

完璧なCKAD試験感想 & 資格試験におけるリーダーオファーマー & 素敵なCKAD: Linux Foundation Certified Kubernetes Application Developer Exam



2025年Jpexamの最新CKAD PDFダンプおよびCKAD試験エンジンの無料共有: <https://drive.google.com/open?id=1haOMfzupEjc-lvNpQFSRC8WUXThpD4Ws>

Jpexamが提供したLinux FoundationのCKADトレーニング資料はシミュレーションの度合いがとても高いことから、実際の試験で資料での同じ問題に会うことができます。これは当社のITエリートはすごい能力を持っていることが説明されました。現在、野心家としてのIT職員がたくさんいて、自分の構成ファイルは市場の需要と互換性があることを確保するために、人気があるIT認証試験を通じて自分の夢を実現します。そのようなものとして、Linux FoundationのCKAD試験はとても人気がある認定試験です。Jpexamが提供したLinux FoundationのCKADトレーニング資料を手にとると、夢への扉はあなたのために開きます。

Jpexamは、試験の準備をしている人に最適です。Linux Foundation私たちの実際のCKADテストを使用した後、多くの人が良い成績を獲得しているので、あなたも良い結果を楽しむでしょう。当社の無料デモでは、世界で発生している最新のCKADポイントを追跡できるように、1年間無料で更新できます。Linux Foundation Certified Kubernetes Application Developer Exam試験の急流の試験の質問は多かれ少なかれ白熱した問題に関係しており、試験の準備をする顧客は一日中試験のLinux Foundation痕跡を保持するのに十分な時間がない必要があるので、Linux Foundation Certified Kubernetes Application Developer Exam私たちの模擬試験はあなたにとって助けになるツールとしてCKAD役立ちます 無視したホットポイントを補います。

>> CKAD試験感想 <<

CKAD模擬試験 & CKAD日本語参考

JpexamのCKAD試験参考書はあなたを一回で試験に合格させるだけでなく、CKAD認定試験に関連する多くの知識を勉強させることもできます。Jpexamの問題集はあなたが身に付けるべき技能をすべて含んでいます。そうすると、あなたは自分自身の能力をよく高めることができ、仕事でよりよくそれらを適用することができます。Jpexam的CKAD問題集は絶対あなたがよく試験に準備して、しかも自分を向上させる一番良い選択です。Jpexamがあなたに美しい未来を与えることができることを信じてください。

CKAD試験は、Kubernetesクラスター上でアプリケーションを設計および展開する能力をテストする実践的な試験です。この試験はオンラインで実施され、2時間以内に完了する必要がある19のタスクで構成されています。これらのタスクは、実際のシナリオをシミュレートし、Kubernetesオブジェクトの操作、ネットワークおよびストレージの設定、問題のトラブルシューティング、アプリケーションの安全かつ信頼性の高い展開能力を示す必要があります。

Linux Foundation Certified Kubernetes Application Developer Exam 認定CKAD 試験問題 (Q101-Q106):

質問 # 101

You are running a multi-tier application in Kubernetes. Your application consists of a frontend service (nginx) and a backend service (app). The frontend service exposes a port to the outside world, while the backend service listens on a different port. The backend service needs to access a database service running on a different node.

You need to create a network policy that allows the nginx service to access the app service, and the app service to access the database service. Ensure that no other traffic is allowed between pods in the cluster.

正解:

解説:

See the solution below with Step by Step Explanation.

Explanation:

Solution (Step by Step) :

1. Define Network Policy for Nginx Service:

- Create a NetworkPolicy named 'nginx-policy' that allows traffic from pods labeled 'app=nginx' to pods labeled 'app=app'
- Use 'ingress' rules to define incoming traffic to the nginx service-
- Specify the for the nginx service.
- Allow all ports.

```
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
  name: nginx-policy
spec:
  podSelector:
    matchLabels:
      app: nginx
  ingress:
    - from:
        - podSelector:
            matchLabels:
              app: app
      ports:
        - protocol: TCP
          port: 80
    egress: []
```

