Other languages: 繁體中文

Overview

Drogon is a C++17/20-based HTTP application framework. Drogon can be used to easily build various types of web application server programs using C++.

Drogon is the name of a dragon in the American TV series "Game of Thrones" that I really like.

Drogon's main application platform is Linux. It also supports Mac OS, FreeBSD and Windows.

Its main features are as follows:

- Use a non-blocking I/O network lib based on epoll (kqueue under macOS/FreeBSD) to provide high-concurrency, high-performance network IO, please visit the TFB Tests Results for more details;
- Provide a completely asynchronous programming mode;
- Support Http1.0/1.1 (server side and client side);
- Based on template, a simple reflection mechanism is implemented to completely decouple the main program framework, controllers and views.
- Support cookies and built-in sessions;
- Support back-end rendering, the controller generates the data to the view to generate the Html page. Views are described by CSP template files, C++ codes are embedded into Html pages through CSP tags. And the drogon command-line tool automatically generates the C++ code files for compilation;
- Support view page dynamic loading (dynamic compilation and loading at runtime);
- Provide a convenient and flexible routing solution from the path to the controller handler;
- Support filter chains to facilitate the execution of unified logic (such as login verification, Http Method constraint verification, etc.) before handling HTTP requests;
- Support https (based on OpenSSL);
- Support WebSocket (server side and client side);
- Support JSON format request and response, very friendly to the Restful API application development;
- Support file download and upload;
- Support gzip, brotli compression transmission;
- Support pipelining;
- Provide a lightweight command line tool, drogon_ctl, to simplify the creation of various classes in Drogon and the generation of view code;
- Support non-blocking I/O based asynchronously reading and writing database (PostgreSQL and MySQL(MariaDB) database);
- Support asynchronously reading and writing sqlite3 database based on thread pool;
- Support ARM Architecture;
- Provide a convenient lightweight ORM implementation that supports for regular object-to-database bidirectional mapping;
- Support plugins which can be installed by the configuration file at load time;
- Support AOP with build-in joinpoints.

Next: Install drogon