MySQL client

MySQL shell and dump

CONCEPTS

A statement runs only at its terminator: ; or \G. Backslash commands like \q and \s take effect at once and need no semicolon.

Passing -p<password> leaks it to ps and shell history. Use bare -p to be prompted, or a login path from mysql_config_editor.

CONNECT

mysql -u *<user>* **-p**
Connect to localhost, prompt for password

mysql -u *<user>* **-p -h** *<host>* **-P** *<port>* *<db>*
Connect to a remote server and database

mysql -e "*<sql>***"** *<db>*
Run a statement and exit

mysql --safe-updates
Refuse UPDATE/DELETE without key or LIMIT

SHELL COMMANDS

\s
Show connection and server status

\G
Run and print vertically

\q
Quit

\. *<file.sql>*
Run SQL from a file

INSPECT

SHOW DATABASES;
List databases

SHOW TABLES;
List tables in the current database

DESCRIBE *<table>***;**
Show columns, types and keys

SHOW CREATE TABLE *<table>***\G**
Show the full DDL

SHOW FULL PROCESSLIST;
See running queries

QUERY

SELECT * FROM *<table>* **LIMIT 10;**
Peek at rows

SELECT COUNT(*) FROM *<table>***;**
Count rows

EXPLAIN SELECT ...;
Show the query plan

EXPLAIN ANALYZE SELECT ...;
Run and time each plan step

ROLLBACK;
Undo the open transaction

USERS & GRANTS

CREATE USER '*<user>***'@'***<host>***' IDENTIFIED BY '***<pw>***';**
Create an account

GRANT ALL ON *<db>***.* TO '***<user>***'@'***<host>***';**
Grant on one database

SHOW GRANTS FOR '*<user>***'@'***<host>***';**
List an account's privileges

OUTPUT

mysql -B -N -e "*<sql>***"**
Tab-separated rows, no header

DUMP & RESTORE

mysqldump *<db>* **>** *<file.sql>*
Dump one database

mysqldump --single-transaction *<db>* **>** *<file.sql>*
Consistent InnoDB dump without locks

mysqldump --no-data *<db>*
Schema only

mysqldump --routines --triggers --events *<db>*
Include stored code

mysql *<db>* **<** *<file.sql>*
Restore a dump

mysqldump *<db>* **| gzip >** *<file.sql.gz>*
Compressed dump

gunzip -c *<file.sql.gz>* **| mysql** *<db>*
Restore a compressed dump