

# Google Cloud Fundamentals: Getting Started with GKE

Start a Kubernetes cluster:

- Create an environment variable called MY\_ZONE: `export MY_ZONE=us-central1-a`
- 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`
- After the cluster is created, check your installed version of Kubernetes using the `kubectl version` command: `kubectl version`

Run and deploy a container:

- 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`
- View the pod running the nginx container: `kubectl get pods`
- Expose the nginx container to the Internet: `kubectl expose deployment nginx --port 80 --type LoadBalancer`
- View the new service: `kubectl get services`
- Scale up the number of pods running on your service: `kubectl scale deployment nginx --replicas 3`
- Confirm that Kubernetes has updated the number of pods: `kubectl get pods`
- Confirm that your external IP address has not changed: `kubectl get services`