

Exam Questions CKAD

Certified Kubernetes Application Developer (CKAD) Program

<https://www.2passeasy.com/dumps/CKAD/>



NEW QUESTION 1

Exhibit:



Context

You sometimes need to observe a pod's logs, and write those logs to a file for further analysis. Task

Please complete the following;

- Deploy the counter pod to the cluster using the provided YAMLSpec file at /opt/KDOB00201/counter.yaml
- Retrieve all currently available application logs from the running pod and store them in the file /opt/KDOB00201/log_Output.txt, which has already been created

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Solution:

```
student@node-1:~$ kubectl create -f /opt/KDOB00201/counter.yaml
pod/counter created
student@node-1:~$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
counter       1/1     Running   0           10s
liveness-http 1/1     Running   0           6h45m
nginx-101     1/1     Running   0           6h46m
nginx-configmap 1/1     Running   0           107s
nginx-secret  1/1     Running   0           7m21s
poller        1/1     Running   0           6h46m
student@node-1:~$ kubectl logs counter
1: 2b305101817ae25ca60ae46510fb6d11
2: 3648cf2eae95ab680dba8f195f891af4
3: 65c8bbd4dbf70bf81f2a0984a3a44ede
4: 40d3a9c8e46f5533bb4828fbe5c8d038
5: 390442d2530a90c3602901e3fe999ac8
6: b71d95187417e139effb33af77681040
7: 66a8e55a6491e756d2d0549ad6ab90a7
8: ff2b3d583b64125d2f9129c443bb37ff
9: b6c6a12b6e77944ed8baaf6c242dae4
10: bfcc9a894a0604fc4b814b37d0a200a4
student@node-1:~$ kubectl logs counter > /opt/KDOB00201/log_output.txt
student@node-1:~$
```

```
student@node-1:~$ kubectl logs counter > /opt/KDOB00201/log_output.txt
student@node-1:~$ kubectl logs counter > /opt/KDOB00201/log_output.txt
student@node-1:~$ cat /opt/KDOB00201/log_output.txt
```

```
Readme Web Terminal THE LINUX FOUNDATION

student@node-1:~$ kubectl logs counter > /opt/KDOB00201/log_output.txt
student@node-1:~$ cat /opt/KDOB00201/log_output.txt
1: 2b305101817ae25ca60ae46510fb6d11
2: 3648cf2eae95ab680dba8f195f891af4
3: 65c8bbd4dbf70bf81f2a0984a3a44ede
4: 40d3a9c8e46f5533bb4828f8e5c8d038
5: 390442d2530a90c3602901e3fe999ac8
6: b71d95187417e139effb33af77681040
7: 66a8e55a6491e756d2d0549ad6ab90a7
8: ff2b3d583b64125d2f9129c443bb37ff
9: b6c6a12b6e77944ed8baaaf6c242dae4
10: bfcc9a894a0604fc4b814b37d0a200a4
11: 5493cd16a1790a5fb9512b0c9d4c5dd1
12: 03f169e93e6143438e6dfe4ecb3cc9ed
13: 764b37fe611373c42d0b47154041f6eb
14: 1a56fbc1896b0ee6394136166281839e
15: ecc492eb17715de090c47345a98d98d3
16: 7974a6bec0fb44b6b8bbfc71aa3fbc74
17: 9ae01bef01748b12cc9f97a5f9f72cd6
18: 23fb22ee34d4272e4c9e005f1774515f
19: ec7e1a5d314da9a0ad45d53be5a7acae
20: 0bccdd8ee02cd42029e8162cd1c1197c
21: d6851ea43546216b95bcb81ced997102
22: 7ed9a38ea8bf0d86206569481442af44
23: 29b8416ddc63dbfcb987ab3c8198e9fe
24: 1f2062001df51a108ab25010f506716f
student@node-1:~$
```

NEW QUESTION 2

Exhibit:

```
Set configuration context:

[student@node-1] $ | kubectl config
use-context dk8s
```

Context

A user has reported an application is unteachable due to a failing livenessProbe . Task

