

GOOGLE CLOUD FUNDAMENTALS: GETTING STARTED WITH GKE

START A KUBERNETES ENGINE CLUSTER

1 For convenience, place the zone that Qwiklabs assigned you to into an environment variable called **MY_ZONE**.

```
export MY_ZONE=us-central1-a
```

2 Start a Kubernetes cluster managed by Kubernetes Engine. Name the cluster webfrontend and configure it to run 2 nodes:

```
gcloud container clusters create webfrontend --zone $MY_ZONE --num-nodes 2
```

3 After the cluster is created, check your installed version of Kubernetes using the **kubectl version** command:

```
kubectl version
```

RUN AND DEPLOY A CONTAINER

4 From your Cloud Shell prompt, launch a single instance of the nginx container. (Nginx is a popular web server.)

```
kubectl create deploy nginx --image=nginx:1.17.10
```

5. View the pod running the nginx container:

```
kubectl get pods
```

6. Expose the nginx container to the Internet:

```
kubectl expose deployment nginx --port 80 --type LoadBalancer
```

7. View the new service:

```
kubectl get services
```

8. Scale up the number of pods running on your service:

```
kubectl scale deployment nginx --replicas 3
```

9. Confirm that Kubernetes has updated the number of pods:

```
kubectl get pods
```

10 Confirm that your external IP address has not changed:

```
kubectl get services
```