

## **Cheat Sheet: Kubernetes Cluster**

# Creating a GKE Cluster and Configuring Credentials

- From the Google Cloud Console (<a href="https://console.cloud.google.com">https://console.cloud.google.com</a>):
  - Click the Navigation menu and select Kubernetes Engine
  - o If an Enable button is displayed, click the **Enable** button
  - Copy/paste the following command in Cloud Shell and run it to create a Kubernetes Cluster (this is one single command):

```
gcloud container clusters create "cluster-1" --zone "us-central1-c"
--machine-type "e2-small" --preemptible --num-nodes "3" --scopes
"https://www.googleapis.com/auth/cloud-platform"
```

Wait for the cluster to be created (3-5 minutes)

#### **Testing the Cluster Access**

- When the cluster is running, test your access by using kubect1 commands:
  - o kubectl get services
    - This should return a single service named Kubernetes
  - kubectl get nodes
    - This should return 3 nodes

### **Testing the Cluster Access (continued)**

- If the cluster is running, but the kubectl commands did **not** work:
  - In the console, go to Kubernetes Engine and
  - Click the three vertical dots : to the right of your cluster
  - Then click the Connect button, and choose Run in Cloud Shell
  - Cloud Shell will open with a command pre-created
    - Press enter to run the command
  - This command creates the kubectl config file for your cluster

#### **Success!**

Congratulations! You have successfully created a Kubernetes cluster