# Hands-on with Kubernetes on Cloud

## Steps

- Download and upload the tcb-vote.zip file to Cloud Shell:
  https://www.dropbox.com/s/oxsnuzydxubwyhb/tcb-vote-en.zip?dl=0

- Unzip tcb-vote.zip
  mkdir kube
  mv tcb-vote*.zip kube
  cd kube
  unzip tcb-vote*.zip

- Set project

```
gcloud config set project <PROJECT_ID>
```

- Build and push the image to Container Registry

```
gcloud services enable cloudbuild.googleapis.com --project <PROJ
ECT_ID> gcloud builds submit --tag gcr.io/<PROJECT_ID>/tcb-vote-
front
```

- Create and Connect to GKE
- Deploy the app to GKE

```
kubectl apply -f tcb-vote-plus-redis-v2.yaml
```

- Enable autoscaling - horizontal pod autoscaling

```
kubectl autoscale deployment tcb-vote-front --cpu-percent=50 --m
in=1 --max=10 kubectl get hpa kubectl get pods kubectl get deplo
yment tcb-vote-front
```

- Simulate user access (increase the load)

```
kubectl run -i --tty load-generator --rm --image=busybox:1.28 --
restart=Never -- /bin/sh -c "while sleep 0.01; do wget -q -O- <h
ttp://tcb-vote-front>; done"
```

- Watch autoscale

```
kubectl get hpa tcb-vote-front --watch kubectl get deployment tc
b-vote-front
```

- Stop load
  CTRL +C on cloud shell tab running the load inscrease
- Watch scale down

```
kubectl get hpa tcb-vote-front --watch kubectl get deployment tc
b-vote-front
```