

DATE : 08.11.2023

DT/NT : DT

LESSON : DEVOPS

**SUBJECT: KUBERNETES
(Probes)**

BATCH : B 149

AWS-DEVOPS



TECHPRO
EDUCATION



techproeducation.com



+1 (585) 304 29 59



Probes

Probes

- ❖ In Kubernetes, a "probe" is a diagnostic performed periodically by the kubelet on a Container to determine its health.
- ❖ Kubernetes uses probes to decide how to manage Containers, such as when to restart them or not to send traffic to them if they are not responding.



Types of Probes

- ❖ Readiness Probes
- ❖ Liveness Probes
- ❖ Startup Probes

Readiness Probes

- ❖ Readiness probes are designed to let Kubernetes know when your app is ready to serve traffic.
- ❖ Kubernetes makes sure the readiness probe passes before allowing a service to send traffic to the pod.
- ❖ If a readiness probe starts to fail, Kubernetes stops sending traffic to the pod until it passes.

Liveness Probes

- ❖ Liveness probes let Kubernetes know if your app is alive or dead. If your app is alive, then
- ❖ Kubernetes leaves it alone. If your app is dead, Kubernetes removes the Pod and starts a new one to replace it.

Startup Probes

- ❖ Startup probes are designed to let Kubernetes know if your app has started successfully.
- ❖ Kubernetes uses the startup probe to know when to begin liveness and readiness checks. It prevents the pod from being killed before it's up and running.
- ❖ If the startup probe does not succeed within a specified time, Kubernetes restarts the Pod to try again, according to the specified restart policy.



Probes can be configured to perform checks in three different ways:

HTTP GET: The probe sends an HTTP GET request to the container.

TCP Socket: The probe attempts to open a TCP connection to the container.

Exec: The probe executes a command inside the container and checks the exit status of the command.

