Running jobs

<u>Jobs</u>

Jobs are a construct that run a pod once and then stop. However, unlike pods and deployments, the output of the job is kept around until you decide to remove it.

```
X
Administrator: Windows PowerShell
PS C:\Users\msuban01\Desktop\kube\Exercise\05_04_Secrets> Set-Location
apiVersion: batch/v1
kind: Job
netadata:
 name: finalcountdown
 template:
   metadata:
     name: finalcountdown
   spec:
     containers:
      name: counter
       image: busybox
       command:
        - bin/sh
        - -c
- "for i in 9 8 7 6 5 4 3 2 1 ; do echo $i ; done"
     restartPolicy: Never #could also be Always or OnFailure
PS C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> <mark>kubectl</mark> create -f simplejob.yaml
job.batch/finalcountdown created
PS C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> kubectl get jobs
                COMPLETIONS DURATION AGE
finalcountdown
                                        97s
               1/1
PS C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> <mark>kubectl</mark> get pods
NAME
                      READY
                             STATUS
                                         RESTARTS AGE
finalcountdown-98hw6
                     0/1
                             Completed
                                         0
PS C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> <mark>kubectl</mark> logs finalcountdown-98hw6
```

Crons

crons are like jobs, however, they can run periodically. So, I have a cron here, it's called cronjob.yaml. It's still similar to what we had before, all it's doing here is putting out the date and then echoing "Hello from your kubernetes cluster". Restart policy: OnFailure and-- So this also has a schedule, in this case it runs every minute.

>In the cronjob, we're can see hellocron, on the schedule, Suspend as false. This just means that it doesn't ever suspend and just always keep running it.

>To stop a cronjob change suspend to true using: Kubectl edit cronjobs/[cron name].

```
X
 Administrator: Windows PowerShell
PS C:\Users\msuban01\Desktop\kube\Exercise\05 05 jobs> cat cronjob.yaml
apiVersion: batch/v1beta1
kind: CronJob
    metadata:
            name: hellocron
               spec:
                      schedule: "*/1 * * * * " #Runs every minute (cron syntax) or @hourly.
 jobTemplate:
    spec:
      template:
        spec:
          containers:
          - name: hellocron
            image: busybox
            args:
            - /bin/sh
            - date; echo Hello from your Kubernetes cluster
          restartPolicy: OnFailure #could also be Always or Never
 suspend: false #Set to true if you want to suspend in the future
S C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> kubectl create -f cronjob.yaml
larning: batch/v1beta1 CronJob is deprecated in v1.21+, unavailable in v1.25+; use batch/v1 CronJob
ronjob.batch/hellocron created
S C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> get cronjob
PS C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> kubectl get cronjob
NAME SCHEDULE SUSPEND ACTIVE LAST SCHEDULE AGE
hellocron */1 * * * * False 0 45s 58s
PS C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> kubectl get cronjob
NAME SCHEDULE SUSPEND ACTIVE LAST SCHEDULE AGE hellocron */1 * * * * False 1 5s 78s
PS C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> kubectl get jobs
                     COMPLETIONS DURATION AGE
NAME
finalcountdown
                                               8m58s
                     1/1
                                    135
nellocron-27426318
                     1/1
                                    6s
                                                84s
hellocron-27426319
                     1/1
                                    6s
                                                24s
S C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> kubectl get jobs
NAME
                     COMPLETIONS DURATION AGE
finalcountdown
                     1/1
                                                9m13s
hellocron-27426318 1/1
                                               995
                                    65
nellocron-27426319 1/1
                                   6s
                                                395
S C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> kubectl get cronjob
           SCHEDULE SUSPEND ACTIVE LAST SCHEDULE AGE
NAME
hellocron */1 * * * *
                         False
                                                               2m6s
PS C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> kubectl edit cronjobs/hellocro
Error from server (NotFound): cronjobs.batch "hellocro" not found
PS C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> kubectl edit cronjobs/hellocron
ronjob.batch/hellocron edited
PS C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> kubectl get cronjob
NAME SCHEDULE SUSPEND ACTIVE LAST SCHEDULE AGE
hellocron */1 * * * * True 0 62s 4m1
S C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs> kubectl get jobs
                                   DURATION
                     COMPLETIONS
NAME
                                               AGF
inalcountdown
                     1/1
                                                12m
hellocron-27426319
                     1/1
                                    6s
                                                4m13s
hellocron-27426320
                                    6s
                                                3m13s
                     1/1
nellocron-27426321
                     1/1
                                                2m13s
PS C:\Users\msuban01\Desktop\kube\Exercise\05_05_jobs>
```