Perform the following tasks:

- Find the broken pod and store its name and namespace to /opt/KDOB00401/broken.txt in the format:

```
<namespace>/<pod>
```

The output file has already been created

- Store the associated error events to a file /opt/KDOB00401/error.txt, The output file has already been created. You will need to use the -o wide output specifier with your command
- Fix the issue.

```
The associated deployment could be
running in any of the following
namespaces:

• qa
• test
• production
• alan
```

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Solution:

Create the Pod: `kubectl create -f`

<http://k8s.io/docs/tasks/configure-pod-container/execute-liveness-probe>

`exec-liveness.yaml`

Within 30 seconds, view the Pod events: `kubectl describe pod liveness-exec`

The output indicates that no liveness probes have failed yet:

FirstSeen LastSeen Count From SubobjectPath Type Reason Message

```
-----
24s 24s 1{default-scheduler } Normal Scheduled Successfully assigned liveness-exec to worker0
23s 23s 1{kubelet worker0} spec.containers{liveness} Normal Pulling pulling image "gcr.io/google_containers/busybox"
23s 23s 1{kubelet worker0} spec.containers{liveness} Normal Pulled Successfully pulled image "gcr.io/google_containers/busybox"
23s 23s 1{kubelet worker0} spec.containers{liveness} Normal Created Created container with docker id86849c15382e; Security:[seccomp=unconfined]
23s 23s 1{kubelet worker0} spec.containers{liveness} Normal Started Started container with docker id86849c15382e
```

After 35 seconds, view the Pod events again: `kubectl describe pod liveness-exec`

At the bottom of the output, there are messages indicating that the liveness probes have failed, and the containers have been killed and recreated.

FirstSeen LastSeen Count From SubobjectPath Type Reason Message

```
-----
37s 37s 1{default-scheduler } Normal Scheduled Successfully assigned liveness-exec to worker0
36s 36s 1{kubelet worker0} spec.containers{liveness} Normal Pulling pulling image "gcr.io/google_containers/busybox"
36s 36s 1{kubelet worker0} spec.containers{liveness} Normal Pulled Successfully pulled image "gcr.io/google_containers/busybox"
36s 36s 1{kubelet worker0} spec.containers{liveness} Normal Created Created container with docker id86849c15382e; Security:[seccomp=unconfined]
36s 36s 1{kubelet worker0} spec.containers{liveness} Normal Started Started container with docker id86849c15382e
```

```
2s 2s 1{kubelet worker0} spec.containers{liveness} Warning Unhealthy Liveness probe failed: cat: can't open
'/tmp/healthy': No such file or directory
```

Wait another 30 seconds, and verify that the Container has been restarted: `kubectl get pod liveness-exec`

The output shows that RESTARTS has been incremented:

NAMEREADY STATUS RESTARTS AGE

liveness-exec 1/1 Running 1m

NEW QUESTION 3

Exhibit:



Task

A deployment is failing on the cluster due to an incorrect image being specified. Locate the deployment, and fix the problem.

Pending

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Suggest the Solution.

NEW QUESTION 4

Exhibit:



Context

Your application's namespace requires a specific service account to be used.

