

MySQL Tips

This is my compiled list of tips and tricks for working with MySQL.

Show which database is currently selected (if no database selected: null):

```
select database();
```

Show all table metadata from one database:

```
SHOW TABLE STATUS FROM database_name;
```

Using information_schema database

(Access INFORMATION_SCHEMA database directly, if you have SELECT-privilege.)

Information about particular table:

```
SELECT
    *
FROM
    information_schema.tables
WHERE
    table_schema = 'my_db'
    AND table_name = 'my_tab_name';
```

Information about columns:

```
SELECT
    table_name
    , column_name
    , column_comment
FROM
    information_schema.columns
WHERE
    table_schema = 'my_db'
    AND table_name = 'my_tab_name';
```

Displays all available "information-tables":

```
SHOW TABLES FROM information_schema;
```

List all information, in all tables, in all databases, except the following databases:

```
select * from information_schema.tables
where table_schema not in('information_schema', 'performance_schema',
'mysql');
```

List all tables in database mytest, in reverse order, displaying table name, type, and storage engine:

```
SELECT table_schema, table_name, table_type, engine
FROM information_schema.tables
WHERE table_schema = 'mytest'
ORDER BY table_name DESC;
```

List table_schema, table_name, table_type, engine, table_rows, in all tables, in all databases, except the following databases:

```
-- order by database name and table name ascending
SELECT table_schema, table_name, table_type, engine, table_rows
FROM information_schema.tables
where table_schema not in('information_schema', 'performance_schema',
'mysql')
ORDER BY table_schema ASC, table_name ASC;
```

List all foreign keys and references in ALL databases:

```
select
    concat(table_name, '.', column_name) as 'foreign key',
    concat(referenced_table_name, '.', referenced_column_name) as
'references'
from
    information_schema.key_column_usage
where
    referenced_table_name is not null;
```

List all Foreign keys, database, table, and attribute names in ALL databases:

```
SELECT
fk.table_schema as 'schema',
fk.table_name as 'table' ,
fk.column_name as 'column',
fk.constraint_name as 'constraint_name'
FROM `information_schema`.`KEY_COLUMN_USAGE` fk
where
fk.referenced_column_name is not null;
```

List all Foreign keys in ONE database:

```
SELECT
fk.table_schema as 'schema',
fk.table_name as 'table' ,
fk.column_name as 'column',
fk.constraint_name as 'constraint_name'
FROM `information_schema`.`KEY_COLUMN_USAGE` fk
where
fk.referenced_column_name is not null and fk.table_schema like
'database_name';
```

Note: If the FOREIGN KEY clause included a CONSTRAINT name when you created the foreign key, you can refer to that name to drop the foreign key. Otherwise, the fk_symbol value is internally generated by InnoDB when the foreign key is created. To find out the symbol value when you want to drop a foreign key, use the **SHOW CREATE TABLE** statement

To display all users Grants (for backup purpose as example) :

```
SELECT CONCAT('SHOW GRANTS FOR \'', user , '\'@\'', host, '\';') FROM
mysql.user;
```

To specify resource limits for an existing user without affecting existing privileges, use GRANT USAGE at the global level (ON *.*) and name the limits to be changed.

```
GRANT USAGE ON *.* TO ...
    WITH MAX_QUERIES_PER_HOUR 500 MAX_UPDATES_PER_HOUR 100;
(Limits not specified retain their current values.)
```

View query results in HTML or XML (or just append --xml):

```
C:\mysql\bin>mysql -h 127.0.0.1 -u root -p --port=3307 --html
```

After changes to full-text search variables MUST rebuild indexes, fast way...

```
REPAIR TABLE tbl_name QUICK;
```

Dump table data in SQL and CSV formats (to bin dir.)

```
mysqldump -h 127.0.0.1 -u root -p --port=3307 -T . --fields-terminated-by=",
" database_name table_name
```

Show one table's metadata:

describe (or explain) table_name;

Show table comments:

show full columns from emp_hist;

Obtain CREATE TABLE code:

SHOW CREATE TABLE table_name

Change command prompt

mysql>prompt \u:\d>

Changes to...

PROMPT set to '\u:\d>'

user_name:/database_name>

Display which threads are running:

show full processlist;

(If you do not use the FULL keyword, only the first 100 characters of each statement are shown in the Info field.)

Show processlist with out all the sleeping processes...

\P grep -v Sleep;

<http://dev.mysql.com/doc/refman/5.1/en/show-processlist.html>

Display and change number of max connections:

show variables like "max_connections";

set global max_connections=200;

show variables like "max_connections";

Display connection variables:

mysql> show status like '%onn%';

Variable_name	Value
Aborted_connects	598
Connections	3745
Max_used_connections	101
Ssl_client_connects	0
Ssl_connect_renegotiates	0
Ssl_finished_connects	0
Threads_connected	1

Connections:

The number of connection attempts (successful or not) to the MySQL server

Max_used_connections:

Maximum number of connections that have been in use simultaneously since server started.

<http://dev.mysql.com/doc/refman/5.1/en/server-status-variables.html>