



CKA^{Q&As}

Certified Kubernetes Administrator (CKA) Program

Pass Linux Foundation CKA Exam with 100% Guarantee

Free Download Real Questions & Answers **PDF** and **VCE** file from:

<https://www.geekcert.com/cka.html>

100% Passing Guarantee
100% Money Back Assurance

Following Questions and Answers are all new published by Linux Foundation Official Exam Center

- ⚙️ **Instant Download** After Purchase
- ⚙️ **100% Money Back** Guarantee
- ⚙️ **365 Days** Free Update
- ⚙️ **800,000+** Satisfied Customers





QUESTION 1

Create a namespace called 'development' and a pod with image nginx called nginx on this namespace.

Correct Answer: Check the answer in explanation.

```
kubectl create namespace development kubectl run nginx --image=nginx --restart=Never -n development
```

QUESTION 2

SIMULATION

Create a file:

/opt/KUCC00302/kucc00302.txt that lists all pods that implement service baz in namespace development.

The format of the file should be one pod name per line.

Correct Answer: Check the answer in explanation.

```
root@node-1:~#  
root@node-1:~# k describe svc baz -n development  
Name:          baz  
Namespace:     development  
Labels:        <none>  
Annotations:   <none>  
Selector:      name=foo  
Type:          ClusterIP  
IP:            10.104.252.175  
Port:          <unset> 80/TCP  
TargetPort:    9376/TCP  
Endpoints:     10.244.1.5:9376,10.244.2.3:9376,10.244.2.6:9376  
Session Affinity: None  
Events:        <none>  
root@node-1:~# k get po -l name=foo -n development  
NAME                READY   STATUS    RESTARTS   AGE  
pod-kucc00302-847878 1/1     Running   0           6h35m  
pod-kucc00302-983457 1/1     Running   0           6h35m  
pod-kucc00302-985953 1/1     Running   0           6h35m  
root@node-1:~# k get po -l name=foo -n development -o NAME  
pod/pod-kucc00302-847878  
pod/pod-kucc00302-983457  
pod/pod-kucc00302-985953  
root@node-1:~# k get po -l name=foo -n development -o NAME > /opt/KUCC00302/kucc00302.txt  
root@node-1:~# vim /opt/KUCC00302/kucc00302.txt
```

A screenshot of a web terminal interface. At the top, there is a dark blue header bar. On the left side of the header, there are two buttons: "Readme" with a document icon and "Web Terminal" with a terminal icon. On the right side of the header, the text "THE LINUX FOUNDATION" is displayed in white, with a small logo to the left of "THE". The main area of the terminal is black. It contains a list of pod IDs: "pod-kucc00302-847878", "pod-kucc00302-983457", and "pod-kucc00302-985953". Below these, there are several lines of tilde characters (~). At the bottom left, there is a prompt ": wq" followed by a cursor. On the right side of the terminal area, there is a vertical scrollbar.

Readme

Web Terminal

THE **LINUX** FOUNDATION

```
Name: baz
Namespace: development
Labels: <none>
Annotations: <none>
Selector: name=foo
Type: ClusterIP
IP: 10.104.252.175
Port: <unset> 80/TCP
TargetPort: 9376/TCP
Endpoints: 10.244.1.5:9376,10.244.2.3:9376,10.244.2.6:9376
Session Affinity: None
Events: <none>
root@node-1:~# k get po -l name=foo -n development
NAME                                READY    STATUS    RESTARTS   AGE
pod-kucc00302-847878                1/1     Running   0           6h35m
pod-kucc00302-983457                1/1     Running   0           6h35m
pod-kucc00302-985953                1/1     Running   0           6h35m
root@node-1:~# k get po -l name=foo -n development -o NAME
pod/pod-kucc00302-847878
pod/pod-kucc00302-983457
pod/pod-kucc00302-985953
root@node-1:~# k get po -l name=foo -n development -o NAME > /opt/KUCC00302/kucc00302.txt
root@node-1:~# vim /opt/KUCC00302/kucc00302.txt
root@node-1:~# vim /opt/KUCC00302/kucc00302.txt
root@node-1:~#
```



QUESTION 3

SIMULATION

Given a partially-functioning Kubernetes cluster, identify symptoms of failure on the cluster.

Determine the node, the failing service, and take actions to bring up the failed service and restore the health of the cluster. Ensure that any changes are made permanently.

