Kubernetes resources

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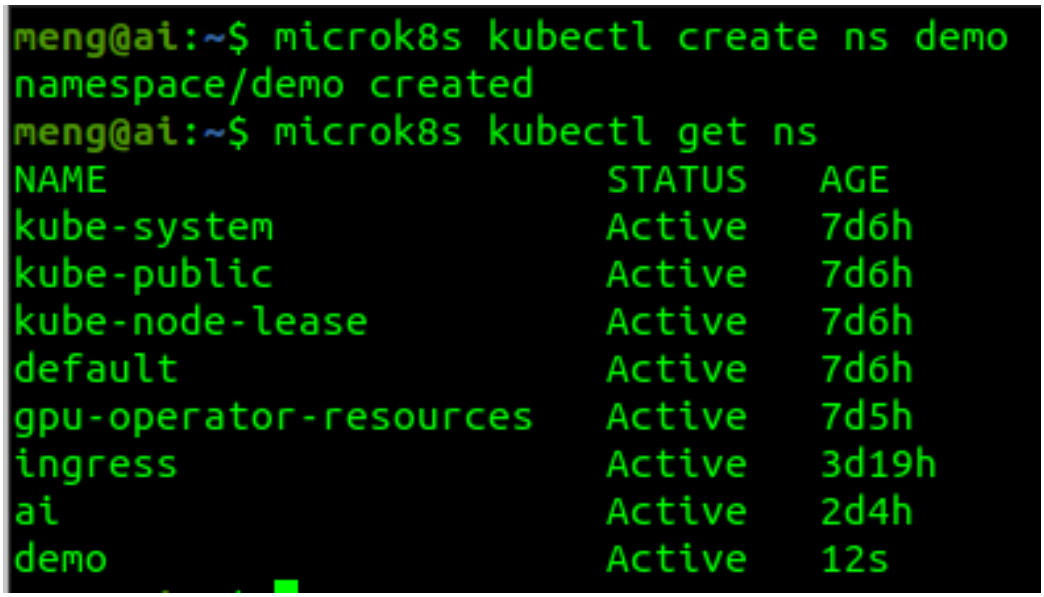
1 Imperative approach

1. Create demo namespace
   kubectl create ns demo



2. Label demo namespace
   kubectl label ns demo tier=test

```
meng@ai:~$ microk8s kubectl label ns demo tier=test
namespace/demo labeled
meng@ai:~$ microk8s kubectl describe ns/demo
Name:         demo
Labels:       kubernetes.io/metadata.name=demo
              tier=test
Annotations:  <none>
Status:       Active

No resource quota.

No LimitRange resource.
```

3. Create nginx-alpine deployment
   kubectl create deploy nginx-alpine --image=nginx:alpine --replicas=3 --namespace=demo

```
meng@ai:~$ microk8s kubectl create deploy nginx-alpine --image=nginx:alpine --replicas=3 --namespace=demo
deployment.apps/nginx-alpine created
meng@ai:~$ microk8s kubectl get deploy -n demo
NAME           READY   UP-TO-DATE   AVAILABLE   AGE
nginx-alpine   3/3     3            3           107s
```

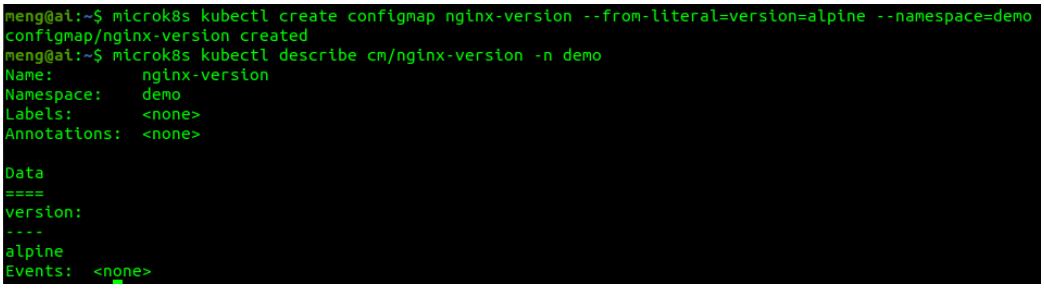
4. Label nginx-alpine deployment
   kubectl label deploy nginx-alpine app=nginx tag=alpine --namespace=demo --overwrite

```
meng@ai:~$ microk8s kubectl label deploy nginx-alpine app=nginx tag=alpine --namespace=demo --overwrite
deployment.apps/nginx-alpine labeled
meng@ai:~$ microk8s kubectl describe deploy/nginx-alpine -n demo
Name:                   nginx-alpine
Namespace:              demo
CreationTimestamp:      Mon, 05 Jul 2021 15:14:31 +0800
Labels:                 app=nginx
                        tag=alpine
```

5. Expose nginx-alpine deployment
   kubectl expose deploy/ngin-alpine --port=8111 --namespace=demo

```
meng@ai:~$ microk8s kubectl expose deploy/nginx-alpine --port=8111 --namespace=demo
service/nginx-alpine exposed
meng@ai:~$ microk8s kubectl get svc --namespace=demo
NAME           TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)    AGE
nginx-alpine   ClusterIP   10.152.183.20   <none>        8111/TCP   27s
```

6. Create config map
   kubectl create configmap nginx-version --from-literal=version=alpine --namespace=demo


meng@ai:~$ microk8s kubectl create configmap nginx-version --from-literal=version=alpine --namespace=demo
configmap/nginx-version created
meng@ai:~$ microk8s kubectl describe cm/nginx-version -n demo
Name: nginx-version
Namespace: demo
Labels: <none>
Annotations: <none>
Data
====
version:
----
alpine
Events: <none>