Altibase 7.1.0.9.5 Patch Notes

- Fixed Bugs
    - BUG-50775 Fix an issue where execute processing is aborted if the result of SQLExecute() is SQL_NO_DATA when performing a Multiple Statement query.
    - BUG-50782 Fix an issue where Name-based Binding did not work in Multiple Statement.
    - BUG-50784 Address security vulnerabilities in CWE-114 and CWE-73
    - BUG-50798 Fix an error in allocating the page control header (PCH) internally when a checkpoint image file was added during MEDIA RECOVERY.
    - BUG-50803 Fix an issue where altibase_boot.log printed an incorrect errno.
    - BUG-50804 Fix an issue where Session Time Failover (STF) did not work if the server connection was lost when AltibaseStatement.close() was called.
    - BUG-50817 Change from holding an X Lock(Exclusive Lock) on the table to an IX Lock (Intent Exclusive Lock) when executing AGING statement on a disk table or disk index.
    - BUG-50826 Fix an issue where the CLI function SQLPrimaryKeys() outputted the wrong name for the second column of the result.
    - BUG-50840 Fix an error where pages were not allocated internally when a checkpoint image file was added during MEDIA RECOVERY.
- Changes
    - Version Info
    - Compatibility
    - Altibase Server Properties
    - Performance Views

Fixed Bugs

BUG-50775 Fix an issue where execute processing is aborted if the result of SQLExecute() is SQL_NO_DATA when performing a Multiple Statement query.

- **module** : mm-cli
- **Category** : Functional Error
- **Reproducibility** : Always
- **Description** : Altibase fixed to prevent execute processing from being aborted when the result of SQLExecute() is SQL_NO_DATA when executing a Multiple Statement query.
- **How to reproduce this bug**
  - **Reproduction conditions**
  - **Actual Results**
  - **Expected Results**
- **Workaround**
- **Changes**
  - Performance view
  - Property
  - Compile Option
  - Error Code

BUG-50782 Fix an issue where Name-based Binding did not work in Multiple Statement.

- **module** : mm-cli
- **Category** : Functional Error
- **Reproducibility** : Always
- **Description** : Altibase fixed an issue where Name-based binding did not work correctly when binding multiple parameters in multiple statements.
- **How to reproduce this bug**
  - **Reproduction conditions**
  - **Actual Results**
  - **Expected Results**
- **Workaround**
- **Changes**
  - Performance view
  - Property
  - Compile Option
  - Error Code

BUG-50784 Address security vulnerabilities in CWE-114 and CWE-73.

- **module** : mm-jdbc
- **Category** : Security
- **Reproducibility** : Always
- **Description** : Altibase fixed security vulnerabilities in CWE-114 and CWE-73 detected in Veracode. The JDBC driver must be patched for this bug.
- **How to reproduce this bug**
  - **Reproduction conditions**
  - **Actual Results**
  - **Expected Results**
- **Workaround**
- **Changes**
  - Performance view
  - Property
  - Compile Option
  - Error Code

BUG-50798 Fix an error in allocating the page control header (PCH) internally when a checkpoint image file was added during MEDIA RECOVERY.

- **module** : sm
- **Category** : Fatal
- **Reproducibility** : Always
- **Description** : Altibase fixed an error in allocating the page control header (PCH) internally when a checkpoint image file was added during MEDIA RECOVERY.
- **How to reproduce this bug**
  - **Reproduction conditions**
  - **Actual Results**
  - **Expected Results**
- **Workaround**
- **Changes**
  - Performance view
  - Property
  - Compile Option
  - Error Code

BUG-50803 Fix an issue where altibase_boot.log printed an incorrect errno.

- **module** : cm
- **Category** : Other
- **Reproducibility** : Always
- **Description** : Altibase fixed an issue where the error number was output to altibase_boot.log with a "d" character after the error number, such as "errno=22d".
- **How to reproduce this bug**
  - **Reproduction conditions**
  - **Actual Results**
  - **Expected Results**
- **Workaround**
- **Changes**
  - Performance view
  - Property
  - Compile Option
  - Error Code

BUG-50804 Fix an issue where Session Time Failover (STF) did not work if the server connection was lost when AltibaseStatement.close() was called.

- **module** : mm-jdbc
- **Category** : Functional Error
- **Reproducibility** : Always
- **Description** : Altibase fixed an issue where Session Time Failover (STF) did not work if the server connection was lost when AltibaseStatement.close() was called, resulting in a sockets error.
- **How to reproduce this bug**
  - **Reproduction conditions**

```
// stf=on
try
{
    sStmt = sCon.prepareStatement("SELECT 1 FROM dual");
    sRes = sStmt.executeQuery();
    if ( sRes.next() )
    {
        System.out.println( "VALUE : " + sRes.getString(1) );
    }
    // ==> Server connection is lost at this point
    sStmt.close();
}
catch ( SQLException e )
```

```
{
    if (e.getErrorCode() == ErrorDef.FAILOVER_SUCCESS)
    {
        System.out.println( "SUCCESS" );
    }
    else
    {
    System.out.println("FAIL";
    }
}
```

- Actual Results

```
FAIL
```

- Expected Results

```
SUCCESS
```

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

BUG-50817 Change from holding an X Lock(Exclusive Lock) on the table to an IX Lock (Intent Exclusive Lock) when executing AGING statement on a disk table or disk index.

