



## **Manual on Data Consolidation (Batch Processing)**

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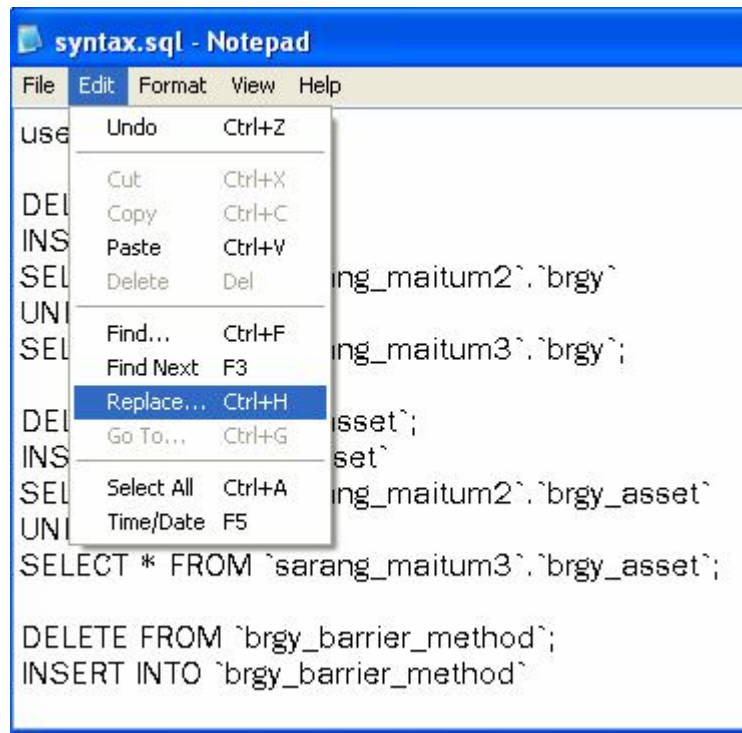
A folder that contains the syntax and my-sql console window is provided in this CD. The folder name is CBMS-MYSQL. You may copy this folder and save this at C:/CBMSdatabase.

Batch Processing is done by processing encoded data into batches on files and are processed in batches by the program. This procedure allows you to expedite the processing of encoded data for municipalities/provinces with large data. This procedure will also lessen the chances of encountering Statsim errors such as “My SQL has gone away” and “Packets size too big”.

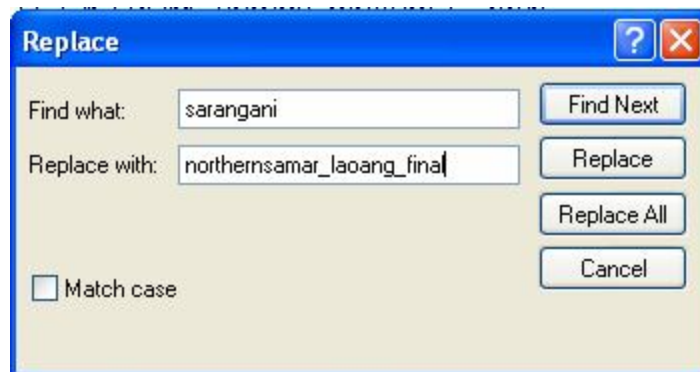
### Batch Processing Procedure

1. The idea of batch processing is to process large data into batches. To standardize our procedure, we will always divide or process our data into 2 batches. The 2 batches of data will then be processed using 2 separate databases. For example, the municipality of Laoang in Northern Samar has 56 barangays. To speed-up the processing of 56 encoded data, we will use batch processing. We will divide the 56 encoded data into two with 28 barangays to be processed on each database.
  - a. Create a database `northernsamar_laoang` and process barangays 1 to 28.
  - b. Create another database. Name it `northernsmar_laong2` and process barangay 29 until 56.
2. After processing all the encoded data, we will use another program called MY-SQL to merge or consolidate the two databases. Every database consists of one or more tables, which store the database’s data/information. Each table has its own unique name and consists of columns and rows. While table columns describe the data types, the table rows contain the actual data for the columns. The my-sql program will consolidate the data by merging or joining the tables found in both databases. We will use an insert syntax that will allow us to insert new rows into the tables. But before we can do this, we need to create a third database wherein the consolidated data will be placed.
  - a. Create a third database. You may name it `northernsamar_laoang_final`.
  - b. Process 1 barangay for this database.
3. The command that we will use is located in the `cbms-mysql` folder with file name “*syntax*”. This is a sql file thus with extension `.sql`. You may open this file using notepad.
  - a. Right click on the `syntax.sql`
  - b. Select open with and choose the program notepad.
  - c. Notice that the first line command is “*use <database name>;*” The *use* command is used when you have more than one database and thus the need to specify what database to use. In consolidating the data, we will always use the third database. For our example, we will replace `sarangani`

