

Latest CKAD Examprep - CKAD Latest Exam Questions



P.S. Free 2025 Linux Foundation CKAD dumps are available on Google Drive shared by TestPDF: <https://drive.google.com/open?id=1V-LhFn3u21cIPFyXS7xI7iAhKD7Ar7i>

Some candidates may considerate whether the CKAD exam guide is profession, but it can be sure that the contents of our study materials are compiled by industry experts after them refining the contents of textbooks, they have good knowledge of exam. CKAD test questions also has an automatic scoring function, giving you an objective rating after you take a mock exam to let you know your true level. With CKAD Exam Guide, you only need to spend 20-30 hours to study and you can successfully pass the exam. You will no longer worry about your exam because of bad study materials. If you decide to choose and practice our CKAD test questions, our life will be even more exciting.

The CKAD Exam is aimed at developers who are already familiar with Kubernetes and have experience working with it. CKAD exam consists of a series of performance-based tasks that are designed to test the candidate's ability to use Kubernetes to deploy, manage, and scale containerized applications. The tasks are designed to simulate real-world scenarios that developers may encounter when working with Kubernetes. CKAD exam is conducted online, and candidates have two hours to complete it. Upon successful completion of the exam, the candidate is awarded the CKAD certification, which is recognized by the industry as a standard for Kubernetes application development.

The CKAD Exam is a performance-based exam that requires candidates to complete a set of tasks within a given time frame. CKAD exam is conducted online and candidates are required to use a terminal and a web browser to complete the tasks. CKAD exam is designed to test the candidate's ability to work with Kubernetes in a hands-on environment and to complete tasks that are similar to those encountered in real-world Kubernetes application development scenarios.

>> Latest CKAD Examprep <<

CKAD Latest Exam Questions, Reliable CKAD Exam Guide

We should admit that gaining the CKAD test certification will bring your some benefits. You may get a good opportunity in the job interview due to your Linux Foundation CKAD exam certification. You may have a promotion in your present job and get a considerable salary. So, no matter how difficult it is, many IT candidates still choose to take the CKAD exam test. TestPDF Linux Foundation latest practice exam test may contribute to your CKAD Exam Preparation. We have three different versions for you to choose, the PDF, PC Test Engine, Online Test Engine. You can choose the proper version according to your actual condition. Linux Foundation CKAD exam torrents are valid and useful which can ensure you 100% pass in the actual test.

Linux Foundation Certified Kubernetes Application Developer Exam Sample Questions (Q14-Q19):

NEW QUESTION # 14

You have a Deployment named 'bookstore-deployment' which deploys a Bookstore application, utilizing a PostgreSQL database. The deployment has 3 replicas. The database server is managed externally. The application is built With a feature to dynamically resize its replica count based on the load- You need to implement a strategy to automatically adjust the replica count to between 2 and 5, based on the CPU utilization of the pods. This should happen without manual intervention.

Answer:

Explanation:

See the solution below with Step by Step Explanation.

Explanation:

Solution (Step by Step) :

1. Create a Horizontal Pod Autoscaler (HPA):

- use the 'kubectl create hpa' command to create an HPA named 'bookstore-hpa'
- Set the 'minReplicas' to 2 and 'maxReplicas' to 5, defining the desired range of replicas.
- Set the 'targetCPUUtilizationPercentage' to 70, meaning the replica count will adjust when the average CPU utilization of the pods crosses 70%.
- Specify the selector to match the 'bookstore-deployment' pods.

```
apiVersion: autoscaling/v2beta2
kind: HorizontalPodAutoscaler
metadata:
  name: bookstore-hpa
spec:
  scaleTargetRef:
    apiVersion: apps/v1
    kind: Deployment
    name: bookstore-deployment
  minReplicas: 2
  maxReplicas: 5
  metrics:
  - type: Resource
    resource:
      name: cpu
      targetAverageUtilization: 70
```

2. Apply the HPA: - Run 'kubectl apply -f bookstore-hpa.yaml' to create the HPA. 3. Verify the HPA: - Check the status of the HPA using 'kubectl get hpa bookstore-hpa' 4. Observe Replica Adjustment: - Increase the load on the bookstore application to trigger the HPA scaling. - Monitor the replica count of the bookstore-deployment' using 'kubectl get deployments bookstore-deployment'. You will observe the replica count automatically adjusting based on the CPU utilization- 5. Customize Scaling Parameters: - You can customize the 'targetCPUUtilizationPercentage', 'minReplicas', and 'maxReplicas' in the HPA definition based on the application requirements and desired behavior.

