

Go e o framework Serverless

Configurando e executando o deploy através do gitlab-ci



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Agenda

↳ Serverless

↳ Serverless framework

↳ Serverless framework configuração

↳ Estrutura do projeto

↳ Configuração gitlab-ci

↳ Demo



- Alguns benefícios
 - Não existe a preocupação de manter uma infraestrutura.
 - Foco no negócio
 - Altamente escalável
 - Baixo custo
- Pontos de atenção
 - Dependência de fornecedores
 - Funções inativas
 - Processamentos longos
 - Stateless





Framework de código aberto
para criar e implantar aplicativos
sem servidor

- Serverless Cloud Providers
 - Amazon
 - Microsoft
 - Google





- serverless.yml

```
service: serverless-task

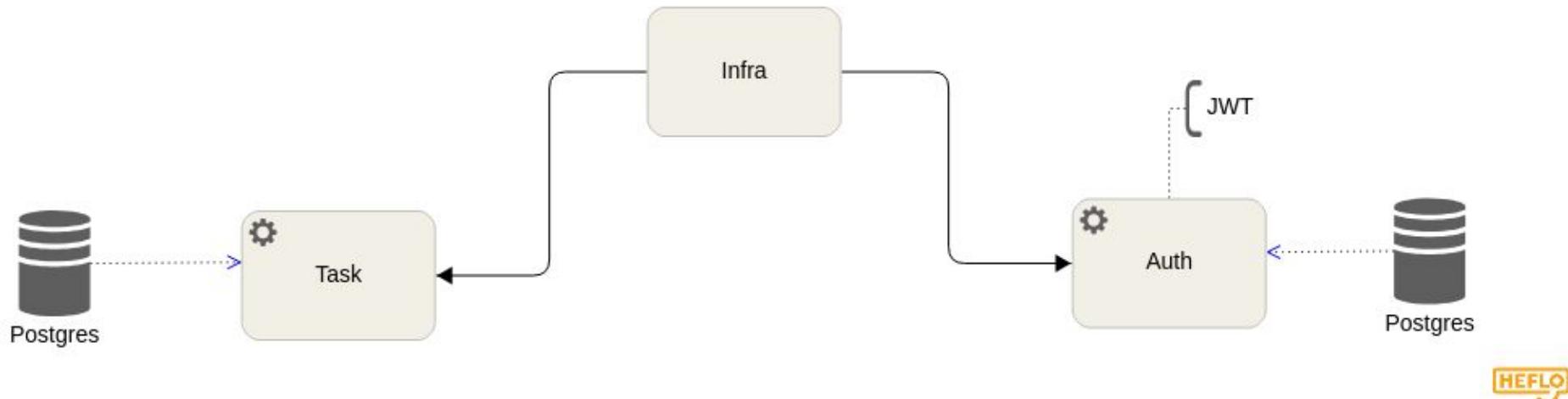
provider:
  name: aws
  runtime: go1.x
  environment:
    DATASTORE_URL: ${file(./serverless.env.yml):${opt:stage, self:provider.stage}.DATASTORE_URL}

functions:
  api:
    handler: build/api
    events:
      - http:
          path: "{proxy+}"
          method: any
          cors: true

package:
  exclude:
    - ./*
  include:
    - ./build/**
```

- serverless.env.yml
 - stage
 - dev
 - staging
 - prod

```
dev:  
  DATASTORE_URL: postgres://<user>:<password>@<ip>:5432/<database>  
staging:  
  DATASTORE_URL: '<URL_STAGING>'  
prod:  
  DATASTORE_URL: '<URL_PROD>'
```



- github.com/FernandoCagale/serverless-task
- github.com/FernandoCagale/serverless-auth
- github.com/FernandoCagale/serverless-infra



- dbconfig.yml

```
development:
  driver: postgres
  open: postgres://<user>:<password>@<ip>:5432/<database>

staging:
  driver: postgres
  open: $URL_STATING

production:
  driver: postgres
  open: $URL_PROD
```

```
-- +goose Up
-- SQL in this section is executed when the migration is applied.

CREATE TABLE task (
    id serial NOT NULL,
    name varchar(120) NOT NULL,
    updated_at timestamp with time zone DEFAULT now(),
    created_at timestamp with time zone DEFAULT now()
);

-- +goose Down
-- SQL in this section is executed when the migration is rolled back.

DROP TABLE task;
```

- create-task.sql

Gitlab-ci configuração build ".gitlab-ci.yml"

```
stages:
- build
- migrate
- deploy

build:
image: golang:1.10
stage: build
before_script:
- go get -v github.com/golang/dep/cmd/dep
- ln -s /builds /go/src/gitlab.com
- cd /go/src/gitlab.com/${CI_PROJECT_PATH}
script:
- dep ensure
- go test ....
- CGO_ENABLED=0 GOOS=linux go build -a -installsuffix cgo -o build/api api/main.go
artifacts:
paths:
- build/api
```



```
dev-migrate:
  image: golang:1.10
  stage: migrate
  before_script:
    - go get -u bitbucket.org/liamstask/goose/cmd/goose
    - ln -s /builds /go/src/gitlab.com
    - cd /go/src/gitlab.com/${CI_PROJECT_PATH}
  script:
    - goose -env development up
  only:
    - dev
```



```
dev:  
  stage: deploy  
  image: node:8.10  
  script:  
    - npm install serverless -g --silent  
    - serverless config credentials --provider aws --key ${AWS_ACCESS_KEY_ID} --secret ${AWS_SECRET_ACCESS_KEY}  
    - serverless deploy --stage dev  
  only:  
    - dev
```



Estrutura do projeto



GitLab Projects Groups Snippets Help

S serverless-task

Project Repository Issues (0) Merge Requests (0)

CI / CD

Pipelines

- Jobs
- Schedules
- Charts

Registry Packages Wiki Snippets Members

José Fernando Bellucci Cagale > serverless-task > Pipelines > #37953451

Pipeline #37953451 triggered 1 week ago by José Fernando Bellucci Cagale

add CI

3 jobs from master in 4 minutes and 59 seconds (queued for 1 second)

1cec03d4 ... ↻

Pipeline Jobs (3)

Build Migrate Deploy

```
graph LR; build((build)) --> prodMigrate((prod-migrate)); prodMigrate --> prod((prod))
```

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Dúvidas???

Obrigado!

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