION P1 VALUES LESS THAN ( 101,10 ),
   PARTITION P2 VALUES LESS THAN ( 201,20 ),
   PARTITION P3 VALUES LESS THAN ( 301,30 ),
   PARTITION PMAX VALUES LESS THAN ( 1001,40 ),
   PARTITION DEF VALUES DEFAULT
) TABLESPACE SYS_TBS_DISK_DATA;
INSERT INTO T1 SELECT LEVEL, 1 FROM DUAL CONNECT BY LEVEL <= 1000;
EXEC GATHER_TABLE_STATS('SYS', 'T1');
ALTER TABLE T1 SPLIT PARTITION PMAX AT ( 400, 40 ) INTO ( PARTITION P4,
PARTITION PMAX );
-- You need to install two save packages, DBMS_CONCURRENT_EXEC, and
DBMS_STATS to perform the statement below.
EXEC DBMS_STATS.COPY_TABLE_STATS('SYS', 'T1', 'P3', 'P4');
```

Actual Results

```
SELECT PARTITION_NAME, NUM_DIST, NUM_NULL, AVG_LEN, MIN, MAX
FROM V$DBMS_STATS S, SYSTEM_.SYS_TABLE_PARTITIONS_ T
WHERE S.TYPE = 'C' AND S.TARGET_ID = T.PARTITION_OID
ORDER BY 1, MIN, MAX;
```

PARTITION_NAME MIN		NUM_DIST MAX		NUM_NULL	AVG_LEN
P1		1		0	4
P1	1	101	1	0	4
	1		101		
P2	1	1	1	0	4
P2		100		0	4
Р3	102	1	201	0	4
-2	1	400	1		
Р3	202	100	301	0	4
Р4	30	100	40	0	4
P4	30	1	40	0	4
PMAX	301	1	400	0	4
PIVIAA	1	1	1	O .	7
PMAX	302	699	1000	0	4
	302		1000		

Expected Results

SELECT PARTITION_NAME, NUM_DIST, NUM_NULL, AVG_LEN, MIN,MAX FROM V\$DBMS_STATS S, SYSTEMSYS_TABLE_PARTITIONS_ T WHERE S.TYPE = 'C' AND S.TARGET_ID = T.PARTITION_OID ORDER BY 1, MIN, MAX;								
PARTIT	TION_NAME MIN	NUM_	DIST MAX	NUM_NULL	AVG_LEN			
P1	1	1	1	0	4			
P1	1	101	101	0	4			
P2	1	1	1	0	4			
P2		100		0	4			
Р3	102	1	201	0	4			
Р3	1	100	1	0	4			
P4	202	1	301	0	4			
P4	30	100	40	0	4			
PMAX	301	1	400	0	4			
PMAX	1	699	1	0	4			
	302		1000					

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

BUG-49143 The ping method of the JDBC driver is improved to work in prepared mode as well.

• module: mm-jdbc

• Category: Functional Error

• Reproducibility: Always

• **Description**: The JDBC ping method operates on Statement.executeQuery(). In the case of a specific connection pool (e.g. Tomcat DBCP2), it is improved to operate in prepared mode to support that validation query operates in prepared mode.

The JDBC driver must be patched to apply this bug.

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

BUG-49155 There is a concurrency problem when replacing trace log files.

• module: id

• **Category**: Reliability

• Reproducibility: Rare

- **Description**: Fix concurrency issues when replacing trace log files.
- How to reproduce this bug
 - Reproduction conditions
 - Actual Results
 - Expected Results
- Workaround
- Changes
 - o Performance view
 - Property
 - o Compile Option
 - o Error Code

BUG-49181 In a replication environment using the DDL replication function, if V\$REPRECEIVER is queried while executing a DDL statement, the Altibase server may be terminated abnormally.

• module: rp

• Category : Fatal

• Reproducibility: Rare

• **Description**: In a replication environment where the DDL replication function is used (REPLICATION_DDL_SYNC = 1), a bug in which the Altibase server abnormally terminates due to a concurrency problem when V\$REPRECEIVER is queried while executing a DDL statement is fixed.

• How to reproduce this bug

o Reproduction conditions

Setting Altibase server property REPLICATION_DDL_SYNC = 1 in Altibase replication environment
Query V\$REPRECEIVER during TRUNCATE table

Actual Results

Altibase server terminates abnormally.

Expected Results

Normally V\$REPRECEIVER is queried.

Workaround

Do not query V\$REPRECEIVER, during DDL statement execution when REPLICATION_DDL_SYNC = 1 is set.

Changes

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

BUG-49200 The memory usage restriction function does not work normally.

• module: id

• Category : Functional Error

• Reproducibility: Always

- Description: Fixes a bug where the memory usage restriction function does not work
 normally. If an error does not occur because the memory usage is low when executing SQL
 including memory tables, it may fail due to PREPARE_STMT_MEMORY_MAXIMUM and
 EXECUTE_STMT_MEMORY_MAXIMUM after patching.
- How to reproduce this bug
 - Reproduction conditions
 - Actual Results
 - Expected Results
- Workaround
- Changes
 - o Performance view
 - Property
 - o Compile Option
 - Error Code

BUG-49213 Improves internal exception handling when DDL replication fails.

- module: rp
- Category: Functional Error
- Reproducibility: Always
- **Description**: Improves internal exception handling when DDL replication fails.
- · How to reproduce this bug
 - Reproduction conditions
 - Actual Results
 - Expected Results
- Workaround
- Changes
 - o Performance view
 - Property
 - Compile Option
 - o Error Code

BUG-49217 Improve Adapter for JDBC, Adapter for Oracle to replicate data by separating column names.

- module: rp-jdbcAdapter
- Category: Other
- Reproducibility: Always
- **Description**: Improve Adapter for JDBC, Adapter for Oracle to replicate data by separating column names.
- How to reproduce this bug
 - Reproduction conditions
 - Actual Results
 - Expected Results

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

BUG-49224 In a replication active-active environment using the DDL replication function, if a DDL statement fails due to DDL_LOCK_TIMEOUT on the remote server, the Altibase server on the local server may terminate abnormally.

• module: rp

• Category: Other

• Reproducibility: Rare

- **Description**: In a replication active-active environment using the DDL replication function, a bug in which the Altibase server of the local server abnormally terminates when a DDL statement fails due to DDL_LOCK_TIMEOUT in the remote server is fixed.
- How to reproduce this bug
 - o Reproduction conditions

