#035 Kubernetes - Replicasets Lab

Introduction

this is part 35 from the journey it's a long journey(360 day) so go please check previous parts , and if you need to walk in the journey with me please make sure to follow because I may post more than once in 1 Day but surely I will post daily at least one 2.

And I will cover lot of tools as we move on.

Lab

```
1 app_035.yml 🖺 🗉
   apiVersion: apps/v1
 1 kind: ReplicaSet
  metadata:
     name: myapp-replicaset
   spec:
     template:
       metadata:
         name: first-pod-dec
         labels:
10
           app: myapp
11
           type: restapi
12
13
       spec:
14
         containers:
15
             name: simple-api
              image: emondek/simple-api:latest
16
17
     replicas: 4
18
19
     selector:
20
       matchLabels:
21
         app: myapp
         type: restapi
22
```

In last part we talk about what every part mean(go check it:)).

Yaml have a specific conditions like: case sensitive, also don't use tabs use spaces to align them, I use vim he auto do those stuff for me. Also they are not order sensitive so you can define thing before another. It's like python if you work with it before it's block and aligned so when it start it should be in the same level where it ends so you should align every thing.

Template is the same from last pod lab .

```
1 app_033.yml 🖽 🖪
   apiVersion: v1
 2 kind : Pod
 4 metadata:
     name: first-api-dec
     labels:
       app: myapp
       type: restapi
10 spec:
11
12
     containers:
13
       - name: simple-api
         image: emondek/simple-api:latest
14
```

we can see the template is the pod it self. here replicas are 4 so it going to create for pods for us.

```
kubectl get pods
```

here our old pods, let's create our replicas.

```
(base) (master)in ~/Documents/DevOpsJourney/app_035
> kubectl create -f app_035.yml
replicaset.apps/myapp-replicaset created
(base) (master)in ~/Documents/DevOpsJourney/app_035
>
```

```
kubectl create -f app_035.yml
```

now we have our replicas created here.

let's get the pods

```
(base) (master)in ~/Documents/DevOpsJourney/app_035
 kubectl get pods
NAME
                        READY
                                STATUS
                                          RESTARTS
                                                     AGE
first-api-dec
                        1/1
                                          2
                                                     3d23h
                                Running
first-pod
                        0/1
                                          0
                                                     5d22h
                                Error
                        1/1
myapp-replicaset-2jxjd
                                Running
                                          0
                                                     2m
myapp-replicaset-m4k2f
                        1/1
                                Running
                                          0
                                                     2m
myapp-replicaset-xqvmk
                        1/1
                                Running
                                          0
(base) (master)in ~/Documents/DevOpsJourney/app_035
```

```
kubectl get pods
```

he generate 3 pods with random ID with it (ex: -2jxjd), but wait we say 4 not 3! yes he take our old pod as 1 of them. now let's delete them 3:)

```
(base) in ~
> kubectl delete pods first-api-dec myapp-replicaset-2jxjd myapp-replicaset-m4k2f myapp-replicaset-xqvmk
pod "first-api-dec" deleted
pod "myapp-replicaset-2jxjd" deleted
pod "myapp-replicaset-m4k2f" deleted
pod "myapp-replicaset-m4k2f" deleted
pod "myapp-replicaset-xqvmk" deleted
(base) in ~
>
```

```
kubectl delete pods first-api-dec myapp-replicaset-2jxjd myapp-
replicaset-m4k2f myapp-replicaset-xqvmk
```

here maybe the names will vary for you so just copy paste them.

```
(base) in
 kubectl get pods
NAME
                         READY
                                 STATUS
                                           RESTARTS
                                                      AGE
first-pod
                         0/1
                                 Error
                                           0
                                                      5d22h
myapp-replicaset-498cd
                         1/1
                                                      25s
                                 Running
                                           0
myapp-replicaset-6h2r7
                         1/1
                                           0
                                                      25s
                                 Running
myapp-replicaset-bjg2b
                         1/1
                                           0
                                                      25s
                                 Running
myapp-replicaset-g6c5f
                         1/1
                                 Running
                                           0
                                                      25s
(base) in ~
```

We can as soon we delete them the replicaset create new fresh pods for us, we can also see that the names are now different also there age is few seconds.

Get replicasets

To get our created replicasets we use this command

```
(base) in ~
> kubectl get replicasets
NAME DESIRED CURRENT READY AGE
myapp-replicaset 4 4 4 16m
(base) in ~
>
```

- . Desired are what we specify in the yml file
- . Current are the current pods created
- . Ready are the pods ready to use
- . Age is the age where the replica was created