2. Define Network Policy for App Service: - Create a NetworkPolicy named 'app-policy' that allows traffic from pods labeled 'app=app' to pods labeled 'app=database' - Use 'ingress' rules to define incoming traffic to the app service. - Specify the 'podSelector' for the app service. - Allow traffic on the port that the database service listens on.

```
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
  name: app-policy
spec:
  podSelector:
    matchLabels:
      app: app
  ingress:
    - from:
        - podSelector:
            matchLabels:
              app: database
      ports:
        - protocol: TCP
          port: 5432
    egress: []
```

3. Create the NetworkPolicy Objects - Apply the NetworkPolicies using the 'kubectl apply' command: `bash kubectl apply -f nginx-policy.yaml kubectl apply -f app-policy.yaml` 4. Apply Default Network Policy: - Create a NetworkPolicy named 'default-policy' that blocks all traffic by default. - This ensures that only traffic allowed by the specific policies is permitted.

```
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
  name: default-policy
spec:
  podSelector: {}
  ingress: []
  egress: []
```

5. Apply Default Network Policy: - Apply the NetworkPolicy using the 'kubectl apply' command: `bash kubectl apply -f default-policy.yaml` This configuration ensures that: - Nginx Service: Can access the 'app' service on port 80, and no other traffic is allowed

in or out - App Service: Can access the 'database' service on port 5432, and no other traffic is allowed in or out - All Other Pods: All other pods in the cluster are blocked from communicating with each other by the default network policy.,

質問 # 102

Refer to Exhibit.



Task

You are required to create a pod that requests a certain amount of CPU and memory, so it gets scheduled to a node that has those resources available.

- * Create a pod named `nginx-resources` in the `pod-resources` namespace that requests a minimum of 200m CPU and 1Gi memory for its container
- * The pod should use the `nginx` image
- * The `pod-resources` namespace has already been created

正解:

解説:

Solution:





質問 # 103

You are building a microservices application with two services, 'user-service' and 'order-service'. Both services have dedicated Dockerfiles for building their container images. You want to optimize the image build process by minimizing the size of the final images. You also want to ensure that the image build process is reproducible and reliable. How can you achieve these goals using Dockerfile best practices and multi-stage builds?

正解:

解説:

See the solution below with Step by Step Explanation.

Explanation:

Solution (Step by Step) :

1. Use Multi-Stage Builds:

- Define two stages in your Dockerfile: a 'build' stage for compiling dependencies and a 'runtime' stage for running the final application.
 - Copy only the essential files and dependencies from the 'builds stage to the 'runtime' stage.
- dockerfile

```
FROM golang:1.18 as build
WORKDIR /app
COPY . .
RUN go mod download
RUN go build -o user-service .
FROM alpine:latest as runtime
COPY --from=build lapp/user-service fuser-service
CMD ["/user-service"]
```

2. Minimize Image Size:

- Use a minimal base image: 'alpine:latest' is a lightweight Linux distribution.
- Remove unnecessary files: Use 'SRIJN apt-get clean' to remove package cache.
- Leverage Docker layers: Separate build steps to minimize the number of layers recreated during subsequent builds.
- Use 'COPY' instead of 'ADD': 'COPY' avoids unpacking archives, making the image smaller.
- Install only required dependencies: use package managers to install only the necessary libraries and tools.

3. Reproducibility and Reliability:

- Define a clear build context: use a '.dockerignore' file to exclude unnecessary files from the build context.
- Leverage Docker caching: Arrange Dockerfile instructions to maximize the use of cached layers.
- Use 'go mod vendor' to vendor dependencies for improved build reproducibility.
- Use a consistent environment for building images: Use a Dockerfile builder image that is compatible with the development environment.

4. Implement for Both Services:

- Apply the same best practices to the 'order-service' Dockerfile.
- Create a separate Dockerfile for each service and use consistent naming conventions (e.g. 'Dockerfile.user-service', 'Dockerfile-order-service').

5. Test and Validate.

- Build and push the images to a registry-
- Run the services in a Kubernetes cluster and verify their functionality.
- Measure image sizes to confirm that the optimization efforts have been successful.

By implementing these steps, you can create smaller, more reproducible, and reliable Docker images for your microservices, leading to faster build times and more efficient deployments.,

質問 # 104

You are building a microservice-based application with a frontend service and a backend service. The frontend service needs to communicate with the backend service via a Kubernetes Service. Design and implement a robust solution for the frontend service to discover the backend service's IP address and port, ensuring seamless communication between the services.

