Create a Cluster

This lesson focuses on creating a cluster and the necessary requirements and gists for this chapter.

WE'LL COVER THE FOLLOWING

Pulling the code

The vfarcic/k8s-specs repository will continue to serve as our source of Kubernetes definitions. We'll make sure that it is up-to-date by pulling the latest version.

> 🔍 All the commands from this chapter are available in the 06-grafana.sh Gist.

```
cd k8s-specs

git pull
```

Gists and specifications

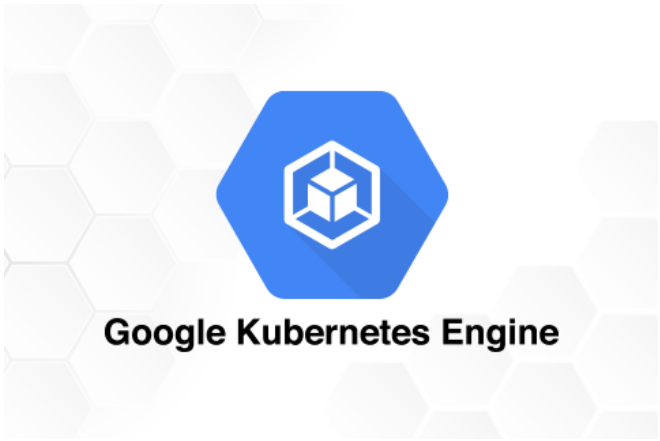
Choose the flavor you want and run the commands from its `.sh` file to create the cluster and the required specifications needed in this chapter. The requirements are the same as those we had in the previous chapter. For your convenience, the Gists are available here as well. Feel free to use them to create a new cluster, or to validate that the one you're planning to use meets the requirements.

> **NOTE:** In the end, you will see a command to `DELETE` the cluster too.

> Don't execute that command. Use the `DELETE` command only when you need to delete the cluster, preferably at the end of the chapter.

GKE

- gke-instrument.sh: **GKE** with 3 n1-standard-1 worker nodes, **nginx Ingress**, **Prometheus** Chart, and environment variables **LB_IP**, **PROM_ADDR**, and **AM_ADDR**



EKS

- eks-hpa-custom.sh: **EKS** with 3 t2.small worker nodes, **nginx Ingress**, **Metrics Server**, **Prometheus** Chart, environment variables **LB_IP**, **PROM_ADDR**, and **AM_ADDR**, and **Cluster Autoscaler**

AKS

- aks-instrument.sh: **AKS** with 3 Standard_B2s worker nodes, **nginx Ingress** and **Prometheus** Chart, and environment variables **LB_IP**, **PROM_ADDR**, and **AM_ADDR**

Docker for Desktop

- docker-instrument.sh: **Docker for Desktop** with **2 CPUs, 3 GB RAM, nginx Ingress, Metrics**

Server, **Prometheus** Chart, and

environment variables **LB_IP**, **PROM_ADDR**, and **AM_ADDR**

Minikube

- minikube-instrument.sh: **minikube** with **2 CPUs, 3 GB RAM**, **ingress**, **storage-provisioner**, **default-storageclass**, and **metrics-server** addons enabled, **Prometheus** Chart, and environment variables **LB_IP**, **PROM_ADDR**, and **AM_ADDR**

In the next lesson, we will see the tools we require for making Dashboards.