Task

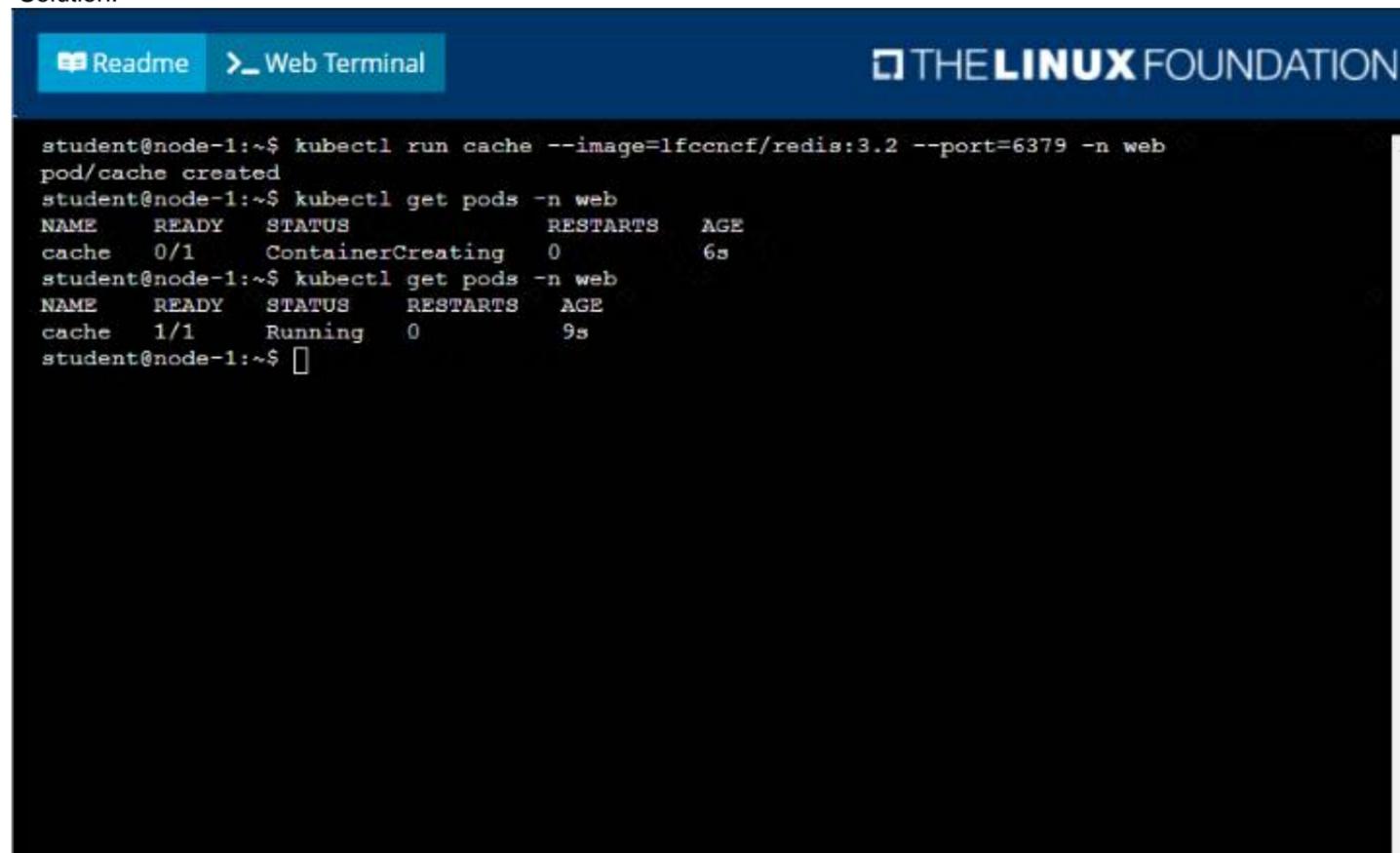
Update the app-deployment in the production namespace to run as the restricted-service-account. The service account has already been created.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Solution:



```
student@node-1:~$ kubectl run cache --image=lfcncf/redis:3.2 --port=6379 -n web
pod/cache created
student@node-1:~$ kubectl get pods -n web
NAME      READY   STATUS             RESTARTS   AGE
cache     0/1     ContainerCreating   0           6s
student@node-1:~$ kubectl get pods -n web
NAME      READY   STATUS    RESTARTS   AGE
cache     1/1     Running   0           9s
student@node-1:~$
```