You can ssh to the relevant I nodes (bk8s-master-0 or bk8s-node-0) using:

```
[student@node-1] $ ssh
```

You can assume elevated privileges on any node in the cluster with the following command:

```
[student@nodename] $ | sudo -i
```

Correct Answer: Check the answer in explanation.

solution

```
Readme Web Terminal THE LINUX FOUNDATION

root@node-1:~#
root@node-1:~# kubectl config use-context bk8s
Switched to context "bk8s".
root@node-1:~# ssh bk8s-master-0
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.4.0-1109-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

 * Are you ready for Kubernetes 1.19? It's nearly here! Try RC3 with
   sudo snap install microk8s --channel=1.19/candidate --classic

   https://microk8s.io/ has docs and details.

4 packages can be updated.
1 update is a security update.

New release '18.04.5 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

student@bk8s-master-0:~$ sudo -i
root@bk8s-master-0:~# vim /var/lib/kubelet/config.yaml
```



Readme Web Terminal

THE LINUX FOUNDATION

```
authorization:
  mode: Webhook
  webhook:
    cacheAuthorizedTTL: 0s
    cacheUnauthorizedTTL: 0s
clusterDNS:
- 10.96.0.10
clusterDomain: cluster.local
cpuManagerReconcilePeriod: 0s
evictionPressureTransitionPeriod: 0s
fileCheckFrequency: 0s
healthzBindAddress: 127.0.0.1
healthzPort: 10248
httpCheckFrequency: 0s
imageMinimumGCAge: 0s
kind: KubeletConfiguration
nodeStatusReportFrequency: 0s
nodeStatusUpdateFrequency: 0s
rotateCertificates: true
runtimeRequestTimeout: 0s
staticPodPath: /etc/kubernetes/manifests
streamingConnectionIdleTimeout: 0s
syncFrequency: 0s
volumeStatsAggPeriod: 0s
:Wg
```

Readme Web Terminal

THE LINUX FOUNDATION

<https://microk8s.io/> has docs and details.

4 packages can be updated.
1 update is a security update.

New release '18.04.5 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

```
student@bk8s-master-0:~$ sudo -i
root@bk8s-master-0:~# vim /var/lib/kubelet/config.yaml
root@bk8s-master-0:~# systemctl restart kubelet
root@bk8s-master-0:~# systemctl enable kubelet
root@bk8s-master-0:~# kubectl get nodes
```

NAME	STATUS	ROLES	AGE	VERSION
bk8s-master-0	Ready	master	77d	v1.18.2
bk8s-node-0	Ready	<none>	77d	v1.18.2

```
root@bk8s-master-0:~#
root@bk8s-master-0:~# exit
logout
student@bk8s-master-0:~$ exit
logout
Connection to 10.250.4.77 closed.
root@node-1:~#
```




QUESTION 4

Get list of all the pods showing name and namespace with a jsonpath expression.

Correct Answer: Check the answer in explanation.

```
kubectl get pods -o=jsonpath="{.items[*][\metadata.name\ , \metadata.namespace\]}"
```

QUESTION 5

SIMULATION

Configure the kubelet systemd- managed service, on the node labelled with name=wk8s-node-1, to launch a pod containing a single container of Image httpd named webtool automatically. Any spec files required should be placed in the /etc/

kubernetes/manifests directory on the node.

You can ssh to the appropriate node using:

```
[student@node-1] $ ssh wk8s-node-1
```

You can assume elevated privileges on the node with the following command:

```
[student@wk8s-node-1] $ | sudo -i
```

