

## USING LABELS

### Label and unlabel pods

>To get all pods use command: `kubectl get pods`

>To get all pods with labels use command: `kubectl get pods --show-labels`

>To change label use command: `kubectl label pod/[NAME] app=[new name] --overwrite`

>To delete change to label use command: `kubectl label pod/[NAME] app-`

```
Administrator: Windows PowerShell
PS C:\Users\msuban01\Desktop\kube\Exercise\04_01_Adding_labels_to_the_app> kubectl get pods --show-labels
NAME                                READY    STATUS    RESTARTS   AGE    LABELS
helloworld                          1/1      Running   0           13m    application_type=ui,author=karthequian,env=production,release-version=1.0
helloworld-all-deployment-d7c6dd56-mgf8w  1/1      Running   0          143m    app=helloworld,pod-template-hash=d7c6dd56
helloworld-d7c6dd56-6rwxw            1/1      Running   0          3h51m    app=helloworld,pod-template-hash=d7c6dd56
helloworld-deployment-d7c6dd56-wg4x9  1/1      Running   0          148m    app=helloworld,pod-template-hash=d7c6dd56
PS C:\Users\msuban01\Desktop\kube\Exercise\04_01_Adding_labels_to_the_app> kubectl label pod/helloworld app=helloworldapp --overwrite
pod/helloworld labeled
PS C:\Users\msuban01\Desktop\kube\Exercise\04_01_Adding_labels_to_the_app> kubectl get pods --show-labels
NAME                                READY    STATUS    RESTARTS   AGE    LABELS
helloworld                          1/1      Running   0           14m    app=helloworldapp,application_type=ui,author=karthequian,env=production,release-version=1.0
helloworld-all-deployment-d7c6dd56-mgf8w  1/1      Running   0          143m    app=helloworld,pod-template-hash=d7c6dd56
helloworld-d7c6dd56-6rwxw            1/1      Running   0          3h52m    app=helloworld,pod-template-hash=d7c6dd56
helloworld-deployment-d7c6dd56-wg4x9  1/1      Running   0          148m    app=helloworld,pod-template-hash=d7c6dd56
PS C:\Users\msuban01\Desktop\kube\Exercise\04_01_Adding_labels_to_the_app> kubectl label pod/helloworld app-
pod/helloworld unlabeled
PS C:\Users\msuban01\Desktop\kube\Exercise\04_01_Adding_labels_to_the_app> kubectl get pods --show-labels
NAME                                READY    STATUS    RESTARTS   AGE    LABELS
helloworld                          1/1      Running   0           14m    application_type=ui,author=karthequian,env=production,release-version=1.0
helloworld-all-deployment-d7c6dd56-mgf8w  1/1      Running   0          144m    app=helloworld,pod-template-hash=d7c6dd56
helloworld-d7c6dd56-6rwxw            1/1      Running   0          3h52m    app=helloworld,pod-template-hash=d7c6dd56
helloworld-deployment-d7c6dd56-wg4x9  1/1      Running   0          148m    app=helloworld,pod-template-hash=d7c6dd56
PS C:\Users\msuban01\Desktop\kube\Exercise\04_01_Adding_labels_to_the_app>
```

