**Table of Content**

|  |
| --- |
| Software Required |
| Oracle Functions |
| GEN\_INSERT\_STATEMENT |
| JUNK\_CHAR |
| Create schema |
| Configuration |
| JAR Files |
| Running OracleToMysqlMigration.java |

# Software Required:

* + MY SQL
  + JAVA 7

# Oracle Functions:

We have to run two function JUNK\_CHAR, GEN\_INSERT\_STATEMENT in oracle database.

## GEN\_INSERT\_STATEMENT:

This function is used to get the select query to get insert statements of all data in the table. Table name is parameter for this function. And this function is used inside the oracle to mysql migration java program.

create or replace FUNCTION GEN\_INSERT\_STATEMENT (IN\_TABLE\_NAME VARCHAR2)

RETURN CLOB

IS

LC$COLS\_SELECT VARCHAR2 (4000);

LC$COLS\_VALUES CLOB;

LC$COLOUMN VARCHAR2 (200);

CURSOR LCUR$TAB\_COLUMNS (IN\_TABLE\_NAME VARCHAR2)

IS

SELECT COLUMN\_NAME, DATA\_TYPE, COLUMN\_ID

FROM USER\_TAB\_COLS

WHERE TABLE\_NAME = IN\_TABLE\_NAME AND COLUMN\_ID IS NOT NULL

ORDER BY COLUMN\_ID;

BEGIN

FOR LREC$TAB\_COLUMNS IN LCUR$TAB\_COLUMNS (UPPER (IN\_TABLE\_NAME))

LOOP

IF INSTR (LREC$TAB\_COLUMNS.DATA\_TYPE, 'BLOB') < 1 AND INSTR (LREC$TAB\_COLUMNS.DATA\_TYPE, 'CLOB') < 1

THEN

LC$COLS\_SELECT :=

LC$COLS\_SELECT

|| CASE LREC$TAB\_COLUMNS.COLUMN\_ID WHEN 1 THEN '' ELSE ',' END

|| '`' || LREC$TAB\_COLUMNS.COLUMN\_NAME || '`';

IF INSTR (LREC$TAB\_COLUMNS.DATA\_TYPE, 'CHAR') > 0

THEN

LC$COLOUMN :=

'''''''''||' || 'JUNK\_CHAR('

|| LREC$TAB\_COLUMNS.COLUMN\_NAME

|| ')' || '||''''''''';

ELSIF INSTR (LREC$TAB\_COLUMNS.DATA\_TYPE, 'DATE') > 0 OR INSTR (LREC$TAB\_COLUMNS.DATA\_TYPE, 'TIMESTAMP') > 0

THEN

LC$COLOUMN :=

'TO\_CHAR(' || LREC$TAB\_COLUMNS.COLUMN\_NAME ||',''YYYYMMDDHHMISS'')';

ELSE

LC$COLOUMN := LREC$TAB\_COLUMNS.COLUMN\_NAME;

END IF;

IF INSTR (LREC$TAB\_COLUMNS.DATA\_TYPE, 'LONG') < 1

THEN

LC$COLS\_VALUES :=

LC$COLS\_VALUES

|| ','

|| '''||DECODE('

|| LREC$TAB\_COLUMNS.COLUMN\_NAME

|| ',NULL,''NULL'','

|| LC$COLOUMN

|| ')||''';

ELSE

LC$COLS\_VALUES :=

LC$COLS\_VALUES

|| ','

|| LC$COLOUMN;

END IF;

END IF;

END LOOP;

RETURN TO\_CLOB('SELECT ''INSERT INTO '

|| IN\_TABLE\_NAME

|| ' ('

|| '`ROWID`,'

|| LC$COLS\_SELECT

|| ') VALUES (''''''||ROWID||'''''''

|| LC$COLS\_VALUES

|| ')'' FROM '

|| IN\_TABLE\_NAME || ' ORDER BY ROWID'

|| '');

END;

## JUNK\_CHAR:

This function is used to remove the ‘\’ and new lines in the data. This function is used in GEN\_INSERT\_STATEMENT function. String data is the parameter for this function.

create or replace FUNCTION JUNK\_CHAR (STRING\_DATA VARCHAR2)

RETURN VARCHAR2

IS

nonewline VARCHAR(4000);

clean VARCHAR(4000);

BEGIN

nonewline:=REPLACE(REPLACE(STRING\_DATA, '\n', ''), '\r', '');

clean:=TRIM(REPLACE(REPLACE(nonewline,'\','\\'),'''','\'''));

IF LENGTH(clean) = 2

THEN

clean:=TRIM(REPLACE(clean,'\''',''));

END IF;

RETURN clean;

END;

# Create Schema:

Create the schema in mysql which need to be migrated.

create schema if not exists dbname;

# Configuration:

Do both Oracle and MySql DB configurations in the config.properties file. Provide its URL, Username, Password as oracle\_url, oracle\_user, oracle\_password, mysql\_url, mysql\_user, mysql\_password, database\_name, nomig\_table. Provide tables which need not to be migrated in nomig\_table with comma (,) separator.

File:Migration\config.properties

Example :

oracle\_url=jdbcde:oracle:thin:@10.8.18.25:1521:bsro

oracle\_user=RTMS\_WEBDB

oracle\_password=RTMS\_WEBDB

mysql\_url=jdbc:mysql://localhost/RTMS\_WEBDB

mysql\_user=root

mysql\_password=bsro

database\_name=RTMS\_WEBDB

nomig\_table=STORE\_DATA\_EXTRACTS,APPT\_DATA\_EXTRACTS,CUSTOMER\_CONTACTUSEMAIL\_LOG

# JAR files:

We need to add two jar files **com.mysql.jdbc\_5.1.5** and **ojdbc14-10.2.0.5** for the database connection through Java.

Location: Migration\lib\com.mysql.jdbc\_5.1.5.jar

Location: Migration\lib\oidbc14-10.2.0.5.jar

# Running Java Program:

set classpath for above two jars executing in command prompt like below,

javac -cp ".:./lib/\*" OracleToMysqlMigration.java

java -cp ".:./lib/\*" OracleToMysqlMigration

for Windows use semicolon ; instead of colon :