# Instant GraphQL API

graphile.org



### Rapidly develop lightning-fast powerful applications

#### Features:

- Strong PostgreSQL support
- GraphQL best practices
- ✓ Simple to deploy and scale
- ✓ Highly customisable
- Powerful plugin system and more...

#### Instantly spin-up a GraphQL API server by pointing PostGraphile at your existing PostgreSQL database

#### Anatomy of a GraphQL query



#### **PostGraphile**

Automatically detects tables, columns, indexes, relationships, views, types, functions, comments, and more - providing a GraphQL server that is highly intelligent about your data, and that automatically updates itself without restarting when you modify your database.

- Strong PostgreSQL support
- GraphQL best practices
- Simple to deploy and scale
- Highly customisable

- Impressively high performance
- Granular authorisation via RLS
- Open source under MIT license
- Powerful plugin system



#### GraphQL

A powerful guery language for APIs, typically used as a replacement for RESTful API services. Open sourced in 2015, the specification has spawned the release of GraphQL servers and clients in many popular programming languages and a massive ecosystem of shared tooling.

- Strong data types
- Built-in documentation
- Powerful introspection
- Enables versionless APIs
- Eliminates over- and under-fetching
- Eases collaboration on API design
- Increases productivity
- Leads to incredible UX



#### **PostgreSQL**

"The world's most advanced open source database." Growing in popularity year on year and holding its own against alternative data stores such as NoSQL, it's a solid choice for many modern applications.

- JSONB columns, queries & indexes
  - Views and materialized views
- Powerful database functions
- Row-level security (RLS) since 2015 Foreign data wrappers (FDW)
- Realtime pub/sub

- Geospatial features via PostGIS



#### As found in our GraphQL Operation Cheatsheet

GraphQL supports three operation types: query, mutation and subscription. This cheatsheet covers how to construct GraphQL requests for each of these operations, gives an overview of GraphQL fragments, and contains a glossary of relevant terms.

#### Other resources include:

#### GraphQL Schema Language Cheatsheet

GraphQL Schema Definition Language (SDL) enables teams to discuss the design of a GraphQL API using shared terminology accessible to non-programmers. This cheatsheet is a reference for the terminology and how it is used.

#### PostgreSQL Row Level Security (RLS) Infosheet

In 2015, PostgreSQL introduced a granular security technology, Row Level Security, in which policies containing SQL expression dictate which rows the current user may operate on. Learn about how you can increase your application security with RLS in this infosheet.



Scan me for more info and to download our cheatsheets or visit learn.graphile.org

## PostGraphile

#### Try it now:

#### npx postgraphile -c my\_db --watch

requires Node.js v8.6 or higher

If your database is on another machine, you may pass a connection string in place of my\_db.

Connection strings have the form:

postgres://pg\_user:pg\_pass@pg\_host:pg\_port/pg\_db?ssl=1

⊕ graphile.org y@GraphileHQ ⊖ graphile ⊠ team@graphile.org