### Select Pods by labels

>`kubectl get pods -- selector [env=production] --show labels`

> `kubectl get pods -l [dev-lead=Karthik,env=production] --show labels`

> `kubectl get pods -l [dev-lead!=Karthik,env=production] --show labels`

>`kubectl get pods -l 'release-version in (1.0,2.0)' --show labels`

>`kubectl get pods -l 'release-version notin (1.0,2.0)' --show labels`

```
PS C:\Users\msuban01\Desktop\kube\Exercise\04_02_searching_for_labels> kubectl get pods -l 'release-version in (1.0,2.0)' --show-labels
NAME                                READY    STATUS    RESTARTS   AGE    LABELS
cart-dev                            1/1      Running   8 (117s ago)  18h    application_type=api,dev-lead=carisa,env=development,release-version=1.0,team=ecommerce
cart-prod                           1/1      Running   8 (79s ago)   18h    application_type=api,dev-lead=carisa,env=production,release-version=1.0,team=ecommerce
cart-staging                        1/1      Running   8 (87s ago)   18h    application_type=api,dev-lead=carisa,env=staging,release-version=1.0,team=ecommerce
login-dev                           1/1      Running   8 (2m5s ago)  18h    application_type=api,dev-lead=jlm,env=development,release-version=1.0,team=auth
login-prod                          1/1      Running   8 (101s ago)  18h    application_type=api,dev-lead=jlm,env=production,release-version=1.0,team=auth
login-staging                       1/1      Running   8 (2m13s ago) 18h    application_type=api,dev-lead=jlm,env=staging,release-version=1.0,team=auth
ordering-dev                        1/1      Running   8 (35s ago)   18h    application_type=backend,dev-lead=chen,env=development,release-version=2.0,team=purchasing
ordering-prod                       1/1      Running   8 (8s ago)    18h    application_type=backend,dev-lead=chen,env=production,release-version=2.0,team=purchasing
ordering-staging                    1/1      Running   8 (30s ago)   18h    application_type=backend,dev-lead=chen,env=staging,release-version=2.0,team=purchasing
quote-dev                           1/1      Running   8 (59s ago)   18h    application_type=api,dev-lead=amy,env=development,release-version=2.0,team=ecommerce
quote-prod                          1/1      Running   8 (46s ago)   18h    application_type=api,dev-lead=amy,env=production,release-version=1.0,team=ecommerce
quote-staging                       1/1      Running   8 (41s ago)   18h    application_type=api,dev-lead=amy,env=staging,release-version=2.0,team=ecommerce
social-dev                          1/1      Running   8 (66s ago)   18h    application_type=api,dev-lead=carisa,env=development,release-version=2.0,team=marketing
social-prod                         1/1      Running   8 (16s ago)   18h    application_type=api,dev-lead=marketing,env=production,release-version=1.0,team=marketing
social-staging                      1/1      Running   8 (97s ago)   18h    application_type=api,dev-lead=marketing,env=staging,release-version=1.0,team=marketing
PS C:\Users\msuban01\Desktop\kube\Exercise\04_02_searching_for_labels> kubectl get pods -l 'release-version notin (1.0,2.0)' --show-labels
NAME                                READY    STATUS    RESTARTS   AGE    LABELS
catalog-dev                         1/1      Running   8 (97s ago)   18h    application_type=api,dev-lead=daniel,env=development,release-version=4.0,team=ecommerce
catalog-prod                       1/1      Running   8 (2m6s ago)  18h    application_type=api,dev-lead=daniel,env=production,release-version=4.0,team=ecommerce
catalog-staging                     1/1      Running   8 (2m26s ago) 18h    application_type=api,dev-lead=daniel,env=staging,release-version=4.0,team=ecommerce
homepage-dev                        1/1      Running   0            18h    application_type=ui,dev-lead=karthik,env=development,release-version=12.0,team=web
homepage-prod                       1/1      Running   0            18h    application_type=ui,dev-lead=karthik,env=production,release-version=12.0,team=web
homepage-staging                    1/1      Running   0            18h    application_type=ui,dev-lead=karthik,env=staging,release-version=12.0,team=web
PS C:\Users\msuban01\Desktop\kube\Exercise\04_02_searching_for_labels>
```

## Deleting pods by label

>kubectl delete pods –l dev-lead=Karthik

```
PS C:\Users\msuban01\Desktop\kube\Exercise\04_02_searching_for_labels> kubectl delete pods -l dev-lead=karthik
pod "homepage-dev" deleted
pod "homepage-prod" deleted
pod "homepage-staging" deleted
PS C:\Users\msuban01\Desktop\kube\Exercise\04_02_searching_for_labels> kubectl get pods
NAME                READY   STATUS    RESTARTS   AGE
cart-dev            1/1     Running   12 (36s ago)    18h
cart-prod           1/1     Running   11 (10m ago)    18h
cart-staging        1/1     Running   12 (6s ago)     18h
catalog-dev         1/1     Running   11 (9m5s ago)   18h
catalog-prod        1/1     Running   11 (9m37s ago)  18h
catalog-staging     1/1     Running   11 (9m59s ago)  18h
login-dev           1/1     Running   12 (42s ago)    18h
login-prod          1/1     Running   12 (19s ago)    18h
login-staging       1/1     Running   12 (48s ago)    18h
ordering-dev        1/1     Running   11 (9m18s ago)  18h
ordering-prod       1/1     Running   11 (8m53s ago)  18h
ordering-staging    1/1     Running   11 (9m13s ago)  18h
quote-dev           1/1     Running   11 (9m44s ago)  18h
quote-prod          1/1     Running   11 (9m28s ago)  18h
quote-staging       1/1     Running   11 (9m23s ago)  18h
social-dev          1/1     Running   11 (9m52s ago)  18h
social-prod         1/1     Running   11 (8m59s ago)  18h
social-staging      1/1     Running   12 (14s ago)    18h
```