NEW QUESTION 5

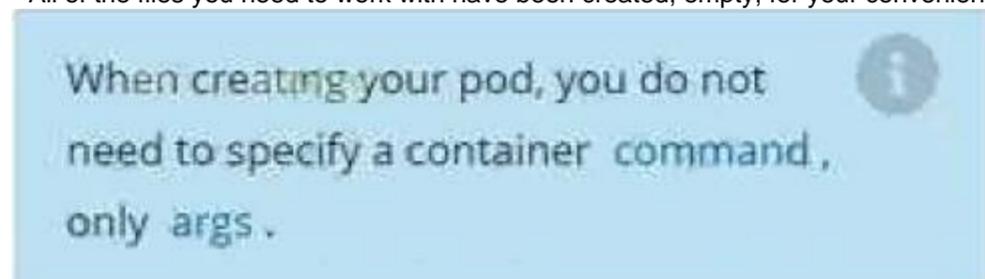
Context

Anytime a team needs to run a container on Kubernetes they will need to define a pod within which to run the container.

Task

Please complete the following:

- Create a YAML formatted pod manifest /opt/KDPD00101/pod1.yml to create a pod named app1 that runs a container named app1cont using image lfcncf/arg-output with these command line arguments: -lines 56 -F
- Create the pod with the kubectl command using the YAML file created in the previous step
- When the pod is running display summary data about the pod in JSON format using the kubectl command and redirect the output to a file named /opt/KDPD00101/out1.json
- All of the files you need to work with have been created, empty, for your convenience



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Solution:



```
student@node-1:~$ kubectl run app1 --image=lfcncf/arg-output --dry-run=client -o yaml > /opt/KDPD00101/pod1.yml
student@node-1:~$ vim /opt/KDPD00101/pod1.yml
```

Readme Web Terminal THE LINUX FOUNDATION

```

apiVersion: v1
kind: Pod
metadata:
  creationTimestamp: null
  labels:
    run: appl
    name: appl
spec:
  containers:
  - image: lfcncf/arg-output
    name: appl
    resources: {}
  dnsPolicy: ClusterFirst
  restartPolicy: Always
status: {}
~
~
~
~
~
~
~
~
~
~
~/opt/KDPD00101/pod1.yml" 15L, 242C 3,1 All

```

Readme Web Terminal THE LINUX FOUNDATION

```

apiVersion: v1
kind: Pod
metadata:
  labels:
    run: appl
    name: appl
spec:
  containers:
  - image: lfcncf/arg-output
    name: appl
    args: ["--lines", "56", "-f"]
~
~
~
~
~
~
~
~
~
~
11,30 All

```

```

pod/appl created
student@node-1:~$ kubectl get pods
NAME          READY   STATUS             RESTARTS   AGE
appl          0/1     ContainerCreating  0           5s
counter       1/1     Running            0           4m44s
liveness-http 1/1     Running            0           6h50m
nginx-101     1/1     Running            0           6h51m
nginx-configmap 1/1     Running            0           6m21s
nginx-secret  1/1     Running            0           11m
poller        1/1     Running            0           6h51m
student@node-1:~$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
appl          1/1     Running  0           26s
counter       1/1     Running  0           5m5s
liveness-http 1/1     Running  0           6h50m
nginx-101     1/1     Running  0           6h51m
nginx-configmap 1/1     Running  0           6m42s
nginx-secret  1/1     Running  0           12m
poller        1/1     Running  0           6h51m
student@node-1:~$ kubectl delete pod appl
pod "appl" deleted
student@node-1:~$ vim /opt/KDPD00101/pod1.yml

```

```

Readme Web Terminal
nginx-configmap 1/1 Running 0 6m2
nginx-secret 1/1 Running 0 11m
poller 1/1 Running 0 6h5
student@node-1:~$ kubectl get pods
NAME READY STATUS RESTARTS AGE
app1 1/1 Running 0 26s
counter 1/1 Running 0 5m5s
liveness-http 1/1 Running 0 6h50m
nginx-101 1/1 Running 0 6h51m
nginx-configmap 1/1 Running 0 6m42s
nginx-secret 1/1 Running 0 12m
poller 1/1 Running 0 6h51m
student@node-1:~$ kubectl delete pod app1
pod "app1" deleted
student@node-1:~$ vim /opt/KDPD00101/pod1.yml
student@node-1:~$ kubectl create -f /opt/KDPD00101/pod1.yml
pod/app1 created
student@node-1:~$ kubectl get pods
NAME READY STATUS RESTARTS AGE
app1 1/1 Running 0 20s
counter 1/1 Running 0 6m57s
liveness-http 1/1 Running 0 6h52m
nginx-101 1/1 Running 0 6h53m
nginx-configmap 1/1 Running 0 8m34s
nginx-secret 1/1 Running 0 14m
poller 1/1 Running 0 6h53m
student@node-1:~$ kubectl get pod app1 -o json >

