

LinuxFoundation.CKA

Exam Code:	CKA
Exam Name:	Certified Kubernetes Administrator (CKA) Program Exam
Certification Provider:	Linux Foundation

NEW QUESTION: 1

Set CPU and memory requests and limits for existing pod name "nginx-prod".

Set requests for CPU and Memory as 100m and 256Mi respectively

Set limits for CPU and Memory as 200m and 512Mi respectively

A. `kubectl get po`

`kubectl set resources po nginx-prod --`

`limits=cpu=200m,memory=512Mi --requests=cpu=100m,memory=256Mi`

`//Verify`

`kubectl top po`

`kubectl describe po nginx-prod`

B. `kubectl get po`

`kubectl set resources po nginx-prod --`

`limits=cpu=200m,memory=512Mi --requests=cpu=100m,memory=256Mi`

`//Verify`

`kubectl describe po nginx-prod`

Answer: A

NEW QUESTION: 2

Deploy a pod with image=redis on a node with label disktype=ssd

A. `// Get list of nodes`

`kubectl get nodes`

`//Get node with the label disktype=ssd`

`kubectl get no -l disktype=ssd`

`// Create a sample yaml file`

`kubectl run node-redis --generator=run-pod/v1 --image=redis --dry`

`run -o yaml > test-redis.yaml`

`// Edit test-redis.yaml file and add nodeSelector`

`vim test-redis.yaml`

`apiVersion: v1`

```

- name: node-redis
image: redis
imagePullPolicy: IfNotPresent
kubectl apply -f test-redis.yaml
// Verify
K kubectl get po -o wide
B. // Get list of nodes
kubectl get nodes
//Get node with the label disktype=ssd
kubectl get no -l disktype=ssd
// Create a sample yaml file
kubectl run node-redis --generator=run-pod/v1 --image=redis --dry
run -o yaml > test-redis.yaml
// Edit test-redis.yaml file and add nodeSelector
vim test-redis.yaml
apiVersion: v1
kind: Pod
metadata:
name: redis
spec:
nodeSelector:
disktype: ssd
containers:
- name: node-redis
image: redis
imagePullPolicy: IfNotPresent
kubectl apply -f test-redis.yaml
// Verify
K kubectl get po -o wide

```

Answer: B

NEW QUESTION: 3

Update the deployment with the image version 1.16.1 and verify the image and check the rollout history

Answer:

```

kubectl set image deploy/webapp nginx=nginx:1.16.1 kubectl describe deploy webapp |
grep Image kubectl rollout history deploy webapp

```

NEW QUESTION: 4

Get all the pods with label "env"

Answer:

```
kubectl get pods -L env
```

NEW QUESTION: 5

Scale the deployment from 5 replicas to 20 replicas and verify

Answer:

```
kubectl scale deploy webapp --replicas=20 kubectl get deploy webapp kubectl get po -l app=webapp
```

NEW QUESTION: 6

Get list of PVs and order by size and write to file - /opt/pvlist.txt

Answer:

```
kubectl get pv --sort-by=.spec.capacity.storage > /opt/pvlist.txt
```

NEW QUESTION: 7

Create a job named "hello-job" with the image busybox which echos "Hello I'm running job"

A. kubectl create job hello-job --image=busybox --dry-run -o yaml

```
-- echo "Hello I'm running job" > hello-job.yaml
```

```
kubectl create -f hello-job.yaml
```

```
//Verify Job
```

```
kubectl get po
```

```
kubectl logs hello-job-*
```

B. kubectl create job hello-job --image=busybox --dry-run -o yaml

```
-- echo "Hello I'm running job" > hello-job.yaml
```

```
kubectl create -f hello-job.yaml
```

```
//Verify Job
```

```
kubectl get job
```

```
kubectl get po
```

```
kubectl logs hello-job-*
```

Answer: B

NEW QUESTION: 8

Print pod name and start time to "/opt/pod-status" file

Answer:

```
kubect1 get pods -o=jsonpath='{range .items[*]}{.metadata.name}{"\t"}{.status.podIP}{"\n"}{end}'
```