with the name of our third database which is `northernssamar_laoang_final`. To do this, go to edit and select replace. You may also use the shortcut CTRL+H.



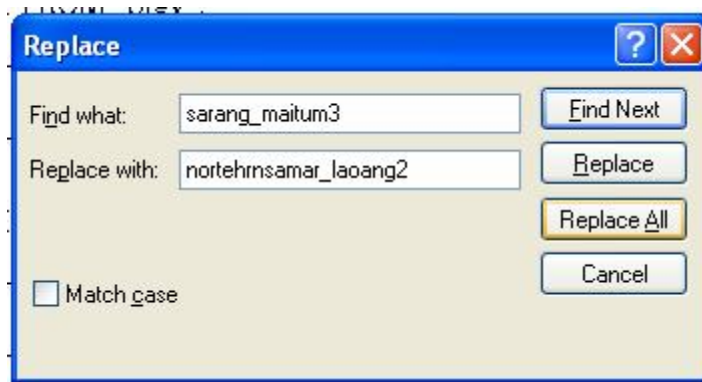
Another window such as below will appear. In the *find what* field type `sarangani` and in the *replace with* field type `northernssamar_laoang_final`. Then Click Replace.



- d. The other commands that follow (see example below) are for the merging of all the tables from the two databases.

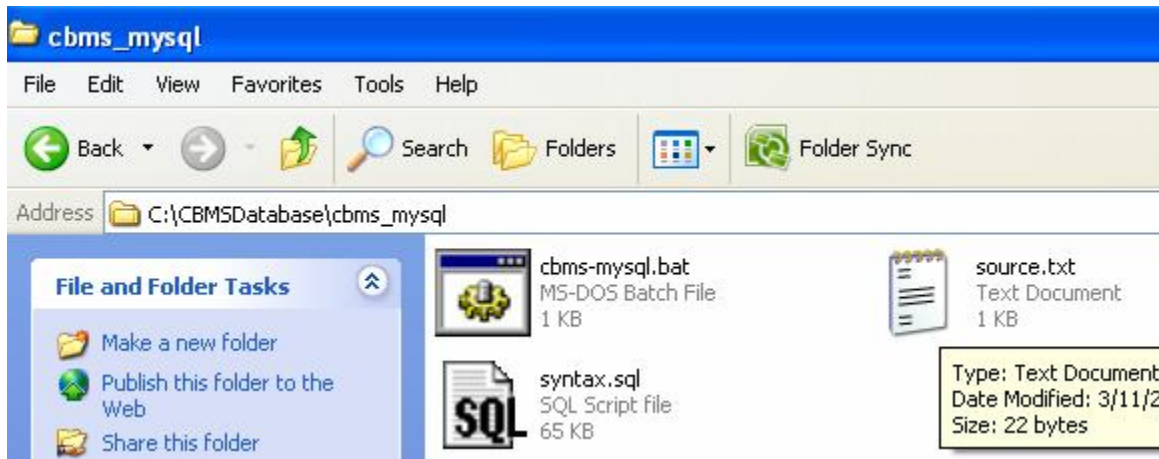
```
DELETE FROM `<table name>`;
INSERT INTO `brgy`
SELECT * FROM `<name of the 1st database>`.`<table name>`
UNION
SELECT * FROM `<name of the 2nd database>`.`<table name>`;
```

- e. For our example, we will replace `sarang_maitum2` with `northernssamar_laoang` and `sarang_maitum3` with `northernssamar_laong2`. Again, to do this, go to edit and select replace. You may also use the shortcut CTRL+H. Then Click replace all.

