pgcli Smarter Postgres shell

START HERE

`pgcli -h <host> -U <user> -d <db>`
Connect

`\x`
Toggle vertical output

`pgcli "postgresql://<user>@<host>/<db>"`
Connect with a URI

`\e`
Edit query in $EDITOR

`\dt`
List tables

`\ns <name> <query>`
Save a named query

`\d <table>`
Describe a table

`\q`
Quit

Connect flags, URI, DSN alias → type → **Prompt** smart completion → run → **Result** table format, pager → adjust → **Config** ~/.config/pgcli/config

CONCEPTS

pgcli is psql with context-aware completion and syntax colours. By default a query runs on Enter after the closing semicolon; F3 switches to multi-line mode.

Destructive statements (DROP, DELETE, UPDATE without WHERE ...) ask for confirmation; --yes skips it, --warn forces the check.

CONNECT

`pgcli -h <host> -p <port> -U <user> -d <db>`
Connect with explicit options

`pgcli <db>`
Connect to a local database

`pgcli "postgresql://<user>@<host>:<port>/<db>"`
Connect with a URI
Add ?sslmode=require for TLS.

`pgcli -W`
Force a password prompt

`pgcli -w`
Never prompt for a password

`pgcli -D <alias>`
Connect via a DSN alias from the config
Aliases live in the [alias_dsn] section.

`pgcli --list-dsn`
List configured DSN aliases

`pgcli -l`
List databases and exit

`pgcli --ping`
Check connectivity and exit

`pgcli --ssh-tunnel <user@host>`
Connect through an SSH tunnel

`pgcli --init-command "<sql>"`
Run SQL right after connecting

`\c <db>`
Switch database

`\conninfo`
Show connection details

INSPECT

`\l`
List databases

`\dt`
List tables

`\d <table>`
Columns, indexes and constraints

`\d+ <table>`
Same, with sizes and storage

`\dn`
List schemas

INSPECT (cont.)

`\dv`
List views

`\dm`
List materialized views

`\di`
List indexes

`\ds`
List sequences

`\df`
List functions

`\sf <function>`
Show a function's definition

`\du`
List roles

`\dx`
List extensions

`\dp <table>`
Show privileges

`\dT`
List data types

RUN SQL

`pgcli -c "<sql>" <db>`
Run a statement and exit

`pgcli -f <file.sql> <db>`
Run a script file and exit

`\i <file>`
Run a file inside pgcli

`\e`
Edit the query in your editor
Uses $EDITOR; the saved text runs when you close it.

`\e <file>`
Edit and run a file

`\watch <sec>`
Re-run the query every N seconds

`\copy <table> from '<file>' csv header`
Load a CSV file

`\copy (<query>) to '<file>' csv header`
Export a query to CSV

`\! <command>`
Run a shell command

`\h <statement>`
SQL syntax help

`\?`
List all backslash commands

OUTPUT

`\x`
Toggle vertical output

`pgcli --auto-vertical-output`
Vertical only when too wide

`\timing`
Toggle query timing

OUTPUT (cont.)

`\T <format>`
Change the table format
Try psql, github, csv, vertical, plain, latex.

`\o <file>`
Send results to a file

`\log-file <file>`
Also log output to a file

`\pager <command>`
Pipe results through a pager

`pgcli -t -c "<sql>" <db>`
Rows only, for scripts

`\pset null <text>`
Change how NULL is shown

`\v on`
Verbose error messages

`\echo <text>`
Print text to stdout

COMPLETION & KEYS

F2
Toggle smart completion

F3
Toggle multi-line mode

F4
Switch Vi and Emacs mode

F5
Toggle explain mode
Prefixes each query with EXPLAIN.

Tab
Force completion at the cursor

Ctrl+Space
Start or accept completion

Alt+Enter
Insert a line break

Ctrl+p / Ctrl+n
Previous or next history entry

Ctrl+r
Search history backwards

Ctrl+a / Ctrl+e
Start or end of line

\refresh
Reload completion metadata
Run after DDL from another session.

\#
Short form of \refresh

NAMED QUERIES

`\ns <name> <query>`
Save a named query

`\n`
List named queries

`\n <name> [args]`
Run a named query
Arguments fill $1, $2 ...; quote values with spaces.

`\np <pattern>`
Print a named query

NAMED QUERIES (cont.)

`\nd <name>`
Delete a named query

`\ne <name>`
Edit a named query in your editor

`\ns <name> ... in ($*)`
Raw list argument

`\ns <name> ... in ($@)`
Quoted list argument

CONFIG

`~/.config/pgcli/config`
Main config file
Created on first run.

`pgcli --pgclirc <file>`
Use another config file

`smart_completion = True`
Context-aware completion

`multi_line = True`
Queries need an explicit ; to end

`table_format = psql`
Default output format

`expand = True`
Always expanded output

`auto_expand = True`
Expanded only when wide

`destructive_warning = drop, delete`
Statements that ask first

`vi = True`
Start in Vi mode

`keyword_casing = upper`
Case of completed keywords

`row_limit = 1000`
Warn above this many rows

`generate_aliases = True`
Auto aliases when completing joins

`prompt = \u@\h:\d>`
Prompt format

RECIPES

Query a remote host with a DSN alias

```
# config: [alias_dsn]  prod = postgresql://app@db.example.com/app
pgcli -D prod
```

Parameterised report

```
\ns by_user select * from orders where user_id = $1
\n by_user 42
```

Save one result to a file

```
\o out.txt
select * from <table>;
\o
```

Tunnel through a bastion

```
pgcli --ssh-tunnel me@bastion.example.com -h db.internal -U app app
```