readinessProbe

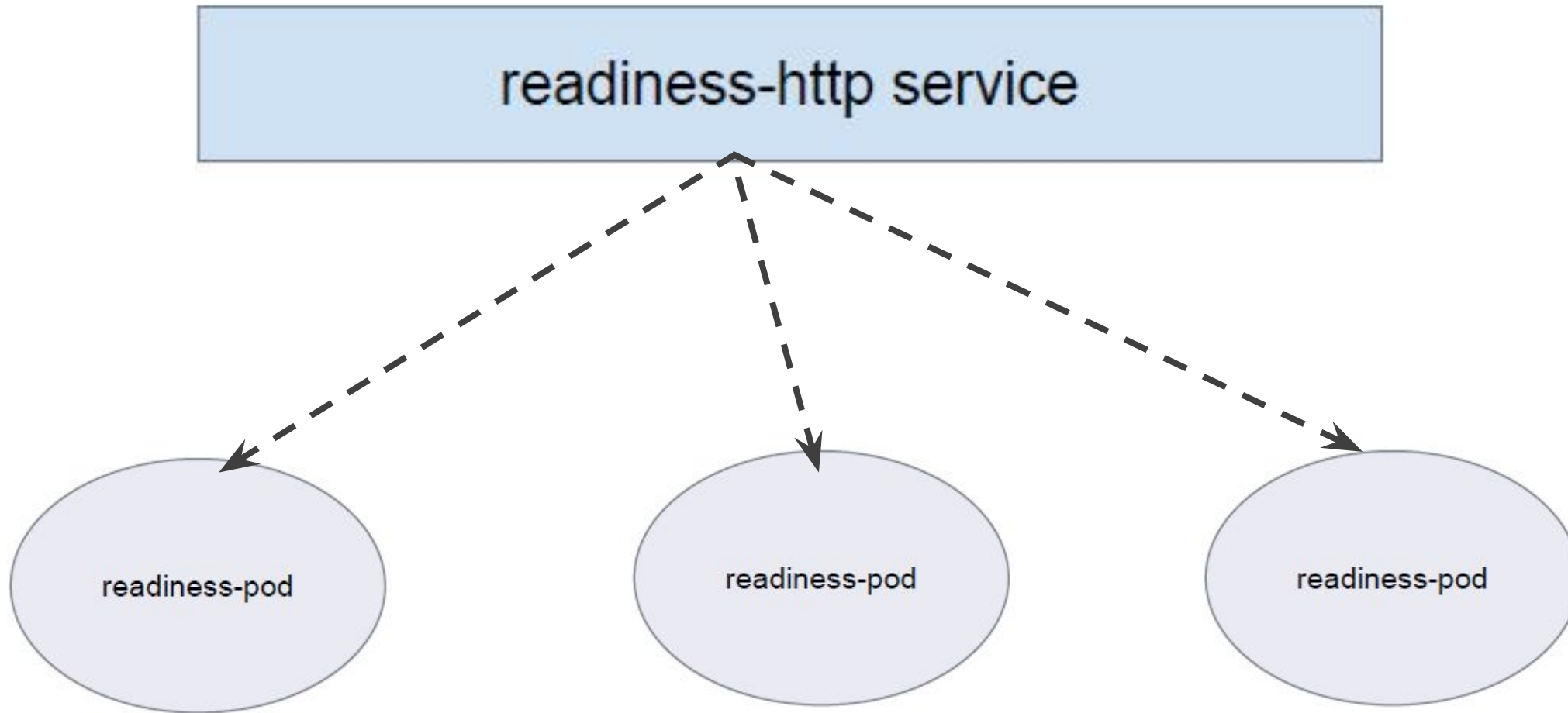
readiness-http service

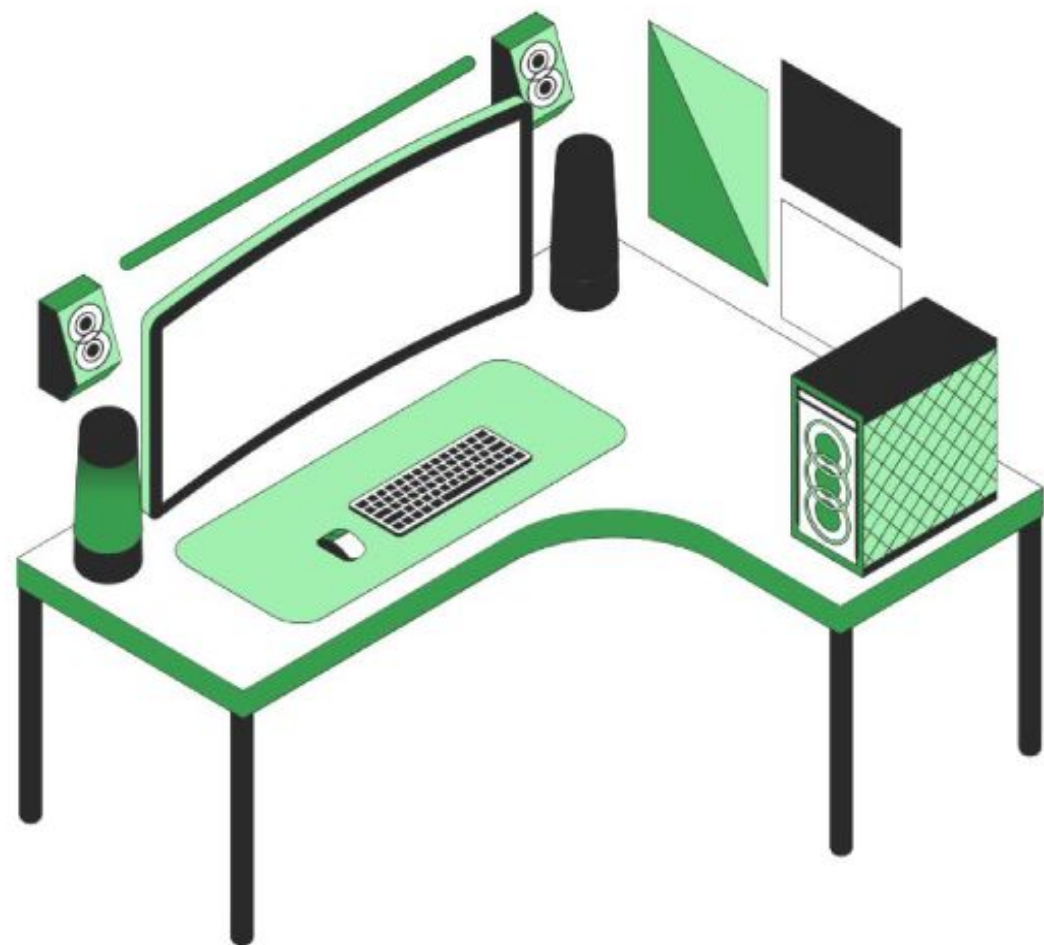
readiness-pod

readiness-pod

readiness-pod

readinessProbe





Do you have any questions?

Send it to us! We hope you learned something new.