

How to import new student BacII into the system

1. Find the missing highschool ids from new students (Important: when comparing value in excel (index/match), all highschool_ids start with 0 will be lost => compare using libre office)
 - a. Export old highschool from database as CSV format

```
# psql
> \l #to list all database, q to quit
> \c database_name #to connect database_name
> COPY "highSchools" TO
'/Users/thavorac/Desktop/2016/old_school.csv' DELIMITER ',' csv
HEADER;
```

Reference: <http://blog.jasonmeridth.com/posts/postgresql-command-line-cheat-sheet/>

- b. Export **new high schools information** as csv format by using mdb-tool

```
mdb-export database.mdb TABLE_NAME > new_highschool.csv
```

- c. Find the **missing new high school in database** by comparing new highschool from **step b.** with old high school from **step a.** (use index/match from libre office)

Libre office INDEX/MATCH

```
=INDEX($old_school.A:A,MATCH(A1,$old_school.A:A,0))
```

// where \$old_school is the other sheet that contains comparing value. In libre office, use . instead of !

- d. Find the missing high school id in table students (ETotal) from new high school table by using find unmatched record (Use query wizard in MS. Access)
<https://support.office.com/en-us/article/Compare-two-tables-and-find-records-without-matches-cb20ad48-4eba-402a-b20d-eaf10a5d1cb4>
 - e. Check if the missing highschool_ids in step d. is already exist in database. To do so, use INDEX/MATCH in libre office between the missing highschool_ids in step d. and old highschool_id from step a.
 - f. Final missing highschool_ids is the merge result from step e. and result of step c.
2. Insert new high school into database
 - a. go to <http://www.convertcsv.com/csv-to-sql.htm>
 - b. Load the missing high school ids as csv file
 - c. convert to sql insert queries (Be careful! highschool id is detected by default as integer => leading 0s are deleted. Change it to varchar)
 3. Insert new student bacII record into studentBac2s table
 - a. By using MS. Access, modify all field accordingly (Delete failed student, removed unused files, Check foreign key, update grade field to 2 character long). If out of memory occur, save file as 2007 mdb file or newer.
 - b. Install mdbtools, and use mdb-export feature to export as sql queries:

```
mdb-export -H -q "" -D '%Y-%m-%d %H:%M:%S' -I postgres
MCSFinal_processed_v3.mdb ETotal > student_2017.sql
```

mdb-export documentation

NAME

mdb-export - Export data in an MDB database table to CSV format.

SYNOPSIS

```
mdb-export [-H] [-d delim] [-R delim] [[-Q] | [-q char [-X
char]]] [-I backend] [-D fmt] [-N prefix] [-b strip|raw|octal]
database table
mdb-export -h|--help
```

DESCRIPTION

mdb-export is a utility program distributed with MDB Tools.

It produces a CSV (comma separated value) output for the given table. Such output is suitable for importation into databases or spreadsheets.

OPTIONS

-H, --no-header	Suppress header row.
-Q, --no-quote	Don't wrap text-like fields (text, memo, date) in quotes. If not specified text fiels will be surrounded by " (double quote) characters.
-d, --delimiter delim	Specify an alternative column delimiter. Default is , (comma).
-R, --row-delimiter delim	Specify a row delimiter. Default is \n (ASCII value 10).
-I, --insert backend	INSERT statements (instead of CSV). You must specify which SQL backend dialect to use. Allowed values are: access, sybase, oracle, postgres, mysql and sqlite.
-D, --date-format fmt	Set the date format (see strftime(3) for details).
-q, --quote char	Use to wrap text-like fields. Default is " (double quote).
-X, --escape char	Use to escape quoted characters within a field. Default is doubling.
-N, --namespace prefix	Prefix identifiers with prefix.
-b, --bin strip raw octal	Binary export mode: strip binaries, export as-is, or output \ooo style octal data.

NOTES

ENVIRONMENT

MDB_JET3_CHARSET Defines the charset of the input JET3 (access 97) file. Default is CP1252. See iconv(1).

MDBICONV Defines the output charset to use for the SQL file. Default is UTF-8. mdbtools must have been compiled with iconv.

MDBOPTS semi-column separated list of options:

- * use_index
- * no_memo
- * debug_like

- * debug_write
- * debug_usage
- * debug_ole
- * debug_row
- * debug_props
- * debug_all is a shortcut for all debug_*

options

SEE ALSO

gmdb2(1) mdb-hexdump(1) mdb-prop(1) mdb-sql(1) mdb-ver(1)
mdb-array(1)
mdb-header(1) mdb-parsecsv(1) mdb-schema(1) mdb-tables(1)
mdb-import(1)

HISTORY

mdb-export first appeared in MDB Tools 0.1.

AUTHORS

The mdb-export utility was written by Brian Bruns.

BUGS

Memo fields are allowed to contain a newline characters, the current program does nothing about this.

- c. Copy queries and run it.
4. Update status of student BacII who applied from DHE
 - a. Export student bacII records from database (only the latest year)

```
# psql
> \c database_name
> COPY (SELECT * FROM "studentBac2s" WHERE bac_year=2017) TO
'/Users/thavorac/Desktop/2016/bac2s.csv' DELIMITER ',' csv
HEADER;
```

- b. Compare with student list sent from DHE

Not in used:

Move all records from studentBac2s table to student_bac2s_old_record for performance reason

1. get old student bacII as insert sql queries

```
pg_dump --column-inserts --data-only --table='"studentBac2s"'
"itcsms-2017-09-14" >
/Users/thavorac/Desktop/2016/student_bac2s_2016.sql
```

2. replace studentBac2s with student_bac2_old_records and clean other header & footer which is from dump operation (keep only insert queries)
3. Run queries