

Terminal



Your Interactive Bash Terminal. A safe place to learn and execute commands.

```
controlplane $ launch.sh
Waiting for Kubernetes to start...
Kubernetes started
controlplane $ kubectl apply -f deploy.yaml
replicationcontroller/frontend created
replicationcontroller/bad-frontend created
service/frontend created
controlplane $ cat deploy.yaml
kind: List
apiVersion: v1
items:
- kind: ReplicationController
  apiVersion: v1
  metadata:
    name: frontend
    labels:
      name: frontend
  spec:
    replicas: 1
    selector:
      name: frontend
    template:
      metadata:
        labels:
          name: frontend
      spec:
        containers:
        - name: frontend
          image: katacoda/docker-http-server:health
          readinessProbe:
            httpGet:
              path: /
              port: 80
            initialDelaySeconds: 1
            timeoutSeconds: 1
          livenessProbe:
            httpGet:
              path: /
              port: 80
            initialDelaySeconds: 1
            timeoutSeconds: 1
```

Terminal



```
      initialDelaySeconds: 1
      timeoutSeconds: 1
    livenessProbe:
      httpGet:
        path: /
        port: 80
      initialDelaySeconds: 1
      timeoutSeconds: 1
```

```
- kind: ReplicationController
  apiVersion: v1
  metadata:
    name: bad-frontend
    labels:
      name: bad-frontend
  spec:
    replicas: 1
    selector:
      name: bad-frontend
    template:
      metadata:
        labels:
          name: bad-frontend
      spec:
        containers:
        - name: bad-frontend
          image: katacoda/docker-http-server:unhealthy
          readinessProbe:
            httpGet:
              path: /
              port: 80
            initialDelaySeconds: 1
            timeoutSeconds: 1
          livenessProbe:
            httpGet:
              path: /
              port: 80
            initialDelaySeconds: 1
            timeoutSeconds: 1

- kind: Service
  apiVersion: v1
  metadata:
    labels:
      app: frontend
```

Terminal



```
  app: frontend
  kubernetes.io/cluster-service: "true"
  name: frontend
```

```
spec:
  type: NodePort
  ports:
  - port: 80
    nodePort: 30080
  selector:
    app: frontend
```

```
controlplane $ kubectl get pods --selector="name=bad-frontend"
```

```
NAME                READY   STATUS    RESTARTS   AGE
bad-frontend-nmrm6  0/1     Running   0           34s
```

```
controlplane $ pod=$(kubectl get pods --selector="name=bad-frontend" --output=jsonpath={.items..metadata.name})
```

```
controlplane $ kubectl describe pod $pod
```

```
Name:                bad-frontend-nmrm6
Namespace:           default
Priority:             0
PriorityClassName:    <none>
Node:                controlplane/172.17.0.35
Start Time:          Tue, 23 Mar 2021 03:32:58 +0000
Labels:              name=bad-frontend
Annotations:         <none>
Status:              Running
IP:                  10.32.0.6
Controlled By:       ReplicationController/bad-frontend
Containers:
  bad-frontend:
    Container ID:      docker://597f577a6b3cc7262ef62024e7f17761bba33cc6a6d554a80dcbf386768a43aa
    Image:             katacoda/docker-http-server:unhealthy
    Image ID:          docker-pullable://katacoda/docker-http-server@sha256:bea95c69c299c690103c39ebb3159c39c5061fee1dad13aa1b0625e0c6b52f22
    Port:              <none>
    Host Port:         <none>
    State:             Running
      Started:         Tue, 23 Mar 2021 03:33:34 +0000
    Last State:        Terminated
      Reason:          Error
      Exit Code:       2
      Started:         Tue, 23 Mar 2021 03:33:06 +0000
      Finished:        Tue, 23 Mar 2021 03:33:34 +0000
    Ready:             False
    Restart Count:     1
    Liveness:          http-get http://:80/ delay=1s timeout=1s period=10s #success=1 #failure=3
```

## Terminal



```
Readiness: http-get http://:80/ delay=1s timeout=1s period=10s #success=1 #failure=3
Environment: <none>
Mounts:
  /var/run/secrets/kubernetes.io/serviceaccount from default-token-c7m8b (ro)
```

## Conditions:

Type	Status
Initialized	True
Ready	False
ContainersReady	False
PodScheduled	True

## Volumes:

```
default-token-c7m8b:
  Type: Secret (a volume populated by a Secret)
  SecretName: default-token-c7m8b
  Optional: false
```

QoS Class: BestEffort

Node-Selectors: <none>

Tolerations: node.kubernetes.io/not-ready:NoExecute for 300s  
node.kubernetes.io/unreachable:NoExecute for 300s

## Events:

Type	Reason	Age	From	Message
Normal	Scheduled	45s	default-scheduler	Successfully assigned default/bad-frontend-nrm6 to controlplane
Normal	Pulling	43s	kubelet, controlplane	Pulling image "katacoda/docker-http-server:unhealthy"
Normal	Pulled	38s	kubelet, controlplane	Successfully pulled image "katacoda/docker-http-server:unhealthy"
Normal	Created	9s (x2 over 38s)	kubelet, controlplane	Created container bad-frontend
Normal	Started	9s (x2 over 37s)	kubelet, controlplane	Started container bad-frontend
Warning	Unhealthy	9s (x3 over 29s)	kubelet, controlplane	Liveness probe failed: HTTP probe failed with statuscode: 500
Normal	Killing	9s	kubelet, controlplane	Container bad-frontend failed liveness probe, will be restarted
Normal	Pulled	9s	kubelet, controlplane	Container image "katacoda/docker-http-server:unhealthy" already present on machine
Warning	Unhealthy	6s (x4 over 36s)	kubelet, controlplane	Readiness probe failed: HTTP probe failed with statuscode: 500

```
controlplane $ kubectl get pods --selector="name=frontend"
```

NAME	READY	STATUS	RESTARTS	AGE
frontend-cqhtn	1/1	Running	0	53s

```
controlplane $ kubectl get pods --selector="name=frontend"
```

NAME	READY	STATUS	RESTARTS	AGE
frontend-cqhtn	1/1	Running	0	58s

```
controlplane $ pod=$(kubectl get pods --selector="name=frontend" --output=jsonpath={.items..metadata.name})
```

```
controlplane $ kubectl exec $pod -- /usr/bin/curl -s localhost/unhealthy
```

```
controlplane $ kubectl get pods --selector="name=frontend"
```

NAME	READY	STATUS	RESTARTS	AGE
frontend-cqhtn	1/1	Running	0	64s

```
controlplane $
```