```

```

Readme Web Terminal THE LINUX FOUNDATION
poller 1/1 Running 0 6h51m
student@node-1:~$ kubectl get pods
NAME READY STATUS RESTARTS AGE
app1 1/1 Running 0 26s
counter 1/1 Running 0 5m5s
liveness-http 1/1 Running 0 6h50m
nginx-101 1/1 Running 0 6h51m
nginx-configmap 1/1 Running 0 6m42s
nginx-secret 1/1 Running 0 12m
poller 1/1 Running 0 6h51m
student@node-1:~$ kubectl delete pod app1
pod "app1" deleted
student@node-1:~$ vim /opt/KDPD00101/pod1.yml
student@node-1:~$ kubectl create -f /opt/KDPD00101/pod1.yml
pod/app1 created
student@node-1:~$ kubectl get pods
NAME READY STATUS RESTARTS AGE
app1 1/1 Running 0 20s
counter 1/1 Running 0 6m57s
liveness-http 1/1 Running 0 6h52m
nginx-101 1/1 Running 0 6h53m
nginx-configmap 1/1 Running 0 8m34s
nginx-secret 1/1 Running 0 14m
poller 1/1 Running 0 6h53m
student@node-1:~$ kubectl get pod app1 -o json > /opt/KDPD00101/out1.json
student@node-1:~$
student@node-1:~$

```

NEW QUESTION 6

Exhibit:

```

Set configuration context:
[student@node-1] $ | kubectl config
use-context nk8s

```

Task

You have rolled out a new pod to your infrastructure and now you need to allow it to communicate with the web and storage pods but nothing else. Given the running pod kdsn00201 -newpod edit it to use a network policy that will allow it to send and receive traffic only to and from the web and storage pods.

All work on this item should be conducted in the kdsn00201 namespace.

All required NetworkPolicy resources are already created and ready for use as appropriate. You should not create, modify or delete any network policies whilst completing this item.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Suggest the Solution.

NEW QUESTION 7

Exhibit:

```
Set configuration context:
[student@node-1] $ | kubectl config
use-context k8s
```

Context

As a Kubernetes application developer you will often find yourself needing to update a running application. Task Please complete the following:

- Update the app deployment in the kdpd00202 namespace with a maxSurge of 5% and a maxUnavailable of 2%
- Perform a rolling update of the web1 deployment, changing the lfcncf/ngmx image version to 1.13
- Roll back the app deployment to the previous version

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Solution:

```
Readme Web Terminal THE LINUX FOUNDATION
student@node-1:~$ kubectl edit deployment app -n kdpd00202
```

```

Readme Web Terminal THE LINUX FOUNDATION

uid: 1dfa2527-5c61-46a9-8dd3-e24643d3ce14
spec:
  progressDeadlineSeconds: 600
  replicas: 10
  revisionHistoryLimit: 10
  selector:
    matchLabels:
      app: nginx
  strategy:
    rollingUpdate:
      maxSurge: 5%
      maxUnavailable: 2
    type: RollingUpdate
  template:
    metadata:
      creationTimestamp: null
      labels:
        app: nginx
    spec:
      containers:
      - image: lfcncf/nginx:1.13
        imagePullPolicy: IfNotPresent
        name: nginx
        ports:
        - containerPort: 80
          protocol: TCP
:wq!