正解:

解説:

See the solution below with Step by Step Explanation.

Explanation:

Solution (Step by Step) :

1. Create a Backend Service:

- Define a Kubernetes Service for the backend service, exposing it on a specific port.
- Ensure the service's 'selector' matches the labels of your backend pods.

```
apiVersion: v1
kind: Service
metadata:
  name: backend-service
spec:
  selector:
    app: backend
  ports:
    - protocol: TCP
      port: 8080
      targetPort: 8080
```

2. Configure Frontend Service: - Create a Kubernetes Deployment for the frontend service. - Inject the backend service's name and

pon into the frontend container's environment variables. This will allow the frontend service to access the backend service's information.

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: frontend-deployment
spec:
  replicas: 2
  selector:
    matchLabels:
      app: frontend
  template:
    metadata:
      labels:
        app: frontend
    spec:
      containers:
        - name: frontend
          image: example/frontend:latest
          env:
            - name: BACKEND_SERVICE_HOST
              valueFrom:
                configMapKeyRef:
                  name: backend-service-config
                  key: backend-service-host
            - name: BACKEND_SERVICE_PORT
              valueFrom:
                configMapKeyRef:
                  name: backend-service-config
                  key: backend-service-port
```

3. Create a ConfigMap for Backend Service Information - Create a ConfigMap to store the backend service's information, including its name and port

```
apiVersion: v1
kind: ConfigMap
metadata:
  name: backend-service-config
data:
  backend-service-host: backend-service
  backend-service-port: "8080"
```

4. Deploy the Services and ConfigMap: - Apply the YAML files for the backend service, frontend deployment, and ConfigMap to your Kubernetes cluster using `kubectl apply -f`. 5. Test Communication: - Access the frontend service (e.g., through a LoadBalancer or Ingress) and ensure it successfully communicates with the backend service. Notes: - This approach utilizes a ConfigMap to store the backend service information, making it easy to update and manage the connection information. - The frontend service can access the backend service's information through environment variables, ensuring consistency in communication. - By utilizing Kubernetes Services, the frontend service can seamlessly communicate with the backend service without knowing the specific IP addresses or ports of individual pods. - The frontend service should be designed to handle potential errors when attempting to connect to the backend service (e.g., timeouts, network issues). Additional Tips for Robust Communication: - Health Checks: Use Liveness and Readiness probes to ensure that only healthy backend pods are included in the backend service. - Service Discovery: Consider using advanced service discovery mechanisms like Consul or etcd to enable dynamic service discovery and updates. - Network Policies: Apply network policies to control communication between services, improving security and preventing unauthorized access.,

質問 # 105

Refer to Exhibit.



Task:

Create a Pod named nginx resources in the existing pod resources namespace.

Specify a single container using nginx:stable image.

Specify a resource request of 300m cpus and 1Gi of memory for the Pod's container.

正解:

解説:

Solution:

```
candidate@node-1:~$ kubectl config use-context k8s
Switched to context "k8s".
candidate@node-1:~$ kubectl run nginx-resources -n pod-resources --image=nginx:stable --dry-run=client -o yaml > hw.yaml
candidate@node-1:~$ vim hw.yaml
#
apiVersion: v1
kind: Pod
metadata:
  creationTimestamp: null
  labels:
    run: nginx-resources
  name: nginx-resources
  namespace: pod-resources
spec:
  containers:
  - image: nginx:stable
    name: nginx-resources
    resources:
      requests:
        cpu: 300m
        memory: "1Gi"
```

```
candidate@node-1:~$ kubectl config use-context k8s
Switched to context "k8s".
candidate@node-1:~$ kubectl run nginx-resources -n pod-resources --image=nginx:stable --dry-run=client -o yaml > hw.yaml
candidate@node-1:~$ vim hw.yaml
candidate@node-1:~$ kubectl create -f hw.yaml
pod/nginx-resources created
candidate@node-1:~$ kubectl get pods -n pod-resources
NAME                READY   STATUS    RESTARTS   AGE
nginx-resources     1/1     Running   0           13s
candidate@node-1:~$ kubectl describe pods -n pod-resources
```

