Lab 3.2 - Deploy a Demo Application

Overview

In this lab, you'll be installing a demo application, Emoji Vote (emojivoto), in each of the three clusters you created in the first lab. According to Linkerd, "The emojivoto application is a standalone Kubernetes application that uses a mix of gRPC and HTTP calls to allow users to vote on their favorite emojis." This demo app will be used by all the service meshes in the rest of the labs in this course.

Thanks to Buoyant and the Linkerd community for making the Emoji Vote app publicly available. The information in this lab is based on the "Install the demo app" instructions from Linkerd.

1. Log into your Ubuntu VM with the three Kubernetes clusters you set up in the first chapter.

2. To start the cluster that will contain the Consul service mesh, issue this command:

   ```
   yourname@ubuntu-vm:~$ docker start $(docker ps -a -f
   name=consul-control-plane -q)

   2e64e6e909e1
   ```

3. To switch the **kind** context to the Consul cluster, use this command:

   ```
   yourname@ubuntu-vm:~$ kubectl config use-context kind-consul

   Switched to context "kind-consul".
   ```

   Please wait around 1-2 minutes (closer to 1 minute) for the Kind Kubernetes cluster to get up and running

4. To install Emoji Vote for the Consul cluster, run the following command:

```
yourname@ubuntu-vm:~$ curl -sL
https://run.linkerd.io/emojivoto.yml \
  | kubectl apply -f -

namespace/emojivoto created
serviceaccount/emoji created
serviceaccount/voting created
serviceaccount/web created
service/emoji-svc created
service/voting-svc created
service/web-svc created
deployment.apps/emoji created
deployment.apps/vote-bot created
deployment.apps/voting created
deployment.apps/web created
```

5. Stop the Consul cluster by using this command:

```
yourname@ubuntu-vm:~$ docker stop $(docker container ls -a -f
name=consul-control-plane -q)

2e64e6e909e1
```

6. To start the cluster that will contain the Istio service mesh, issue this command:

```
yourname@ubuntu-vm:~$ docker start $(docker ps -a -f
name=istio-control-plane -q)

2d1d09fadf21
```

7. To switch the **kind** context to the Istio cluster, use this command:

```
yourname@ubuntu-vm:~$ kubectl config use-context kind-istio

Switched to context "kind-istio".
```

8. To install Emoji Vote for the Istio cluster, run the following command:


```
yourname@ubuntu-vm:~$ curl -sL
https://run.linkerd.io/emojivoto.yml \
  | kubectl apply -f -

namespace/emojivoto created
serviceaccount/emoji created
serviceaccount/voting created
serviceaccount/web created
service/emoji-svc created
service/voting-svc created
service/web-svc created
deployment.apps/emoji created
deployment.apps/vote-bot created
deployment.apps/voting created
deployment.apps/web created
```

9. To stop the Istio cluster, run this command:

```
yourname@ubuntu-vm:~$ docker stop $(docker ps -a -f
name=istio-control-plane -q)

2d1d09fadf21
```

10. To start the cluster that will contain the Linkerd service mesh, issue this command:

```
yourname@ubuntu-vm:~$ docker start $(docker ps -a -f
name=linkerd-control-plane -q)

8af4c08524df
```

11. To switch the **kind** context to the Linkerd cluster, use this command:

```
yourname@ubuntu-vm:~$ kubectl config use-context kind-linkerd

Switched to context "kind-linkerd".
```

12. To install Emoji Vote for the Linkerd cluster, run the following command:

```
yourname@ubuntu-vm:~$ curl -sL
https://run.linkerd.io/emojivoto.yml \
  | kubectl apply -f -
```



```
namespace/emojivoto created
serviceaccount/emoji created
serviceaccount/voting created
serviceaccount/web created
service/emoji-svc created
service/voting-svc created
service/web-svc created
deployment.apps/emoji created
deployment.apps/vote-bot created
deployment.apps/voting created
deployment.apps/web created
```

13. To stop the Linkerd cluster, run this command:

```
yourname@ubuntu-vm:~$ docker stop $(docker ps -a -f
name=linkerd-control-plane -q)

8af4c08524df
```