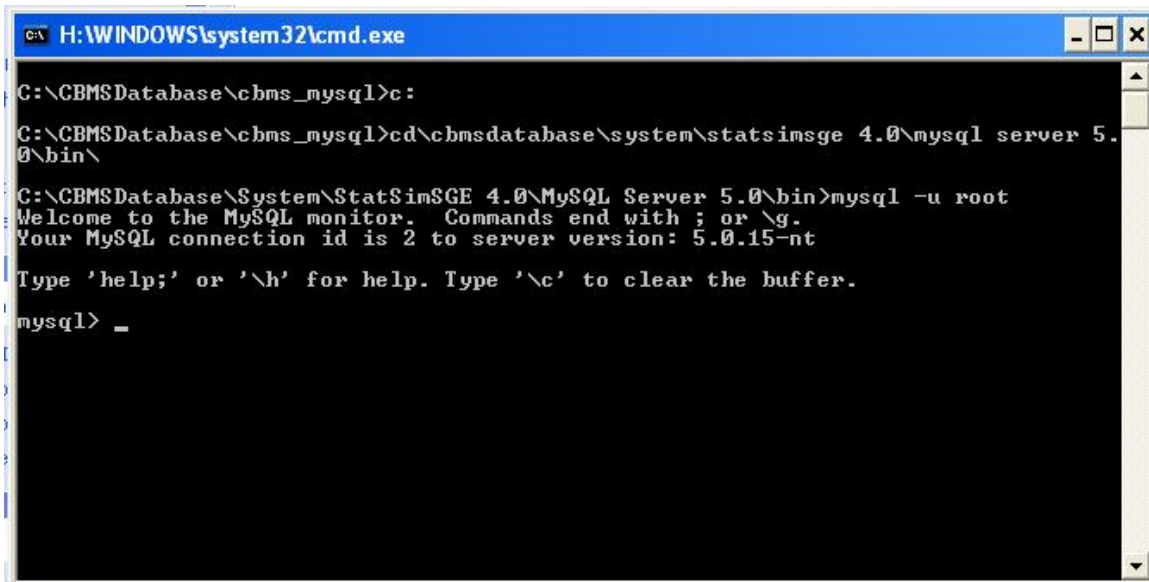


After doing this, click save to save all the changes you made on the syntax. Note that the mysql is spelling sensitive, so be sure to double check the spelling of the name of the database you created before saving it.

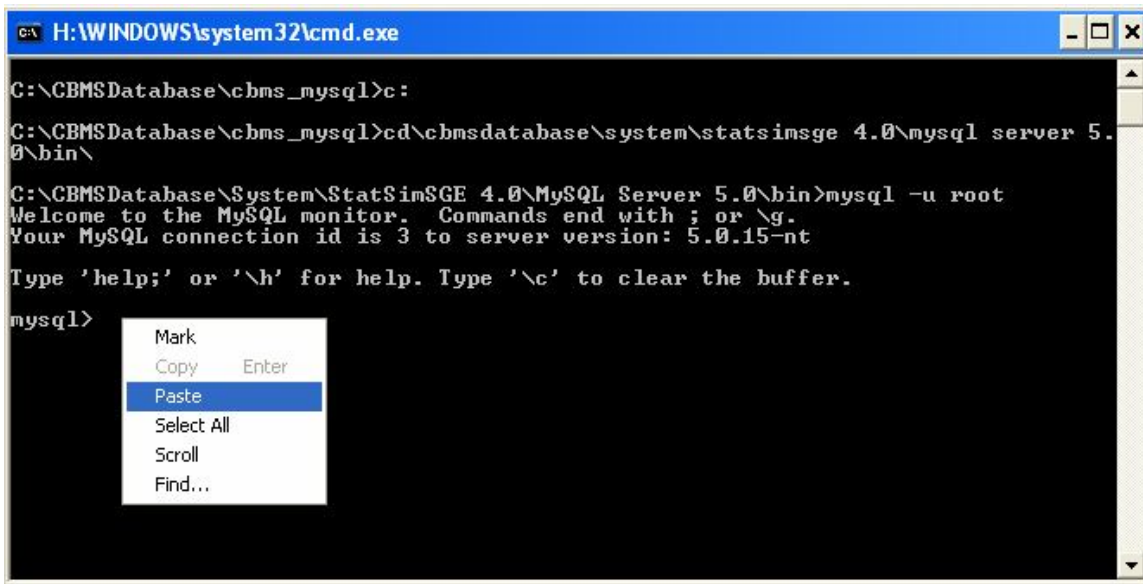
4. We will now execute the syntax that we saved earlier. First, open the mysql console window. Go to `C:\CBMSDatabase\cbms_mysql` and double click `cbms-mysql.bat`.