```
It is an Altibase replication active-active environment and DDL replication function is used (REPLICATION_DDL_SYNC = 1)

TRUNCATE on table T1 on local server
INSERT into table T1 from remote server
TRUNCATE failures on the local server
INSERT into table T1 from remote server
```

Actual Results

```
Altibase server abnormally terminated.
```

Expected Results

Replication operates normally after truncate failure

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

BUG-49233 Change the exception thrown when calling a function not supported by Altibase42.jar.

• module: mm-jdbc

• **Category**: Functionality

• Reproducibility: Always

- **Description**: Change to throw SQLFeatureNotSupportedException instead of SQLException when calling a feature not supported by Altibase42.jar. The JDBC driver(Altibase42.jar) must be patched to apply this bug.
- How to reproduce this bug
 - Reproduction conditions

```
Connection sConn = getConnection();sConn.setTypeMap(new HashMap());
```

Actual Results

```
Exception in thread "main" java.sql.SQLException: Unsupported feature: User defined type
```

Expected Results

```
Exception in thread "main" java.sql.SQLFeatureNotSupportedException: User defined type
```

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

Changes

Version Info

altibase	database binary	meta	cm protocol	replication protocol version
version	version	version	version	
7.1.0.5.9	6.5.1	8.9.1	7.1.7	7.4.6

You can check the module version change history in Version Histories.

Compatibility

Database binary version

The database binary version has not changed.

The database binary version indicates the compatibility of database image files and log files. If this version needs to be patched to a different version, the database must be reorganized.

Meta Version

The meta version has not changed.

If you want to roll back the patch after patching to a version with a changed meta version, see <u>Meta Downgrade</u>.

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