

pgRouting

Routing & Graph Algorithms in the database



Overview

pgRouting extends the PostGIS/PostgreSQL geospatial database providing geospatial routing and other graph algorithms functionality.

pgRouting is implemented in C++, using C++ Boost Graph Library.

Using it, is with SQL queries.



Software

- ▶ **pgRouting postgresQL extension**
Query the database for routes.
- ▶ **osm2pgrouting**
Import OpenStreetMap data to a pgRouting database
- ▶ **pgRoutingLayer**
Qgis plugin for simple routing queries

Core Features

pgRouting implements a variety of graph algorithms.

Some of the most used algorithms are:

- ▶ Dijkstra Algorithm
- ▶ Driving Distance
- ▶ Johnson's Algorithm
- ▶ Floyd-Warshall Algorithm
- ▶ A* Algorithm
- ▶ Bi-directional Dijkstra
- ▶ Bi-directional A*
- ▶ Traveling Sales Person
- ▶ Flow Analysis
- ▶ Graph Analysis