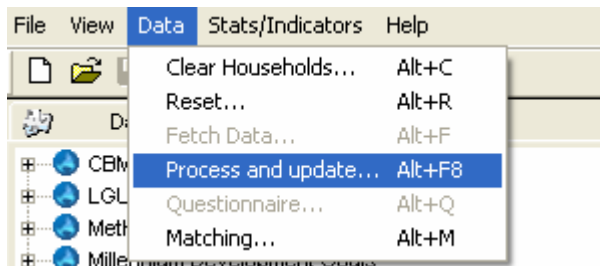
Another window will appear (see below)



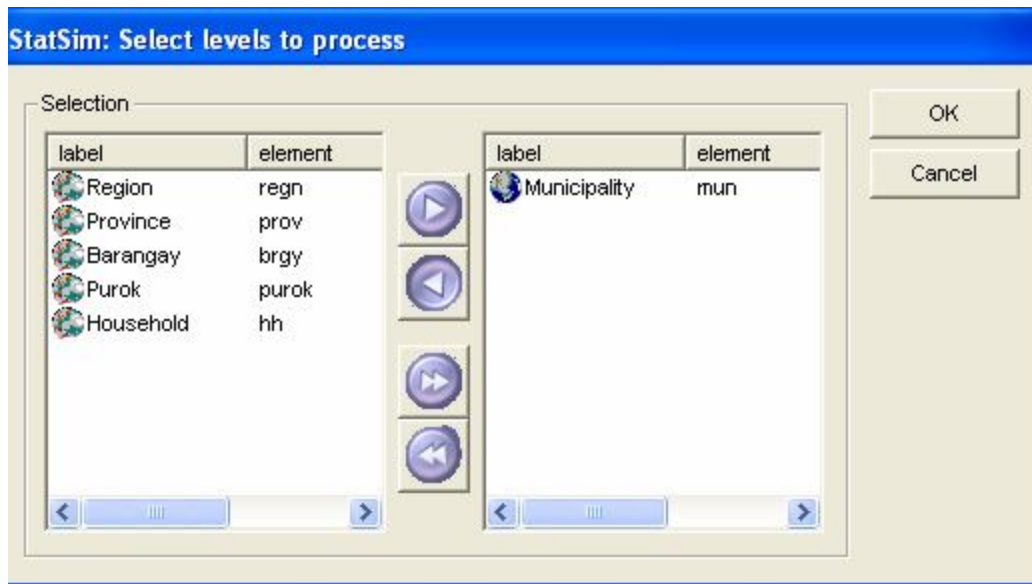
Go back to syntax.sql. We will copy all the commands and paste this to the mysql window console. To do this, click edit and select select all and copy or you may use CTRL+A and then CTRL+C. Then Go back to the mysql console window. Right click and then select paste. The program will automatically run all the commands.



4. When the execution of all commands ends, you may close the mysql console window. Go back to statsim and open the third database. In our example, open the northern\_samar\_laong\_final. Click data and select process and update.



Another window will be shown that asks you if you want to edit the purok. Select yes if you want to edit the purok and select no otherwise. A new window lets you select the level you want to process, and this time select only the municipality. Then click ok.



It will again ask you if you want to process the 13+1 core indicators. Just click yes. The Statsim will now process the municipal level data of Laoang, Northern Samar.