

CKA/CKAD : Complete Certification Guide

Liveness Probe YAML Overview



Liveness Probe Types

```
graph TD; A[Liveness Probe Types] --> B[HTTP]; A --> C[TCP]; A --> D[CMD];
```

HTTP

```
livenessProbe:
  httpGet:
    path: /healthz
    port: 8080
    httpHeaders:
      - name: Custom-Header
        value: Awesome
  initialDelaySeconds: 3
  periodSeconds: 3
```

STATUS : 2xx/3xx

TCP

```
livenessProbe:
  tcpSocket:
    port: 8080
  initialDelaySeconds: 15
  periodSeconds: 20
```

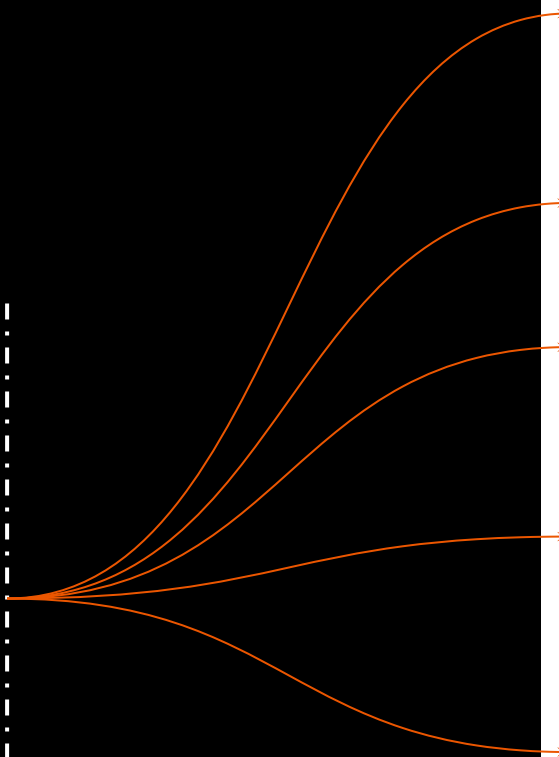
STATUS : Connection
Checking

CMD

```
livenessProbe:
  exec:
    command:
      - cat
      - /tmp/healthy
  initialDelaySeconds: 5
  periodSeconds: 5
```

EXIT Status 0

```
apiVersion: v1
kind: Pod
metadata:
  name: liveness-http
spec:
  containers:
  - name: liveness
    image: k8s.gcr.io/liveness
    livenessProbe:
      httpGet:
        path: /healthz
        port: 8080
        httpHeaders:
        - name: Custom-Header
          value: Awesome
      initialDelaySeconds: 3
      periodSeconds: 3
      failureThreshold: 1
      timeoutSeconds: 5
      successThreshold : 2
```



initialDelaySeconds : Number of seconds after the container has started before liveness or readiness probes are initiated.

periodSeconds : How often (in seconds) to perform the probe.

timeoutSeconds : Number of seconds after which the probe times out.

successThreshold : Minimum consecutive successes for the probe to be considered successful after having failed.

failureThreshold : Minimum consecutive failures for the probe before giving up.

```
apiVersion: v1
kind: Pod
metadata:
  name: liveness-cmd
spec:
  containers:
  - name: liveness
    image: k8s.gcr.io/liveness
    args:
    - /bin/sh
    - -c
    - touch /tmp/healthy; sleep 30; rm -rf /tmp/healthy; sleep 600
```

livenessProbe:

```
  exec:
    command:
    - cat
    - /tmp/healthy
  initialDelaySeconds: 3
  periodSeconds: 3
  failureThreshold: 1
  timeoutSeconds: 5
  successThreshold: 2
```

initialDelaySeconds : Number of seconds after the container has started before liveness or readiness probes are initiated.

periodSeconds : How often (in seconds) to perform the probe.

timeoutSeconds : Number of seconds after which the probe times out.

successThreshold : Minimum consecutive successes for the probe to be considered successful after having failed.

failureThreshold : Minimum consecutive failures for the probe before giving up.

```
apiVersion: v1
kind: Pod
metadata:
  name: liveness-tcp
spec:
  containers:
  - name: goproxy
    image: k8s.gcr.io/goproxy:0.1
    ports:
```

```
- containerPort: 8080
  livenessProbe:
    tcpSocket:
      port: 8080
    initialDelaySeconds: 3
    periodSeconds: 3
    failureThreshold: 1
    timeoutSeconds: 5
    successThreshold: 2
```

initialDelaySeconds : Number of seconds after the container has started before liveness or readiness probes are initiated.

periodSeconds : How often (in seconds) to perform the probe.

timeoutSeconds : Number of seconds after which the probe times out.

successThreshold : Minimum consecutive successes for the probe to be considered successful after having failed.

failureThreshold : Minimum consecutive failures for the probe before giving up.

Thank You...

Don't be the Same! Be Better!!!
