Logging

1. Introduction

- useful for debugging
- to see what's going on inside the containers

2. Creating a pod

- that writes to stdout and stderr

```
hadoop@k8s-00:~$ kubectl create -f https://raw.githubusercontent.com/mhausenblas/kbe
/master/specs/logging/pod.yaml
pod "logme" created
```

3. To view the 5 most recent logs use

```
hadoop@k8s-00:~$ kubectl logs --tail=5 logme -c gen
Mon Jun 18 05:42:04 UTC 2018
Mon Jun 18 05:42:05 UTC 2018
Mon Jun 18 05:42:05 UTC 2018
Mon Jun 18 05:42:06 UTC 2018
Mon Jun 18 05:42:06 UTC 2018
```

where **–tail=n** specifies the **n** recent logs

- **–since=n secs** option, which is used to see the log details since the last **n** seconds

```
hadoop@k8s-00:~$ kubectl logs -f --since=10s logme -c gen
Mon Jun 18 05:45:59 UTC 2018
Mon Jun 18 05:45:59 UTC 2018
Mon Jun 18 05:46:00 UTC 2018
Mon Jun 18 05:46:00 UTC 2018
Mon Jun 18 05:46:01 UTC 2018
Mon Jun 18 05:46:01 UTC 2018
Mon Jun 18 05:46:02 UTC 2018
```

- to view the logs on the containers that have already completed their tasks, we can do follows
- create a pod **oneshot**

```
hadoop@k8s-00:~$ kubectl create -f https://raw.githubusercontent.com/mhausenblas/kbe
/master/specs/logging/oneshotpod.yaml
```

```
pod "oneshot" created
```

- we can see that the pod has completed it's task

```
hadoop@k8s-00:~$ kubectl get pods
NAME       READY     STATUS             RESTARTS   AGE
badpod     0/1       CrashLoopBackOff   15         39m
hc         1/1       Running            0          45m
logme      1/1       Running            0          8m
oneshot    0/1       Completed          3          51s
ready      1/1       Running            0          33m
```

- still we can get the logs of the completed tasks as follows

```
hadoop@k8s-00:~$ kubectl logs -p oneshot -c gen
9
8
7
6
5
4
3
2
1
```