- **module** : sm
- **Category** : Other
- **Reproducibility** : Always
- **Description** : Altibase changed from holding an X Lock(Exclusive Lock) on the table to an IX Lock (Intent Exclusive Lock) when executing AGING statement on a disk table or disk. This change solved an issue where an X Lock would cause a timeout while waiting for a transaction when performing AGING on a disk table or disk index to update page information.
- **How to reproduce this bug**
  - **Reproduction conditions**
  - **Actual Results**
  - **Expected Results**
- **Workaround**
- **Changes**
  - Performance view
  - Property
  - Compile Option

○ Error Code

BUG-50826 Fix an issue where the CLI function SQLPrimaryKeys() outputted the wrong name for the second column of the result.

- **module** : mm-cli

- **Category** : Functional Error

- **Reproducibility** : Always

- **Description** : Altiabse fixed an issue where the name of the second column of the result of the SQLPrimaryKeys() function was output as TABLE_CAT, which should be output as TABLE_SCHEM.

- **How to reproduce this bug**

  ○ **Reproduction conditions**

```
iSQL> CREATE TABLE ODBCTESTS (ID INTEGER PRIMARY KEY, NAME VARCHAR(24),
AGE INTEGER);

....
    if( SQLPrimaryKeys( stmt,
                        NULL,
                        0,
                        NULL,
                        0,
                        (SQLCHAR*) "ODBCTESTS",
                        SQL_NTS ) != SQL_SUCCESS )
    {
        printf( "Error : SQLPrimaryKeys()\n" );
        exit(-1);
    }
    else
    {
        printf("RUN SQLPrimaryKeys : SUCCESS\n");
    }
    ...
    while( SQLFetch(stmt) == SQL_SUCCESS )
    {
        sRecCnt++;
        if ( sRecCnt > 2 )
        {
            break;
        }
        printf( "==========================================\n" );
        printf( "= %d-th Record\n", sRecCnt );
        printf( "==========================================\n" );
        // To Remove DIFF by INDEX_ID
        for ( i = 0; i < sColCnt -1; i++ )
        {
            if ( SQLGetData( stmt,
                             i + 1,
                             SQL_C_CHAR,
                             & sData[i],
```

```
                            32,
                            & sDataLen ) != SQL_SUCCESS )
        {
            printf( "Error : SQLGetData(%d)\n", i );
            exit(-1);
        }
        else
        {
            printf( "COLUMN #%d\n"
                    "   ColName = %s\n"
                    "   ColType = %d\n"
                    "   Value   = %s\n",
                    i+1, sColName[i], sColType[i], sData[i] );
        }
    }
}
```

- **Actual Results**

```
COLUMN #1
   ColName = TABLE_CAT
   ColType = 12
   Value   = mydb
COLUMN #2
   ColName = TABLE_CAT
   ColType = 12
   Value   = SYS
COLUMN #3
   ColName = TABLE_NAME
   ColType = 12
   Value   = ODBCTESTS
COLUMN #4
   ColName = COLUMN_NAME
   ColType = 12
   Value   = ID
COLUMN #5
   ColName = KEY_SEQ
   ColType = 5
   Value   = 1
COLUMN #6
   ColName = PK_NAME
   ColType = 12
   Value   = __SYS_CON_PRIMARY_ID_202
```

- **Expected Results**

```
COLUMN #1
   ColName = TABLE_CAT
   ColType = 12
   Value   = mydb
COLUMN #2
   ColName = TABLE_SCHEM
   ColType = 12
   Value   = SYS
COLUMN #3
```

```
        ColName = TABLE_NAME
        ColType = 12
        Value   = ODBCTESTS
    COLUMN #4
        ColName = COLUMN_NAME
        ColType = 12
        Value   = ID
    COLUMN #5
        ColName = KEY_SEQ
        ColType = 5
        Value   = 1
    COLUMN #6
        ColName = PK_NAME
        ColType = 12
        Value   = __SYS_CON_PRIMARY_ID_202
```

- **Workaround**

```
Inquiry in column order
```

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

BUG-50840 Fix an error where pages were not allocated internally when a checkpoint image file was added during MEDIA RECOVERY.

- **module** : sm
- **Category** : Fatal
- **Reproducibility** : Always
- **Description** : Altibase fixed an issue where the page was sometimes not allocated internally when a checkpoint image file was added during MEDIA RECOVERY.
- **How to reproduce this bug**
    - **Reproduction conditions**
    - **Actual Results**
    - **Expected Results**
- **Workaround**
- **Changes**
    - Performance view
    - Property
    - Compile Option
    - Error Code

Changes

Version Info

altibase version	database binary version	meta version	cm protocol version	replication protocol version
7.1.0.9.5	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 Meta Downgrade.

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