

# Postgresql Database

- [psql Command](#)

# psql Command

## General

<code>\copyright</code>	show PostgreSQL usage and distribution terms
<code>\crosstabview [COLUMNS]</code>	execute query and display results in crosstab
<code>\errverbose</code>	show most recent error message at maximum verbosity
<code>\g [FILE] or ;</code>	execute query (and send results to file or  pipe)
<code>\gdesc</code>	describe result of query, without executing it
<code>\gexec</code>	execute query, then execute each value in its result
<code>\gset [PREFIX]</code>	execute query and store results in psql variables
<code>\gx [FILE]</code>	as <code>\g</code> , but forces expanded output mode
<code>\q</code>	quit psql
<code>\watch [SEC]</code>	execute query every SEC seconds

## Help

<code>\? [commands]</code>	show help on backslash commands
<code>\? options</code>	show help on psql command-line options
<code>\? variables</code>	show help on special variables
<code>\h [NAME]</code>	help on syntax of SQL commands, * for all commands

## Query Buffer

<code>\e [FILE] [LINE]</code>	edit the query buffer (or file) with external editor
<code>\ef [FUNCNAME [LINE]]</code>	edit function definition with external editor
<code>\ev [VIEWNAME [LINE]]</code>	edit view definition with external editor
<code>\p</code>	show the contents of the query buffer
<code>\r</code>	reset (clear) the query buffer
<code>\s [FILE]</code>	display history or save it to file
<code>\w FILE</code>	write query buffer to file

## Input/Output

<code>\copy ...</code>	perform SQL COPY with data stream to the client host
<code>\echo [STRING]</code>	write string to standard output
<code>\i FILE</code>	execute commands from file
<code>\ir FILE</code>	as <code>\i</code> , but relative to location of current script
<code>\o [FILE]</code>	send all query results to file or  pipe
<code>\qecho [STRING]</code>	write string to query output stream (see <code>\o</code> )

## Conditional

<code>\if EXPR</code>	begin conditional block
<code>\elif EXPR</code>	alternative within current conditional block
<code>\else</code>	final alternative within current conditional block
<code>\endif</code>	end conditional block

## Informational

(options: S = show system objects, + = additional detail)

<code>\d[S+]</code>	list tables, views, and sequences
<code>\d[S+] NAME</code>	describe table, view, sequence, or index
<code>\da[S] [PATTERN]</code>	list aggregates
<code>\dA[+] [PATTERN]</code>	list access methods
<code>\db[+] [PATTERN]</code>	list tablespaces
<code>\dc[S+] [PATTERN]</code>	list conversions
<code>\dC[+] [PATTERN]</code>	list casts
<code>\dd[S] [PATTERN]</code>	show object descriptions not displayed elsewhere
<code>\dD[S+] [PATTERN]</code>	list domains
<code>\ddp [PATTERN]</code>	list default privileges
<code>\dE[S+] [PATTERN]</code>	list foreign tables
<code>\det[+] [PATTERN]</code>	list foreign tables
<code>\des[+] [PATTERN]</code>	list foreign servers
<code>\deu[+] [PATTERN]</code>	list user mappings
<code>\dew[+] [PATTERN]</code>	list foreign-data wrappers
<code>\df[anptw][S+] [PATRN]</code>	list [only agg/normal/procedures/trigger/window] functions
<code>\dF[+] [PATTERN]</code>	list text search configurations
<code>\dFd[+] [PATTERN]</code>	list text search dictionaries
<code>\dFp[+] [PATTERN]</code>	list text search parsers
<code>\dFt[+] [PATTERN]</code>	list text search templates
<code>\dg[S+] [PATTERN]</code>	list roles
<code>\di[S+] [PATTERN]</code>	list indexes
<code>\dl</code>	list large objects, same as <code>\lo_list</code>
<code>\dL[S+] [PATTERN]</code>	list procedural languages
<code>\dm[S+] [PATTERN]</code>	list materialized views
<code>\dn[S+] [PATTERN]</code>	list schemas
<code>\do[S] [PATTERN]</code>	list operators
<code>\dO[S+] [PATTERN]</code>	list collations
<code>\dp [PATTERN]</code>	list table, view, and sequence access privileges
<code>\drds [PATRN1 [PATRN2]]</code>	list per-database role settings
<code>\dRp[+] [PATTERN]</code>	list replication publications
<code>\dRs[+] [PATTERN]</code>	list replication subscriptions

`\ds[S+] [PATTERN]` list sequences  
`\dt[S+] [PATTERN]` list tables  
`\dT[S+] [PATTERN]` list data types  
`\du[S+] [PATTERN]` list roles  
`\dv[S+] [PATTERN]` list views  
`\dx[+] [PATTERN]` list extensions  
`\dy [PATTERN]` list event triggers  
`\l[+] [PATTERN]` list databases  
`\sf[+] FUNCNAME` show a function's definition  
`\sv[+] VIEWNAME` show a view's definition  
`\z [PATTERN]` same as `\dp`

## Formatting

`\a` toggle between unaligned and aligned output mode  
`\C [STRING]` set table title, or unset if none  
`\f [STRING]` show or set field separator for unaligned query output  
`\H` toggle HTML output mode (currently off)  
`\pset [NAME [VALUE]]` set table output option  
(NAME := {border|columns|expanded|fieldsep|fieldsep\_zero|  
footer|format|linestyle|null|numericlocale|pager|  
pager\_min\_lines|recordsep|recordsep\_zero|tableattr|title|  
tuples\_only|unicode\_border\_linestyle|  
unicode\_column\_linestyle|unicode\_header\_linestyle})  
`\t [on|off]` show only rows (currently off)  
`\T [STRING]` set HTML `<table>` tag attributes, or unset if none  
`\x [on|off|auto]` toggle expanded output (currently off)

## Connection

`\c[onnect] {[DBNAME]- USER|- HOST|- PORT|-} | conninfo}`  
connect to new database (currently "postgres")  
`\conninfo` display information about current connection  
`\encoding [ENCODING]` show or set client encoding  
`\password [USERNAME]` securely change the password for a user

## Operating System

`\cd [DIR]` change the current working directory  
`\setenv NAME [VALUE]` set or unset environment variable  
`\timing [on|off]` toggle timing of commands (currently off)  
`\! [COMMAND]` execute command in shell or start interactive shell

## Variables

`\prompt [TEXT] NAME` prompt user to set internal variable

`\set [NAME [VALUE]]` set internal variable, or list all if no parameters

`\unset NAME` unset (delete) internal variable

## Large Objects

`\lo_export LOBOID FILE`

`\lo_import FILE [COMMENT]`

`\lo_list`

`\lo_unlink LOBOID` large object operations