```

```

Readme Web Terminal THE LINUX FOUNDATION

student@node-1:~$ kubectl edit deployment app -n kdpd00202
deployment.apps/app edited
student@node-1:~$ kubectl rollout status deployment app -n kdpd00202
Waiting for deployment "app" rollout to finish: 6 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 7 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 7 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 7 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 8 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 8 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 8 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 8 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 1 old replicas are pending termination...
Waiting for deployment "app" rollout to finish: 8 of 10 updated replicas are available...
Waiting for deployment "app" rollout to finish: 9 of 10 updated replicas are available...
deployment "app" successfully rolled out
student@node-1:~$ kubectl rollout undo deployment app -n kdpd00202
deployment.apps/app rolled back
student@node-1:~$ kubectl rollout status deployment app -n kdpd00202

```

```

student@node-1:~$ kubectl rollout status deployment app -n kdpd00202
Waiting for deployment "app" rollout to finish: 6 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 6 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 6 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 6 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 7 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 7 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 9 out of 10 new replicas have been updated...
Waiting for deployment "app" rollout to finish: 1 old replicas are pending termination...
Waiting for deployment "app" rollout to finish: 1 old replicas are pending termination...
Waiting for deployment "app" rollout to finish: 1 old replicas are pending termination...
Waiting for deployment "app" rollout to finish: 8 of 10 updated replicas are available...
Waiting for deployment "app" rollout to finish: 9 of 10 updated replicas are available...
deployment "app" successfully rolled out
student@node-1:~$

```

NEW QUESTION 8

Exhibit:



Context

You are tasked to create a ConfigMap and consume the ConfigMap in a pod using a volume mount. Task Please complete the following:


```
student@node-1:~$ kubectl create configmap another-config --from-literal=key4=value3
configmap/another-config created
student@node-1:~$ kubectl get configmap
NAME          DATA      AGE
another-config 1          5s
student@node-1:~$ kubectl run nginx-configmap --image=nginx --dry-run=client -o yaml > nginx_configmap.yaml
student@node-1:~$ vim nginx_configmap.yaml ^C
student@node-1:~$ mv nginx_configmap.yaml nginx_configmap.yaml
student@node-1:~$ vim nginx_configmap.yaml
student@node-1:~$
```

Readme
Web Terminal
THE LINUX FOUNDATION

```
student@node-1:~$ kubectl create f nginx_configmap.yaml
Error: must specify one of -f and -k

error: unknown command "f nginx_configmap.yaml"
See 'kubectl create -h' for help and examples
student@node-1:~$ kubectl create -f nginx_configmap.yaml
error: error validating "nginx_configmap.yaml": error validating data: ValidationError(Pod.spec.containers[1]): unknown field "mountPath" in io.k8s.api.core.v1.Container; if you choose to ignore these errors, turn validation off with --validate=false
student@node-1:~$ vim nginx_configmap.yaml
student@node-1:~$ kubectl create -f nginx_configmap.yaml
pod/nginx-configmap created
student@node-1:~$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
liveness-http 1/1     Running   0           6h44m
nginx-101     1/1     Running   0           6h45m
nginx-configmap 0/1     ContainerCreating 0           5s
nginx-secret  1/1     Running   0           5m39s
poller        1/1     Running   0           6h44m
student@node-1:~$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
liveness-http 1/1     Running   0           6h44m
nginx-101     1/1     Running   0           6h45m
nginx-configmap 1/1     Running   0           8s
nginx-secret  1/1     Running   0           5m42s
poller        1/1     Running   0           6h45m
student@node-1:~$
```

NEW QUESTION 10

.....

THANKS FOR TRYING THE DEMO OF OUR PRODUCT

Visit Our Site to Purchase the Full Set of Actual CKAD Exam Questions With Answers.

We Also Provide Practice Exam Software That Simulates Real Exam Environment And Has Many Self-Assessment Features. Order the CKAD Product From:

<https://www.2passeasy.com/dumps/CKAD/>

Money Back Guarantee

CKAD Practice Exam Features:

- * CKAD Questions and Answers Updated Frequently
- * CKAD Practice Questions Verified by Expert Senior Certified Staff
- * CKAD Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- * CKAD Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year