

# Pivotal

A NEW PLATFORM FOR A NEW ERA

# GPDB psql Client



Pivotal® Greenplum  
Database

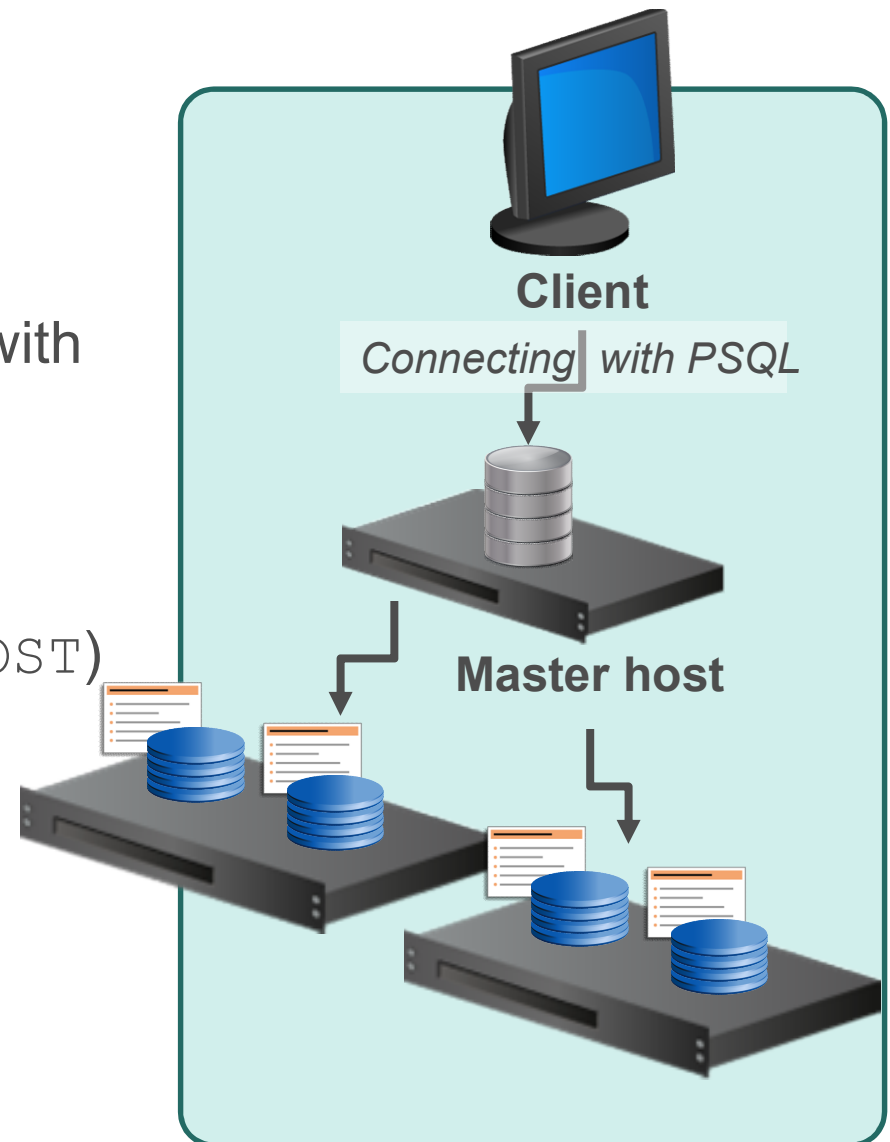
# Agenda

- Introduction
- Connect to GPDB
- Issue SQL commands
- Use psql “meta-commands”
- Some things *not* to do with psql
- Test it out in the lab

# Connecting with PSQL

Using PSQL, you:

- Connect through the master
- Specify connection information with the following options:
  - database name (`-d | PGDATABASE`)
  - master host name (`-h | PGHOST`)
  - master port (`-p | PGPORT`)
  - user name (`-U | PGUSER`)
- Connect the first time to:
  - `template1` database
  - default superuser account (`gpadmin`)



# Issuing SQL Commands

Commands can be issued in:

- Interactive mode:

```
psql mydatabase  
mydatabase=# SELECT * FROM foo;
```

- Non-interactive mode lets you run a semicolon separated list of commands

```
psql mydatabase -ac 'SELECT * FROM foo;'
```

- Non-interactive mode lets you run multiple commands

```
psql mydatabase -af  
/home/lab1/sql/createdb.sql
```

# PSQL Examples

1

```
psql -af runReports.sql -d faa
```

Database to connect to

-a: echo all commands  
-f: execute commands from a file

-d: Specify database name to connect to (optional)

2

```
psql -c 'select flightnum from faadata.fop2;' faa
```

-c: Execute a single command

Semi-colon separated command

Database to connect to

3

```
psql -U student
```

No database is specified; Connect to database specified in \$PGDATABASE; if not set, connect to database with same name as user you are connecting as; otherwise, error out

-U: Login as the specified user

# Common PSQL Meta-Commands

Meta-Command	Description
<code>\?</code>	Help on psql meta-commands
<code>\h</code>	Help on SQL command syntax
<code>\dt</code>	Show tables
<code>\dtS, \dvS</code>	Show system tables, show system views
<code>\dg</code> <code>\du</code>	Show roles
<code>\l</code>	Show databases
<code>\c db_name</code>	Connect to the specified database
<code>\dn</code>	Show schemas
<code>\q</code>	Quit psql
<code>\dx</code>	Show external tables
<code>\timing (on off)</code>	Toggle query timing on or off (on/off is optional)

# Some Configurability

```
[gpadmin@gpdb-sandbox ~]$ cat ~/.psqlrc  
\timing on  
[gpadmin@gpdb-sandbox ~]$ cat ~/.editrc  
bind -v  
[gpadmin@gpdb-sandbox ~]$ █
```



## But, *Don't* Do This ...

- Use psql to offload large amounts of data

# Review

- Connect to GPDB
- Issue SQL commands
- Use psql “meta-commands”
- Some things *not* to do with psql
- Test it out in the lab

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