Correct Answer: Check the answer in explanation.

```
student@node-1:~$ kubectl config use-context wk8s
Switched to context "wk8s".
student@node-1:~$ kubectl get nodes
NAME                STATUS    ROLES                  AGE    VERSION
wk8s-master-0       Ready     control-plane,master   67d    v1.23.1
wk8s-node-0         NotReady  <none>                 67d    v1.23.1
wk8s-node-1         Ready     <none>                 67d    v1.23.1
student@node-1:~$ kubectl describe nodes wk8s-node-0
```



```
ephemeral-storage: 65515382676
hugepages-1Gi: 0
hugepages-2Mi: 0
memory: 31724872Ki
pods: 110

System Info:
Machine ID: 2107786af1744dfbbf02d9f6fac470b0
System UUID: ec22a34d-9b09-cea1-d7eb-1b47b08d2151
Boot ID: 3b22c15f-7dd1-4f61-b5c2-f24d9bd8b281
Kernel Version: 5.11.0-1028-aws
OS Image: Ubuntu 20.04.3 LTS
Operating System: linux
Architecture: amd64
Container Runtime Version: docker://20.10.7
Kubelet Version: v1.23.1
Kube-Proxy Version: v1.23.1
PodCIDR: 10.244.1.0/24
PodCIDRs: 10.244.1.0/24
Non-terminated Pods: (2 in total)
-----
Namespace      Name      CPU Requests  CPU Limits  Memory Requests  Memory Limits  Age
-----
kube-system     kube-flannel-ds-rbx8  100m (0%)    100m (0%)    50Mi (0%)        50Mi (0%)      67d
kube-system     kube-proxy-xfzxm      0 (0%)       0 (0%)       0 (0%)           0 (0%)         67d

Allocated resources:
(Total limits may be over 100 percent, i.e., overcommitted.)
Resource      Requests  Limits
-----
cpu            100m (0%)  100m (0%)
memory         50Mi (0%)  50Mi (0%)
ephemeral-storage  0 (0%)     0 (0%)
hugepages-1Gi  0 (0%)     0 (0%)
hugepages-2Mi  0 (0%)     0 (0%)
Events:       <none>

student@node-1:~$
```

```
Unschedulable: false
Lease:
HolderIdentity: wk8s-node-0
AcquireTime: <unset>
RenewTime: Mon, 25 Apr 2022 09:29:25 +0000
Conditions:
Type      Status      LastHeartbeatTime      LastTransitionTime      Reason      Me
-----
NetworkUnavailable False      Mon, 25 Apr 2022 09:21:15 +0000 Mon, 25 Apr 2022 09:21:15 +0000 FlannelIsUp      Fl
annel is running on this node
MemoryPressure Unknown    Mon, 25 Apr 2022 09:25:20 +0000 Mon, 25 Apr 2022 09:30:07 +0000 NodeStatusUnknown Ku
belet stopped posting node status.
DiskPressure Unknown    Mon, 25 Apr 2022 09:25:20 +0000 Mon, 25 Apr 2022 09:30:07 +0000 NodeStatusUnknown Ku
belet stopped posting node status.
PIDPressure Unknown    Mon, 25 Apr 2022 09:25:20 +0000 Mon, 25 Apr 2022 09:30:07 +0000 NodeStatusUnknown Ku
belet stopped posting node status.
Ready Unknown    Mon, 25 Apr 2022 09:25:20 +0000 Mon, 25 Apr 2022 09:30:07 +0000 NodeStatusUnknown Ku
belet stopped posting node status.
Addresses:
InternalIP: 10.250.5.52
Hostname: wk8s-node-0
Capacity:
cpu: 16
ephemeral-storage: 71088740Ki
hugepages-1Gi: 0
hugepages-2Mi: 0
memory: 31827272Ki
pods: 110
Allocatable:
cpu: 16
ephemeral-storage: 65515382676
hugepages-1Gi: 0
```



```
ephemeral-storage: 65515382676
hugepages-1Gi: 0
hugepages-2Mi: 0
memory: 31724872Ki
pods: 110
System Info:
Machine ID: 2107786af1744dfbbf02d9f6fac470b0
System UUID: ec22a34d-9b09-cea1-d7eb-1b47b08d2151
Boot ID: 3b22c15f-7dd1-4f61-b5c2-f24d9bd8b281
Kernel Version: 5.11.0-1028-aws
OS Image: Ubuntu 20.04.3 LTS
Operating System: linux
Architecture: amd64
Container Runtime Version: docker://20.10.7
Kubelet Version: v1.23.1
Kube-Proxy Version: v1.23.1
PodCIDR: 10.244.1.0/24
PodCIDRs: 10.244.1.0/24
Non-terminated Pods: (2 in total)
-----
Namespace      Name      CPU Requests  CPU Limits  Memory Requests  Memory Lim
-----
kube-system    kube-flannel-ds-rxbx8  100m (0%)    100m (0%)    50Mi (0%)        50Mi (0%)
kube-system    kube-proxy-xfxzm      0 (0%)       0 (0%)       0 (0%)           0 (0%)
Allocated resources:
(Total limits may be over 100 percent, i.e., overcommitted.)
Resource      Requests  Limits
-----
cpu           100m (0%) 100m (0%)
memory        50Mi (0%) 50Mi (0%)
ephemeral-storage 0 (0%)    0 (0%)
hugepages-1Gi 0 (0%)    0 (0%)
hugepages-2Mi 0 (0%)    0 (0%)
