clickhouse-client ClickHouse SQL shell

CONCEPTS

Interactive mode runs a query on Enter without a semicolon; batch mode (-q, stdin, --queries-file) runs and exits. The client speaks the native TCP protocol, not HTTP.

Connect flags, string, config
↓ query
Query REPL, -q, stdin, file
↓ format
Result Pretty or --format
↓ pipe
Output terminal, pager, file

Defaults differ by mode: PrettyCompact in the REPL, TabSeparated in batch mode. Set --format or a FORMAT clause when scripting.

CONNECT

clickhouse-client
Connect to localhost:9000 as default

clickhouse-client -h *<host>* **--port** *<port>* **-u** *<user>* **--password** *<pw>*
Connect with explicit options

clickhouse-client clickhouse://*<user>***@***<host>***:***<port>***/***<db>*
Connect with a connection string

clickhouse-client -s --port 9440
Force a TLS connection

clickhouse-client -d *<db>*
Start in a database

clickhouse-client --connection *<name>*
Use a saved connection from config

INSPECT

SHOW DATABASES
List databases

SHOW TABLES
List tables in the current database

DESCRIBE TABLE *<table>*
Show a table's columns

USE *<db>*
Switch database

INSPECT (cont.)

SHOW CREATE TABLE *<table>*
Show the table DDL

help *<name>*
Docs for a function, engine or setting

RUN QUERIES

clickhouse-client -q "<*sql*>**"**
Run a query and exit

clickhouse-client "<*sql*>**"**
Query without --query

echo "<*sql*>**" | clickhouse-client**
Query from stdin

clickhouse-client --queries-file *<file.sql>*
Run queries from a file

clickhouse-client -m
Multiline: send only at ;

PARAMETERS

--param_<*name*>**=**<*value*>
Set a query parameter

{<*name*>**:**<*Type*>**}**
Typed placeholder in SQL

OUTPUT

--format *<format>*
Choose the output format

<query> **\G**
Vertical output for one query

IMPORT & EXPORT

clickhouse-client -q "INSERT INTO *<table>* **FORMAT CSV"** < *<file>*
Load a CSV file

clickhouse-client -q "INSERT INTO *<table>* **FORMAT CSVWithNames"** < *<file>*
Load CSV with a header

INTERACTIVE

Ctrl+D
Quit the client

Ctrl+C
Cancel the running query