NEW QUESTION # 15

You have a Deployment running a web application that uses secrets to store sensitive information like database credentials. To improve security, you want to use a secret injection mechanism to provide the secret to the pod without exposing it in the deployment YAML.

Answer:

Explanation:

See the solution below with Step by Step Explanation.

Explanation:

Solution (Step by Step) :

1. Create a Secret:

- Create a secret containing the sensitive information:

```
apiVersion: v1
kind: Secret
metadata:
  name: my-secret
  namespace: my-web-app-namespace
type: Opaque
data:
  database-username: "dXN1cm5hbWU=" # Base64 encoded username
  database-password: "cGFzc3dvcmQ=" # Base64 encoded password
```

2. Configure Deployment to Use Secret: - Update the Deployment YAML to mount the secret into the container:

```

apiVersion: apps/v1
kind: Deployment
metadata:
  name: my-web-app
  namespace: my-web-app-namespace
spec:
  replicas: 3
  selector:
    matchLabels:
      app: my-web-app
  template:
    metadata:
      labels:
        app: my-web-app
    spec:
      containers:
        - name: my-web-app
          image: my-web-app-image:latest
          envFrom:
            - secretRef:
                name: my-secret

```

3. Apply the Configuration: - Apply the Secret and Deployment configuration: `bash kubectl apply -f my-secret.yaml kubectl apply -f my-web-app-deployment.yaml` 4. Verify Secret Injection: - Access the secret information from within the container using environment variables: - For example, '\$DATABASE_USERNAME' and '\$DATABASE_PASSWORD'.

NEW QUESTION # 16

Exhibit:



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 Ifcncf/ngmx image version to 1.13
- * Roll back the app deployment to the previous version

- A. 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: lfccncf/nginx:1.13
        imagePullPolicy: IfNotPresent
        name: nginx
        ports:
          - containerPort: 80
            protocol: TCP
```

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: 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: 1 old replicas are pending termination...
deployment "app" successfully rolled out
student@node-1:~$
```

- B. 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: lfccncf/nginx:1.13
        imagePullPolicy: IfNotPresent
        name: nginx
        ports:
          - containerPort: 80
            protocol: TCP

:wq!
```

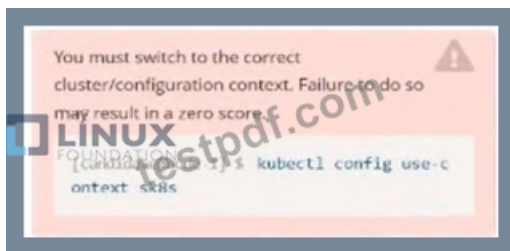
```
Readme Web Terminal THE LINUX FOUNDATION

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: 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: 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: 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:~$
```

Answer: B

NEW QUESTION # 17
Refer to Exhibit.



Task:

- 1- Update the Propertunel scaling configuration of the Deployment web1 in the ckad00015 namespace setting maxSurge to 2 and maxUnavailable to 59
- 2- Update the web1 Deployment to use version tag 1.13.7 for the Ifconf/nginx container image.
- 3- Perform a rollback of the web1 Deployment to its previous version

Answer:

Explanation:

Solution:

```
candidate@node-1:~$ kubectl config use-context k8s
Switched to context "k8s".
candidate@node-1:~$ kubectl edit deploy web1 -n ckad00015
```

```
File Edit View Terminal Tabs Help
app: nginx
strategy:
  rollingUpdate:
    maxSurge: 2%
    maxUnavailable: 5%
  type: RollingUpdate
template:
  metadata:
    creationTimestamp: null
    labels:
      app: nginx
  spec:
    containers:
    - image: lfccncf/nginx:1.13.7
      imagePullPolicy: IfNotPresent
      name: nginx
      ports:
      - containerPort: 80
        protocol: TCP
      resources: {}
      terminationMessagePath: /dev/termination-log
      terminationMessagePolicy: File
    dnsPolicy: ClusterFirst
    restartPolicy: Always
    schedulerName: default-scheduler
    securityContext: {}
    terminationGracePeriodSeconds: 30
status:
  availableReplicas: 2
  conditions:
  - lastTransitionTime: "2022-09-24T04:26:41Z"
```

