

## ICE Breaker for MySQL

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### Overview

ICE Breaker for MySQL is a shell script that simplifies in the migration from a MySQL database to Infobright. It will copy all tables or a single table in a MySQL database to Infobright. This was developed by the client services group to assist customers in the initial migration from existing MySQL databases to Infobright.

A connection is made to the MySQL database and a list of tables is retrieved. This list is used if the "all" option is chosen otherwise the single table is processed. The script then loops through each table name (or the single table name) and gets a row count from the source table and then extracts the table into a flat file that is tab delimited. The target table is truncated and the loader is run to load the file into the Infobright table. It then gets a row count from the target table and message is displayed with both row counts. The database and tables must first be created on Infobright.

### Syntax

```
ib.sh <table name | all> <Infobright database> <mysql database> <mysql userid> <mysql pw>  
<mysql server> <mysql port>
```

<table name | all> - specifying "all" will copy all the tables in the mysql database, specifying a table name will only copy that table

<Infobright database> - the database name on infobright to load tables into (must already exist)

<MySQL database> - the database name of the MySQL database (must exist)

<MySQL userid> - userid with access rights to the tables in the database

<MySQL password> - valid password for the userid

<MySQL server> - IP address or server name of the MySQL database

<MySQL port> - port number for the MySQL database (usually 3306)

### Assumptions and Limitations

- Table exists with the same exact name on target and it's created correctly (load errors will cause table to be skipped)
- Script must run on the Infobright server as either root or mysql and uses the mysql-ib script
- mysql source database can be anywhere in the world as long as you can access it by server name/IP address and port
- Must have a username/password with grants that allow reading the data from the remote mysql database
- Tabs can not exist in the data since that's the chosen delimiter and can not be changed
- /tmp directory on the server running Infobright is used to store the intermediary file (script can be modified to change the location)

### Verifications Performed

- All 7 parameters are entered
- Script can connect to the source mysql database
- Can connect to target Infobright database
- Source table and target table contain same number of columns
- Source table exists and target table exists (missing tables on either side are skipped)
- Number of rows from source and number of rows in target tables are displayed (see messages)

### Messages

- Copy runs - REGION: 5 rows read from source. 5 rows written to target - Thu Apr 2 16:00:00
- Missing table (target or source) - ERROR 1146 at line 1: Table 'tpch.NOTME' doesn't exist
- Column mismatch - REGION: source and target table columns do not match...skipping
- Connection Failure - ERROR 2003 - Can't connect to MySQL server on '192.1.1.1' - Unable to connect to source database
- Wrong credentials - ERROR 1045 - Access denied for user 'david' (using password: YES) - Unable to connect to source database
- Wrong database - ERROR 1049 - Unknown database 'david'

## Usage

### Input Fields:

**Server Name:** Server name or IP address of the SQL Server instance (can include port number for a non-standard port with a coma, like 192.168.1.75,1433)

**Login:** Userid used to log into MS SQL

**Password:** Valid password for that userid

**Export File Directory:** Name of directory to place the BCP files, can use button on right to select a directory or type it in the box  
**Import File Directory:** Name of directory to read the files from, likely different if on different servers, especially if going from Windows to Linux

**Script File:** Name of file that ICE Breaker for SQL Server will write the commands to. If the file exists, it will add. This is useful if migrating multiple databases. The button on the right allows you select a file.

### Buttons:

**Go!** - Connects to MS SQL, writes commands to Script File.

**Forum** - Opens up your default browser and take you to our community forum

**Help** - Shows current documentation for ICE Breaker

**Cancel** - terminates the program