Events: <none>
student@node-1:~$ kubectl config use-context wk8s
Switched to context "wk8s".
student@node-1:~$ kubectl get nodes
NAME          STATUS    ROLES    AGE   VERSION
wk8s-master-0 Ready     control-plane,master 67d   v1.23.1
wk8s-node-0   NotReady <none>   67d   v1.23.1
wk8s-node-1   Ready     <none>   67d   v1.23.1
student@node-1:~$ ssh wk8s-node-0
Warning: Permanently added '10.250.5.52' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.11.0-1028-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Mon Apr 25 09:31:01 UTC 2022

System load: 2.05          Processes:              40
Usage of /:  83.2% of 67.79GB Users logged in:       0
Memory usage: 0%          IPv4 address for docker0: 172.17.0.1
Swap usage:  0%           IPv4 address for eth0:   10.250.5.52

30 updates can be applied immediately.
15 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

student@wk8s-node-0:~$ sudo -i
root@wk8s-node-0:~# systemctl enable --now kubelet
Created symlink /etc/systemd/system/multi-user.target.wants/kubelet.service → /lib/systemd/system/kubelet.se
root@wk8s-node-0:~# systemctl restart kubelet
root@wk8s-node-0:~# systemctl status kube
```




```
The list of available updates is more than a week old.
To check for new updates run: sudo apt update

student@wk8s-node-0:~$ sudo -i
root@wk8s-node-0:~# systemctl enable --now kubelet
Created symlink /etc/systemd/system/multi-user.target.wants/kubelet.service → /lib/systemd/system/kubelet.service.
root@wk8s-node-0:~# systemctl restart kubelet
root@wk8s-node-0:~# systemctl status kubelet
● kubelet.service - kubelet: The Kubernetes Node Agent
   Loaded: loaded (/lib/systemd/system/kubelet.service; enabled; vendor preset: enabled)
   Drop-In: /etc/systemd/system/kubelet.service.d
            └─10-kubeadm.conf, 11-cgroups.conf
   Active: active (running) since Mon 2022-04-25 15:53:40 UTC; 10s ago
     Docs: https://kubernetes.io/docs/home/
   Process: 48272 ExecStartPre=/bin/sleep 10 (code=exited, status=0/SUCCESS)
    Main PID: 48285 (kubelet)
       Tasks: 27 (limit: 37281)
      Memory: 36.6M
         CPU: 530ms
    CGroup: /system.slice/kubelet.service
            └─48285 /usr/bin/kubelet --bootstrap-kubeconfig=/etc/kubernetes/bootstrap-kubelet.conf --kubeconfig=/etc/kube

Apr 25 15:53:41 wk8s-node-0 kubelet[48285]: I0425 15:53:41.273180 48285 topology_manager.go:200] "Topology Admit Handler"
Apr 25 15:53:41 wk8s-node-0 kubelet[48285]: I0425 15:53:41.281123 48285 reconciler.go:216] "operationExecutor.VerifyConte
Apr 25 15:53:41 wk8s-node-0 kubelet[48285]: I0425 15:53:41.281155 48285 reconciler.go:216] "operationExecutor.VerifyConte
Apr 25 15:53:41 wk8s-node-0 kubelet[48285]: I0425 15:53:41.281178 48285 reconciler.go:216] "operationExecutor.VerifyConte
Apr 25 15:53:41 wk8s-node-0 kubelet[48285]: I0425 15:53:41.281199 48285 reconciler.go:216] "operationExecutor.VerifyConte
Apr 25 15:53:41 wk8s-node-0 kubelet[48285]: I0425 15:53:41.281239 48285 reconciler.go:216] "operationExecutor.VerifyConte
Apr 25 15:53:41 wk8s-node-0 kubelet[48285]: I0425 15:53:41.281278 48285 reconciler.go:216] "operationExecutor.VerifyConte
Apr 25 15:53:41 wk8s-node-0 kubelet[48285]: I0425 15:53:41.281310 48285 reconciler.go:216] "operationExecutor.VerifyConte
Apr 25 15:53:41 wk8s-node-0 kubelet[48285]: I0425 15:53:41.281330 48285 reconciler.go:216] "operationExecutor.VerifyConte
Apr 25 15:53:41 wk8s-node-0 kubelet[48285]: I0425 15:53:41.281339 48285 reconciler.go:157] "Reconciler: start to sync sta

root@wk8s-node-0:~# exit
logout
student@wk8s-node-0:~$ exit
logout
Connection to 10.250.5.52 closed.
student@node-1:~$ kubectl get nodes
NAME             STATUS    ROLES                  AGE   VERSION
wk8s-master-0    Ready     control-plane,master   67d   v1.23.1
wk8s-node-0      Ready     <none>                 67d   v1.23.1
wk8s-node-1      Ready     <none>                 67d   v1.23.1
student@node-1:~$
```

[CKA PDF Dumps](#)[CKA VCE Dumps](#)[CKA Study Guide](#)