```
File Edit View Terminal Tabs Help
Switched to context "k8s".
candidate@node-1:~$ kubectl create secret generic app-secret --from-literal=key3=value1
secret/app-secret created
candidate@node-1:~$ kubectl get secrets
NAME      TYPE      DATA      AGE
app-secret  Opaque    1          4s
candidate@node-1:~$ kubectl run nginx-secret --image=nginx:stable --dry-run=client -o yaml > sec.yaml
candidate@node-1:~$ vim sec.yaml
candidate@node-1:~$ kubectl create -f sec.yaml
pod/nginx-secret created
candidate@node-1:~$ kubectl get pods
NAME        READY   STATUS    RESTARTS   AGE
nginx-secret 1/1     Running   0          7s
candidate@node-1:~$ kubectl config use-context k8s
Switched to context "k8s".
candidate@node-1:~$ kubectl edit deployment web1 -n ckad00015
deployment.apps/web1 edited
candidate@node-1:~$ kubectl rollout status deployment.apps/web1 -n ckad00015
deployment.apps/web1 successfully rolled out
candidate@node-1:~$ kubectl rollout undo deployment.apps/web1 -n ckad00015
deployment.apps/web1 rolled back
candidate@node-1:~$ kubectl rollout history deployment.apps/web1 -n ckad00015
deployment.apps/web1
REVISION   CHANGE-CAUSE
<none>
<none>
candidate@node-1:~$ kubectl get rs -n ckad00015
NAME                DESIRED   CURRENT   READY   AGE
web1-56f98bcb79      0         0         0       63s
web1-85775b6b79      2         2         2       6h53m
candidate@node-1:~$
```

NEW QUESTION # 18

You are working on a Kubernetes cluster where you have a Deployment named 'web-app' running an application. The application has a sensitive configuration file named 'config.json' that is mounted as a volume to each pod. You need to ensure that this configuration file is not accessible by any user or process running within the pod, except for the application itself. Describe how you would implement this security best practice, using specific Kubernetes configurations, to protect the sensitivity of the 'config.json' file.

Answer:

Explanation:

See the solution below with Step by Step Explanation.

Explanation:

Solution (Step by Step) :

1. Create a Secret for the Configuration File:

- Create a Kubernetes Secret to store the 'config.json' file securely. This will ensure that the configuration data is encrypted and stored in a way that is not accessible directly by users or processes within the pod.

- Use the following command to create the Secret:

bash

`kubectl create secret generic config-secret --from-file=config.json=config.json`

2. Mount the Secret as a Volume:

- In your Deployment YAML, mount the 'config-secret' as a volume to the pod. This will make the secret's content available to the pod.

- Define the volume mount in the 'spec-template-spec-containers' section of your Deployment YAML:

```

apiVersion: apps/v1
kind: Deployment
metadata:
  name: web-app
spec:
  replicas: 3
  selector:
    matchLabels:
      app: web-app
  template:
    metadata:
      labels:
        app: web-app
    spec:
      containers:
      - name: web-app
        image: example/web-app:latest
        volumeMounts:
        - name: config-volume
          mountPath: /etc/config
      volumes:
      - name: config-volume
        secret:
          secretName: config-secret

```

3. Restrict Access using Security Context: - Define a 'securityContexts' for the container in your Deployment YAML. This will restrict the container's capabilities and permissions. - Add a 'securitycontext' section to the section of your Deployment YAML:

```

securityContext:
  # Set the container's user to a non-root user (e.g., 1000)
  runAsUser: 1000
  # Set the container's group to a non-root group (e.g., 1000)
  runAsGroup: 1000
  # Set the container's permissions to a restricted set (e.g., read-only for /etc/config)
  readOnlyRootFilesystem: true

```

4. Limit the Container's Capabilities: - Configure the 'capabilities' section within the 'securityContexts' to restrict the container's access to specific system capabilities. This is essential for limiting the container's ability to access sensitive information or perform privileged operations. - Add a 'capabilities' section to the 'spec-template-spec-containers-securitycontext' section of your Deployment YAML:

```

securityContext:
  # ... (other security context settings)
  capabilities:
    drop:
      - ALL
    add:
      - NET_BIND_SERVICE

```

5. Apply the Deployment: - Once the Deployment configuration is updated, apply it to the cluster using the following command: `bash kubectl apply -f deployment.yaml` By implementing these steps, you ensure that the 'config.json' file is secured using a Kubernetes Secret, mounted as a volume, and access is restricted using security context and capabilities settings. This effectively protects the sensitive configuration from unauthorized access within the pod.

NEW QUESTION # 19

.....

Our CKAD study materials have three versions which are versions of PDF, Software/PC, and APP/Online. Each format has distinct strength and shortcomings. We have printable PDF format that you can study our CKAD training engine anywhere and anytime since it is printable. We also have installable Software version which is equipped with simulated real exam environment. And the APP online version of our CKAD Exam Dumps can support all kinds of electronic devices.

CKAD Latest Exam Questions: <https://www.testpdf.com/CKAD-exam-braindumps.html>

- CKAD Exam Quick Prep ☐ CKAD Test Review ☐ CKAD PDF VCE ☐ “www.itcerttest.com” is best website to

obtain 《 CKAD 》 for free download ☐CKAD Practice Braindumps

- Hot Latest CKAD Examprep Free PDF | Valid CKAD Latest Exam Questions: Linux Foundation Certified Kubernetes Application Developer Exam ☐ Immediately open ⇒ www.pdfvce.com ⇐ and search for ☐ CKAD ☐ to obtain a free download ☐CKAD Exam Simulator Free
- 2025 Latest CKAD Examprep | Perfect Linux Foundation Certified Kubernetes Application Developer Exam 100% Free Latest Exam Questions ☐ Download ☐ CKAD ☐ for free by simply searching on ➡ www.free4dump.com ☐ ☐Exam CKAD Pass4sure
- Valid CKAD Exam Review ☐ Exam CKAD Pass4sure ☐ CKAD Latest Test Camp ☐ ➡ www.pdfvce.com ☐ is best website to obtain ▶ CKAD ◀ for free download ☐CKAD PDF VCE
- Hot Latest CKAD Examprep Free PDF | Valid CKAD Latest Exam Questions: Linux Foundation Certified Kubernetes Application Developer Exam ☐ Search for 《 CKAD 》 and obtain a free download on ☐ www.dumpsquestion.com ☐ ☐CKAD Exam Quick Prep
- CKAD Exam Demo ☐ CKAD Latest Cram Materials ☐ CKAD Exam Quick Prep ☐ The page for free download of ➤ CKAD ☐ on ➡ www.pdfvce.com ☐ will open immediately ☐Exam CKAD Training
- Exam CKAD Pass4sure ☐ CKAD Exam Demo ☐ Latest CKAD Exam Questions Vce ☐ Search for ▶ CKAD ◀ and download it for free on ▶ www.exams4collection.com ◀ website ☐CKAD Latest Test Format
- Updated Linux Foundation CKAD Questions - Effortless Solution To Pass Exam ☐ Easily obtain free download of ➡ CKAD ☐ by searching on 「 www.pdfvce.com 」 •CKAD PDF VCE
- CKAD PDF VCE ☐ CKAD Latest Test Camp ☐ CKAD Intereactive Testing Engine ☐ Immediately open ➡ www.passcollection.com ☐☐☐ and search for ☐ CKAD ☐ to obtain a free download ♡ CKAD Practice Braindumps
- Useful Latest CKAD Examprep for Real Exam ☐ Search on 《 www.pdfvce.com 》 for ▶ CKAD ◀ to obtain exam materials for free download ♡CKAD Test Review
- CKAD Test Review ☐ CKAD Frenquent Update ☐ Valid CKAD Exam Pattern ☐ Easily obtain free download of▶ CKAD ◀ by searching on ➡ www.examcollectionpass.com ☐ ☐CKAD Latest Test Camp
- kareyed271.dm-blog.com, sanqizhi.com, tedcole945.dailyblogzz.com, skilled-byf.com, myportal.utt.edu.tt, myportal.utt.edu.tt, myportal.utt.edu.tt, myportal.utt.edu.tt, 91xiaojie.com, academy.raotto.com, mindmastervault.com, simplifiedcomputerscience.com, digitalbanglaschool.com, Disposable vapes

P.S. Free & New CKAD dumps are available on Google Drive shared by TestPDF: <https://drive.google.com/open?id=1V-LhFn3u21cIPFyXS7xI7iAhKD7Ar7i>