```
File Edit View Terminal Tabs Help
memory: 1Gi
Environment: <none>
Mounts:
  /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-dmx9j (ro)
Conditions:
  Type           Status
  Initialized     True
  Ready           True
  ContainersReady True
  PodScheduled    True
Volumes:
  kube-api-access-dmx9j:
    Type:              Projected (a volume that contains injected data from multiple sources)
    TokenExpirationSeconds: 3607
    ConfigMapName:       kube-root-ca.crt
    ConfigMapOptional:   <nil>
    DownwardAPI:         true
QoS Class:           Burstable
Node-Selectors:      <none>
Tolerations:         node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
                     node.kubernetes.io/unreachable:NoExecute op=Exists for 300s
Events:
  Type       Reason      Age   From          Message
  ----       -
  Normal     Scheduled   28s   default-scheduler   Successfully assigned pod-resources/nginx-resources to k8s-node-0
  Normal     Pulling     19s   kubelet         Pulling image "nginx:stable"
  Normal     Pulled      13s   kubelet         Successfully pulled image "nginx:stable" in 6.55664052s
  Normal     Created     13s   kubelet         Created container nginx-resources
  Normal     Started     12s   kubelet         Started container nginx-resources
candidate@node-1:~$ kubectl config use-context k8s
Switched to context "k8s".
candidate@node-1:~$ kubectl create deploy expose -n ckad00014 --image lfccncf/nginx:1.13.7 --dry-run=client -o yaml
```

質問 # 106

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Linux FoundationのCKAD認定試験を除いて、最近非常に人気がある試験はまたLinux Foundation、Cisco、IBM、SAPなどの様々な認定試験があります。しかし、もしCKAD認証資格を取りたいなら、JpexamのCKAD問題集はあなたを願望を達成させることができます。試験の受験に自信を持たないので諦めることをしないでください。Jpexamの試験参考書を利用することを通して自分の目標を達成することができますから。CKAD認証資格を入手してから、他のIT認定試験を受験することもできます。Jpexamの試験問題集を手にとると、どのような試験でも問題ではありません。

CKAD模擬試験: https://www.jpexam.com/CKAD_exam.html

Linux Foundation高効率のCKAD学習教材を使用すれば、プロの認定試験に合格した製品を使用しなかった場合に必要時間の半分で済みます、Linux Foundation CKAD試験感想 現在、IT業界での激しい競争に直面しているあなたは、無力に感じるでしょう、Linux Foundation CKAD試験感想 では、どうやって自分の能力を証明するのですか、Linux Foundation CKAD試験感想 私たちは人々の需要を中心にします、JpexamはあなたがCKAD認定試験に合格する保障ですから、我々の試験資材の助けを借りて、他の高価なトレーニング・コースに出席する必要がなく、ただCKAD試験の質問と回答を把握するために20~30時間を取るだけです、Linux Foundation CKAD試験感想 これは心のヘルプだけではなく、試験に合格することで、明るい未来を持つこともできるようになります。

基本的にはガウナーの作法を真似ることにするが、なんかやらかしていたらこっそCKADり教えて欲しい、と本で顔を隠すと、ガウナーは気にする者が近くに寄るような店ではないが、と告げる、すぐに来るんだ<<前へ次へ>>目次握手を求める。

試験の準備方法-ユニークなCKAD試験感想試験-権威のあるCKAD模擬試験

Linux Foundation高効率のCKAD学習教材を使用すれば、プロの認定試験に合格した製品を使用しなかった場合に必要時間の半分で済みます、現在、IT業界での激しい競争に直面しているあなたは、無力に感じるでしょう。

では、どうやって自分の能力を証明するのですか、私たちは人々の需要を中心にします、JpexamはあなたがCKAD認定試験に合格する保障ですから。

- 最新のLinux Foundation CKAD試験感想 - 合格スムーズCKAD模擬試験 | 更新するCKAD日本語参考 □ [

ちなみに、Jpexam CKADの一部をクラウドストレージからダウンロードできます: <https://drive.google.com/open?id=1haOMfzupEjc-lvNpQFSRC8WUXThpD4Ws>