

Question 1 of 6

Where are error outputs from containerised applications usually directed to?

stderr

Question 2 of 6

What type of Kubernetes resource can be used to run a logging pod on every node?

DaemonSet

Question 3 of 6

If a machine has systemd, where will non-containerised Kubernetes components log to?

journald

Question 4 of 6

The Nginx application logs the interaction from the cURL request. After the '200' HTTP response code, what number appears next in the log?

64

```
linux@kubernetes:~$ kubectl get svc
NAME         TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)          AGE
kubernetes   ClusterIP   10.152.183.1 <none>        443/TCP          563d
my-service   NodePort    10.152.183.251 <none>        8127:30000/TCP   6m13s
linux@kubernetes:~$ curl 10.152.183.251:8127
<p>You connected to the Nginx container, now check the logs</p>
linux@kubernetes:~$ kubectl logs nginx
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: /etc/nginx/conf.d/default.conf differs from the packaged version
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
10.102.8.193 - - [04/Nov/2022:14:20:34 +0000] "GET / HTTP/1.1" 200 64 "-" "curl/7.58.0" "-"
```

Question 5 of 6

What is the name of the environment variable that is first exported by microk8s.daemon-kubelet? (Hint: 'export' is a key word.)

PATH

```

linux@kubernetes:~$ journalctl | grep -i "export"
Nov 04 14:13:52 kubernetes microk8s.daemon-containerd[900]: + export CILIU SOCK=/var/snap/microk8s/2143/
Nov 04 14:15:35 kubernetes microk8s.daemon-containerd[7097]: + export PATH=/snap/microk8s/2143/usr/sbin:/
/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
Nov 04 14:15:35 kubernetes microk8s.daemon-containerd[7097]: + export LD_LIBRARY_PATH=/snap/microk8s/214
k8s/2143/usr/lib/x86_64-linux-gnu
Nov 04 14:15:35 kubernetes microk8s.daemon-containerd[7097]: + export LD_LIBRARY_PATH=/var/lib/snapd/lib/
s/2143/usr/lib:/snap/microk8s/2143/lib/x86_64-linux-gnu:/snap/microk8s/2143/usr/lib/x86_64-linux-gnu
Nov 04 14:15:35 kubernetes microk8s.daemon-containerd[7097]: + export XDG_RUNTIME_DIR=/var/snap/microk8s/
Nov 04 14:15:36 kubernetes microk8s.daemon-apiserver[7219]: + export PATH=/snap/microk8s/2143/usr/sbin:/s
/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
Nov 04 14:15:36 kubernetes microk8s.daemon-apiserver[7219]: + export LD_LIBRARY_PATH=/snap/microk8s/2143
k8s/2143/usr/lib/x86_64-linux-gnu
Nov 04 14:15:36 kubernetes microk8s.daemon-apiserver[7219]: + export LD_LIBRARY_PATH=/var/lib/snapd/lib/g
/2143/usr/lib:/snap/microk8s/2143/lib/x86_64-linux-gnu:/snap/microk8s/2143/usr/lib/x86_64-linux-gnu
Nov 04 14:15:37 kubernetes microk8s.daemon-proxy[7333]: + export PATH=/snap/microk8s/2143/usr/sbin:/snap
n:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
Nov 04 14:15:37 kubernetes microk8s.daemon-proxy[7333]: + export LD_LIBRARY_PATH=/snap/microk8s/2143/lib
2143/usr/lib/x86_64-linux-gnu
Nov 04 14:15:37 kubernetes microk8s.daemon-proxy[7333]: + export LD_LIBRARY_PATH=/var/lib/snapd/lib/gl:/v
3/usr/lib:/snap/microk8s/2143/lib/x86_64-linux-gnu:/snap/microk8s/2143/usr/lib/x86_64-linux-gnu
Nov 04 14:15:37 kubernetes microk8s.daemon-kubelet[7424]: + export PATH=/snap/microk8s/2143/usr/sbin:/sna
bin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
Nov 04 14:15:37 kubernetes microk8s.daemon-kubelet[7424]: + export LD_LIBRARY_PATH=/snap/microk8s/2143/l
s/2143/usr/lib/x86_64-linux-gnu
Nov 04 14:15:37 kubernetes microk8s.daemon-kubelet[7424]: + export LD_LIBRARY_PATH=/var/lib/snapd/lib/gl:
143/usr/lib:/snap/microk8s/2143/lib/x86_64-linux-gnu:/snap/microk8s/2143/usr/lib/x86_64-linux-gnu
Nov 04 14:15:38 kubernetes microk8s.daemon-containerd[7097]: + export CILIU SOCK=/var/snap/microk8s/2143/

```

Question 6 of 6

What is the token that is continuously logged by the hidden pod?

618aa4

```

linux@kubernetes:~$ kubectl get po --all-namespaces
NAMESPACE      NAME                                READY   STATUS
different-ns    hidden-pod                          1/1     Running
default         nginx                               1/1     Running
container-registry registry-9b57d9df8-bnk6w             1/1     Running
kube-system     hostpath-provisioner-5c65fbbdb4f-cgqvc 1/1     Running
kube-system     calico-kube-controllers-847c8c99d-gxbsz 1/1     Running
kube-system     calico-node-qrhpx                    1/1     Running
kube-system     coredns-86f78bb79c-vkcsb             1/1     Running
linux@kubernetes:~$ kubectl logs hidden-pod -n different-ns
Your token is not ready yet
Your token is 618aa4
Your token is 618aa4

```