**Jobs**

Kubernetes jobs by example

A [job](https://kubernetes.io/docs/concepts/workloads/controllers/jobs-run-to-completion/) in Kubernetes is a supervisor for pods carrying out batch processes, that is, a process that runs for a certain time to completion, for example a calculation or a backup operation.

Let’s create a [job](https://github.com/openshift-evangelists/kbe/blob/master/specs/jobs/job.yaml) called countdown that supervises a pod counting from 9 down to 1:

$ kubectl apply -f https://raw.githubusercontent.com/openshift-evangelists/kbe/master/specs/**jobs**/job.yaml

You can see the job and the pod it looks after like so:

$ kubectl get **jobs**

NAME DESIRED SUCCESSFUL AGE

countdown 1 1 5s

$ kubectl get pods --show-all

NAME READY STATUS RESTARTS AGE

countdown-lc80g 0/1 Completed 0 16s

To learn more about the status of the job, do:

$ kubectl describe **jobs**/countdown

Name: countdown

Namespace: default

Image(s): centos:7

Selector: controller-uid=ff585b92-2b43-11e7-b44f-be3e8f4350ff

Parallelism: 1

Completions: 1

Start Time: Thu, 27 Apr 2017 13:21:10 +0100

Labels: controller-uid=ff585b92-2b43-11e7-b44f-be3e8f4350ff

job-name=countdown

Pods Statuses: 0 Running / 1 Succeeded / 0 Failed

No volumes.

Events:

FirstSeen LastSeen Count From SubobjectPath Type Reason Message

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2m 2m 1 {job-controller } Normal SuccessfulCreate Created pod: countdown-lc80g

And to see the output of the job via the pod it supervised, execute:

kubectl logs countdown-lc80g

9

8

7

6

5

4

3

2

1

To clean up, use the delete verb on the job object which will remove all the supervised pods:

$ kubectl delete job countdown

job "countdown" deleted

Note that there are also more advanced ways to use jobs, for example, by utilizing a [work queue](https://kubernetes.io/docs/tasks/job/coarse-parallel-processing-work-queue/) or scheduling the execution at a certain time via [cron jobs](https://kubernetes.io/docs/concepts/workloads/controllers/cron-jobs/).