Altibase 7.1.0.9.2 Patch Notes

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New Features

BUG-50703 Improve that the trigger which includes the Row Referencing clause does not copy unused columns internally.

• module: qp-psm-trigger-execute

• Category : Enhancement

• Reproducibility: Always

Description: Previously, when a trigger with the Row Referencing clause was executed, it
internally copied the referenced records to specific variables. During this process, unused
columns were also copied. However, it has been improved to copy only the columns that are
actually used.

With this update, Altibase fixed the issue where a trigger using the Referencing clause would result in an [ERR-21031: Unable to convert the data type.] error when the trigger does not use the LOB column.

Additionally, the performance of the DML operation that activates the trigger has been improved.

Notice: This patch does not address the following issues.

 In triggers using Row Referencing clauses on tables with LOB data exceeding 100MB, an [ERR-21031: Unable to convert the data type.] error may occur when referencing the LOB columns.

· How to reproduce this bug

- o Reproduction conditions
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- Workaround
- Changes
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 - o Compile Option
 - Error Code

Fixed Bugs

BUG-50527 The Altibase server is terminated abnormally when applying operational expression on index columns as parameters of NVL_EQUAL or NVL_NOT_EQUAL function.

module : mtCategory : Fatal

• Reproducibility: Always

- **Description**: The issue causing abnormal server termination when applying operational expression on index columns as parameters of the NVL_EQUAL() and NVL_NOT_EQUAL() functions has been resolved in this patch.
- · How to reproduce this bug
 - Reproduction conditions
 - Actual Results
 - o Expected Results
- Workaround
- Changes
 - o Performance view
 - Property
 - o Compile Option
 - o Error Code

BUG-50542 The Altibase server is terminated abnormally when multiple update statement is executed on the table, which is a hybrid partitioned table, contains GEOMETRY or LOB columns and invokes an update trigger event.

• module: sm

• Category : Fatal

• Reproducibility: Always

- **Description**: The issue causing abnormal termination during the execution of multiple update statements under specific conditions has been addressed.
 - The table is a hybrid partitioned table and contains a GEOMETRY or LOB column.
 - An update trigger event is configured.
- How to reproduce this bug
 - Reproduction conditions

```
DROP TABLE T1;
DROP TABLE T2;

CREATE TABLE T1 ( I1 INTEGER, I2 FLOAT, I3 GEOMETRY )
```

```
PARTITION BY RANGE(I1)
 ( PARTITION P1 VALUES DEFAULT TABLESPACE SYS_TBS_disk_DATA )
 TABLESPACE SYS_TBS_mem_DATA;
CREATE TABLE T2 (I1 INTEGER, I2 VARCHAR(1000));
CREATE TRIGGER AFTER_UPDATE AFTER UPDATE ON T1
REFERENCING
OLD AS OLDROW
NEW AS NEWROW
FOR EACH ROW
AS
BEGIN
INSERT INTO T2 VALUES (7777, 'AFTER UPDATE');
END;
INSERT INTO T1(I2) VALUES (178);
UPDATE T1 LEFT OUTER JOIN T2 ON T1.I1 = T2.I1 SET T1.I1 = T1.I1 + 5,
T2.I1 = T2.I1 + 10;
```

Actual Results

```
[ERR-91015 : Communication failure.]
```

Expected Results

```
[ERR-1105F : No more than one update cursor can be used on a table.at
"SYS.AFTER_UPDATE", line 8]
```

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

BUG-50660 The Altibase server is terminated abnormally when a trigger using the REFERENCING NEW ROW clause is executed after changing the tablespace of the referenced table.

- module: qp-ddl-dcl-execute
- Category: Fatal
- **Reproducibility**: Always
- Description: The issue causing abnormal termination when a trigger, using the REFERENCING NEW ROW clause, is executed under the following conditions has been resolved:
 - 1. The trigger with the REFERENCING NEW ROW clause references a table.
 - 2. The table's tablespace is altered according to the following conditions:

- If it was a memory tablespace, change it to a disk tablespace.
- If it was a disk tablespace, change it to a memory tablespace.
- 3. The trigger executes and DML statements defined in trigger_event are performed.
- How to reproduce this bug
 - Reproduction conditions
 - Actual Results
 - Expected Results
- Workaround
- Changes
 - Performance view
 - o Property
 - o Compile Option
 - o Error Code

BUG-50686 The UTC_OFFSET value for America/Porto_Velho timezone in V\$TIME ZONE NAMES is incorrect.

- module: mt
- Category : Functional Error
- Reproducibility: Always
- **Description**: The UTC_OFFSET value for the America/Porto_Velho timezone in V\$TIME_ZONE_NAMES is incorrectly displayed. This will be corrected to show the accurate value of "-04:00".
- How to reproduce this bug
 - Reproduction conditions

```
select * from v$time_zone_names where name='America/Porto_Velho';
```

Actual Results

NAME	UTC_OFFSET
America/Porto_Velho	04:00

Expected Results

NAME	UTC_OFFSET
America/Porto_Velho	-04:00

- Workaround
- Changes
 - Performance view
 - Property

- o Compile Option
- o Error Code

BUG-50697 A memory leak occurs when using a ping query with PreparedStatement in JDBC.

• module: mm-jdbc

• Category : Functional Error

• Reproducibility: Always

- **Description**: Altibase has fixed a memory leak issue when useing a ping query with PreparedStatement in JDBC. Users need to patch JDBC Driver to apply this fix.
- How to reproduce this bug
 - Reproduction conditions

```
Connection sConn = getConnection("20300");
PreparedStatement sStmt = sConn.prepareStatement("/* PING */ SELECT 1 ");
ResultSet sRs = sStmt.executeQuery();
if (sRs.next())
{
    sRs.close();
}
sStmt.executeQuery();
sStmt.executeQuery();
sStmt.executeQuery();
sStmt.close();
sConn.close();
```

Actual Results

```
Memory Usage is consistently increasing.
```

Expected Results

```
Memory usage is not consistently increasing.
```

Workaround

```
Using 'select 1 from dual' instead of a ping query
```

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

BUG-50700 Invalid memory access error may occur during checking column constraints in a hybrid partitioned table because of incorrect row offset information.

• module: qp

• **Category**: Memory Error

• Reproducibility: Always

- **Description**: Altibase has fixed the issue of invalid memory access which occurs during checking column constraints in a hybrid partitioned table. This issue has occurred due to incorrect row offset information.
- · How to reproduce this bug
 - Reproduction conditions
 - Actual Results
 - Expected Results
- Workaround
- Changes
 - Performance view
 - o Property
 - o Compile Option
 - o Error Code

Changes

Version Info

altibase	database binary	meta	cm protocol	replication
version	version	version	version	protocol version
7.1.0.9.2	6.5.1	8.11.1	7.1.7	7.4.7

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