

# Label & Selectors

Tuesday, January 5, 2021 2:29 PM

## **LABELS and SELECTORS:**

Create two pods with different labels and retrieve through selector.

```
[root@master ~]# cat label_prod.yml
apiVersion: v1
kind: Pod
metadata:
  name: nginx-prod
  labels:
    app: nginx
    environment: production
spec:
  containers:
  - image: nginx
    name: nginx
```

```
[root@master ~]# cat label_qa.yml
apiVersion: v1
kind: Pod
metadata:
  name: nginx-qa
  labels:
    app: nginx
    environment: qa
spec:
  containers:
  - image: nginx
    name: nginx
```

Pod creation with prod label

```
# kubectl apply -f label_prod.yml
```

```
[root@master ~]# kubectl apply -f label_prod.yml
pod/nginx-prod created
```

Pod creation with qa label

```
# kubectl apply -f label_qa.yml
```

```
[root@master ~]# kubectl apply -f label_qa.yml
pod/nginx-qa created
```

List of Pods

```
# kubectl get pods
```

```
[root@master ~]# kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
nginx-prod    1/1     Running   0           11m
nginx-qa      1/1     Running   0           11m
[root@master ~]#
```

List of Pod with help of selector

```
# kubectl get pods --selector environment=qa
```

```
[root@master ~]# kubectl get pods --selector environment=qa
NAME          READY   STATUS    RESTARTS   AGE
nginx-qa      1/1     Running   0           11m
```

```
# kubectl get pods --selector environment=production
```

```
[root@master ~]# kubectl get pods --selector environment=production
NAME          READY   STATUS    RESTARTS   AGE
nginx-prod    1/1     Running   0           12m
```

```
# kubectl get pods --selector app=nginx
```

```
[root@master ~]# kubectl get pods --selector app=nginx
NAME        READY   STATUS    RESTARTS   AGE
nginx-prod  1/1     Running   0           12m
nginx-qa    1/1     Running   0           12m
```

Imperative command of Label and selector and multiple selector

```
# kubectl label pods nginx app=web
```



pod

```
# kubectl get pods -l app=web
```

```
[root@master ~]# kubectl label pods nginx app=web
pod/nginx labeled
[root@master ~]#
[root@master ~]# kubectl get pods -l app=web
NAME    READY   STATUS    RESTARTS   AGE
nginx   1/1     Running   0           81s
```

Use Case of Label and Selector : Replication set

```
[root@master ~]# cat label_rs.yaml
apiVersion: apps/v1
kind: ReplicaSet
metadata:
  name: webapp
  labels:
    app: App1
    env: prod
spec:
  replicas: 3
  selector:
    matchLabels:
      app: App1
  template:
    metadata:
      labels:
        app: App1
        env: prod
    spec:
      containers:
        - name: webapp
          image: simple-webapp
```

Replicaset Labels

Selector

Pod Labels