

IV. Backing Services with k8s Services

Relevant Documentation

- [Twelve-Factor App: IV. Backing Services](#)
- [Services](#)

Lesson Reference

Switch to the source code directory:

```
cd ~/content-designing-applications-for-kubernetes
```

Optional: If you want to start with a clean slate, check out the start tag for this lesson. However, you could lose any local changes you have made if you do this:

```
git reset --hard HEAD
git checkout IV-backing-services-start
```

Examine the MongoDB configuration:

```
cat k8s-uloe-mongodb.yml
```

Deploy the backend MongoDB database Pod:

```
kubectl apply -f k8s-uloe-mongodb.yml -n production
```

Create a ClusterIP service to provide access to the backing service:

```
vi uloe-mongodb.yml
```

```
apiVersion: v1
kind: Service
metadata:
  name: uloe-mongodb
spec:
  type: ClusterIP
  selector:
    app: uloe-mongodb
  ports:
    - protocol: TCP
      port: 27017
      targetPort: 27017
```

```
kubectl apply -f uloe-mongodb.yml -n production
```

Re-create the test Pod in the `production` namespace:

```
kubectl apply -f test-pod.yml -n production
```

Check the Pod's logs:

```
kubectl logs test-pod -n production
```

Get the cluster IP of the test Pod. Copy the `IP` address:

```
kubectl get pod test-pod -n production -o wide
```

Make a test request to the test Pod using the IP address:

```
curl <test-pod cluster IP address>:3001/list
```

Delete the test Pod to clean up:

```
kubectl delete pod test-pod -n production --force
```