Destrinchando o GCP

Google Kubernetes Engine

Clone do Código

```
git clone https://github.com/marcelomarques05/destrinchando-o-gcp.git
cd destrinchando-o-gcp/wordpress-persistent-disks
WORKING_DIR=$(pwd)
```

Criar o Cluster Kubernetes

```
CLUSTER_NAME=destrinchando-gcp-gke
gcloud container clusters create $CLUSTER_NAME --num-nodes=3 --enable-
autoupgrade --no-enable-basic-auth --no-issue-client-certificate --enable-
ip-alias -metadata disable-legacy-endpoint=true
```

Criar a Instância SQL

```
export INSTANCE_NAME="mysql-wordpress-instance"
gcloud sql instances create $INSTANCE_NAME
export INSTANCE_CONNECTION_NAME=$(gcloud sql instances describe
$INSTANCE_NAME  --format='value(connectionName)')
```

Exibir Informações

```
kubectl get nodes
```

Criação de Database

```
gcloud sql databases create wordpress -instance $INSTANCE_NAME
export CLOUD_SQL_PASSWORD='passw0rd'
gcloud sql users create wordpress -host=% -instance $INSTANCE_NAME -
password $CLOUD_SQL_PASSWORD
```

Continuando com Configuração

```
kubectl apply -f $WORKING_DIR/wordpress-volumeclaim.yaml
kubectl get persistentvolumeclaim
```

Criar Service Account

```
SA_NAME=cloudsql-proxy
gcloud iam service-accounts create $SA_NAME --display-name $SA_NAME
SA_EMAIL=$(gcloud iam service-accounts list \
    --filter=displayName:$SA_NAME \
    --format='value(email)')
```

Permissão para Service Account

```
gcloud projects add-iam-policy-binding $PROJECT_ID \
    --role roles/cloudsql.client \
    --member serviceAccount:$SA_EMAIL
```

Criar Chave de Service Account

```
gcloud iam service-accounts keys create $WORKING_DIR/key.json \
    --iam-account $SA_EMAIL
```

Criar Secret e Adicionar Chave

```
kubectl create secret generic cloudsql-db-credentials \
    --from-literal username=wordpress \
    --from-literal password=$CLOUD_SQL_PASSWORD

kubectl create secret generic cloudsql-instance-credentials \
    --from-file $WORKING_DIR/key.json
```

Preparar o Kubernetes para o Secret

```
cat $WORKING_DIR/wordpress_cloudsql.yaml.template | envsubst > \
    $WORKING_DIR/wordpress_cloudsql.yaml
```

Deploy de Pods

```
kubectl create -f $WORKING_DIR/wordpress_cloudsql.yaml
```

Validar

```
kubectl get pod -l app=wordpress --watch
```

Criar Service do Wordpress (Porta/Rede)

```
kubectl create -f $WORKING_DIR/wordpress-service.yaml
```

Validar

```
kubectl get svc -l app=wordpress --watch
```