

pgTAP



This Release: [pgTAP 1.3.3](#)

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Status: Stable

Other Releases: [1.3.3](#) — [2024-04-08](#)

Abstract: Unit testing for PostgreSQL

Description: pgTAP is a suite of database functions that make it easy to write TAP-emitting unit tests in psql scripts or xUnit-style test functions.

Released By: [theory](#)

License: [PostgreSQL](#)

Resources: [www](#) ♦ [git](#) ♦ [repo](#) ♦ [bugs](#)

Special Files: [Changes](#) ♦ [README.md](#) ♦ [META.json](#) ♦ [Makefile](#)

Tags: [testing](#) ♦ [unit testing](#) ♦ [tap](#) ♦ [tddd](#) ♦ [test driven database development](#)

Extensions

pgtap 1.3.3

Unit testing for PostgreSQL

pgtap-core 1.3.3

Unit testing for PostgreSQL

pgtap-schema 1.3.3

Schema unit testing for PostgreSQL

Documentation

release

pgTAP Release Management

README

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[pgTAP](#) is a unit testing framework for PostgreSQL written in PL/pgSQL and PL/SQL. It includes a comprehensive collection of [TAP](#)-emitting assertion functions, as well as the ability to integrate with other TAP-emitting test frameworks. It can also be used in the xUnit testing style. For detailed documentation, see the documentation in [doc/pgtap.mmd](#) or [online](#).

[pgxn](#) 1.3.3  Test [passing](#)

pgTAP must be installed on a host with PostgreSQL server running; it cannot be installed remotely.

To build it, just do this:

```
make
make install
make installcheck
```

If you encounter an error such as:

```
"Makefile", line 8: Need an operator
```

You need to use GNU make, which may well be installed on your system as `gmake` :

```
gmake
gmake install
gmake installcheck
```

If you encounter an error such as:

```
make: pg_config: Command not found
```

Or:

```
Makefile:52: *** pgTAP requires PostgreSQL 9.1 or later. This is . Stop.
```

Be sure that you have `pg_config` installed and in your path. If you used a package management system such as RPM to install PostgreSQL, be sure that the `-devel` package is also installed. If necessary tell the build process where to find it:

```
env PG_CONFIG=/path/to/pg_config make && make install && make installcheck
```

And finally, if all that fails, copy the entire distribution directory to the `contrib/` subdirectory of the PostgreSQL source tree and try it there without `pg_config` :

```
env NO_PGXS=1 make && make install && make installcheck
```

If you encounter an error such as:

```
ERROR: must be owner of database regression
```

You need to run the test suite using a super user, such as the default “postgres” super user:

```
make installcheck PGUSER=postgres
```

If you encounter an error such as:

```
ERROR: Missing extensions required for testing: citext isn ltree
```

Install the PostgreSQL [Additional Supplied Modules](#), which are required to run the tests. If you used a package management system such as RPM to install PostgreSQL, install the `-contrib` package.

Once pgTAP is installed, you can add it to a database by connecting as a super user and running:

```
CREATE EXTENSION pgtap;
```

If you’ve upgraded your cluster to PostgreSQL 9.1 and already had pgTAP installed, you can upgrade it to a properly packaged extension with:

```
CREATE EXTENSION pgtap FROM unpackaged;
```

If you want to install pgTAP and all of its supporting objects into a specific schema, use the `SCHEMA` clause to specify the schema, like so:

```
CREATE EXTENSION pgtap SCHEMA tap;
```

Dependencies

pgTAP requires PostgreSQL 9.1 or higher.

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