project architecture

Heroku cloud platform

Heroku is a cloud platform that provide base service support several language deploy on the server. This a **PAAS** architecture.

HTTP server

We deploy our python code on this platform and run as a HTTP based server. Heroku provide public accessible domain name reflect to our server. It is a **public cloud** deployment model.

Restful API

we use **Restful API** to accept visit. For the get request, we return the HTML page resource. For the post request, we update our resource.

Database Storage

Redis Lab is a platform provide **remote storage**, we use DBMS API to connect with this NoSQL service and receive the data.
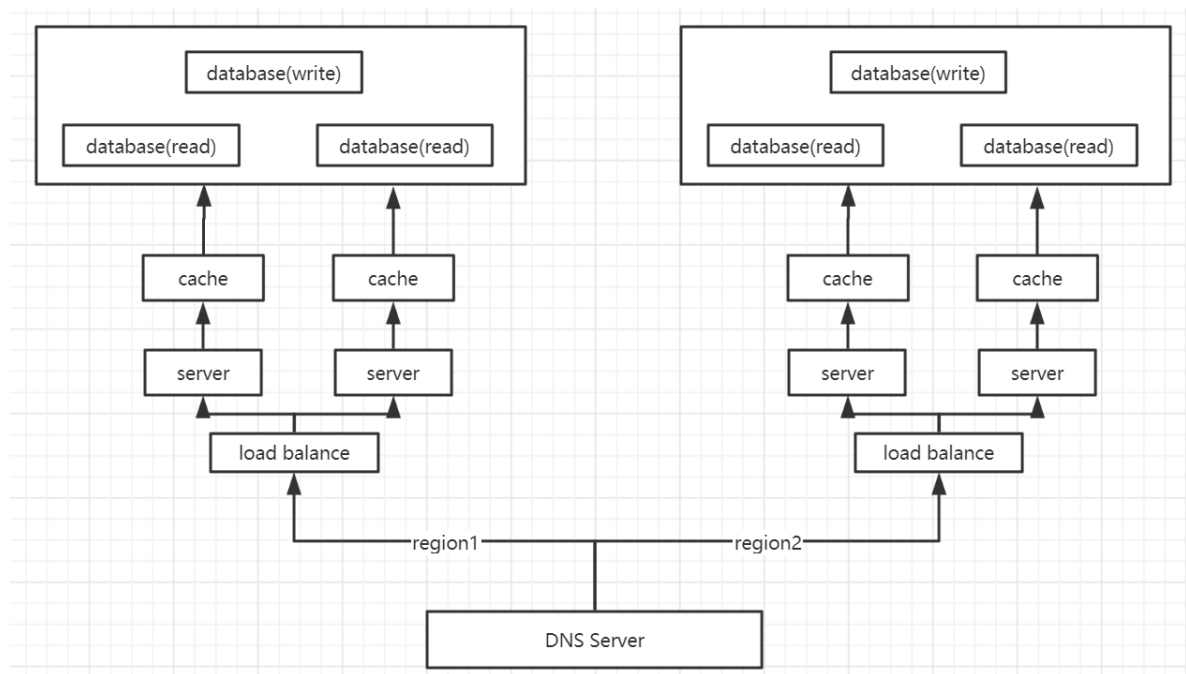
capacity increase

scale up

Using the high frequency CPU or more core CPU, bigger memory can help increase capacity.

scale out

we can use load-balance cluster to provide the service. For the database, setting more database which only provide read operation. Also provide different cluster based on the user areas(we assume different region have different situation and data, so they don't share same database).

which model

Our bot service is a SaaS. In our bot, we provide shared cloud service. User have limited administrative control. All the operation is based on the front-end user interface.