NEW QUESTION: 9

Annotate the pod with name=webapp

A. kubectl annotate pod nginx-dev-pod name=webapp

```
kubectl annotate pod nginx-prod-pod name=webapp
```

```
// Verify
```

```
kubectl describe po nginx-dev-pod | grep -i annotations
kubectl describe po nginx-prod-pod | grep -i annotations
B. kubectl annotate pod nginx-dev-pod name=webapp
kubectl annotate pod nginx-prod-pod name=webapp
// Verify
kubectl describe po nginx-dev-pod | grep -i annotations
```

Answer: A

NEW QUESTION: 10

List the nginx pod with custom columns POD_NAME and POD_STATUS

Answer:

```
kubectl get po -o=custom-columns="POD_NAME:.metadata.name,
POD_STATUS:.status.containerStatuses[].state"
```

NEW QUESTION: 11

Label a node as app=test and verify

Answer:

```
kubectl label node node-name app=test // Verify kubectl get no -show-labels kubectl get no
-l app=test
```

NEW QUESTION: 12

Create a Pod nginx and specify a CPU request and a CPU limit of 0.5 and 1 respectively.

A. // create a yml file

```
kubectl run nginx-pod --image=nginx --restart=Never --dry-run -
```

```
o yaml > nginx-pod.yml
```

// add the resources section and create

```
vim nginx-pod.yml
```

```
apiVersion: v1
```

```
kind: Pod
```

```
metadata:
```

```
labels:
```

```
run: nginx
```

```
name: nginx
```

```
spec:
```

```
containers:
```

```
- image: nginx
```

```
name: nginx
```

```
resources:
```

```
requests:
```

```
cpu: "0.5"
```

```
limits:
```

```

cpu: "1"
restartPolicy: Always
kubectl apply -f nginx-pod.yaml
// verify
kubectl top pod
B. // create a yml file
kubectl run nginx-pod --image=nginx --restart=Never --dry-run -
o yaml > nginx-pod.yaml
// add the resources section and create
vim nginx-pod.yaml
apiVersion: v1
kind: Pod
metadata:
labels:
run: nginx
name: nginx
spec:
containers:
- image: nginx
name: nginx
resources:
requests:
cpu: "0.4"
limits:
cpu: "1"
restartPolicy: Always
kubectl apply -f nginx-pod.yaml
// verify
kubectl top pod

```

Answer: A

NEW QUESTION: 13

Create the service as type NodePort with the port 32767 for the nginx pod with the pod selector app: my-nginx

Answer:

```

kubectl run nginx --image=nginx --restart=Never -- labels=app=nginx --port=80 --dry-run -o
yaml > nginx-pod.yaml

```

NEW QUESTION: 14

List all the pods that are serviced by the service "web-service" and copy the output in /opt/\$USER/web-service.targets Note: You need to list the endpoints

Answer:

```
kubectl describe svc webservice | grep -i "Endpoints" > /opt/$USER/webservice.targets  
kubectl get endpoints webservice > /opt/$USER/webservice.targets
```

NEW QUESTION: 15

Evict all existing pods from a node-1 and make the node unschedulable for new pods.

A. kubectl get nodes

```
kubectl drain node-1 #It will evict pods running on node-1 to  
other nodes in the cluster
```

```
kubectl cordon node-1 # New pods cannot be scheduled to the  
node
```

// Verify

```
kubectl get no
```

When you cordon a node, the status shows "SchedulingDisabled"

B. kubectl get nodes

```
kubectl drain node-1 #It will evict pods running on node-1 to  
other nodes in the cluster
```

// Verify

```
kubectl get no
```

When you cordon a node, the status shows "SchedulingDisabled"

Answer: A**NEW QUESTION: 16**

List all configmap and secrets in the cluster in all namespace and write it to a file /opt/configmap-secret

Answer:

```
kubectl get configmap,secrets --all-namespaces > /opt/configmap-secret // Verify  
Cat /opt/configmap-secret
```

NEW QUESTION: 17

Check the Image version of nginx-dev pod using jsonpath

Answer: A

```
kubect1 get po nginx-dev -o jsonpath='{.spec.containers[].image}'{"\n"}
```

NEW QUESTION: 18

Create a redis pod, and have it use a non-persistent storage

Note: In exam, you will have access to kubernetes.io site,

Refer : <https://kubernetes.io/docs/tasks/configure-pod-container/configurevolume-storage/>

A. apiVersion: v1

kind: Pod

metadata:

name: redis

spec:

containers:

- name: redis

image: redis

volumeMounts:

- containerPort: 6379

volumes:

- name: redis-storage

emptyDir: {}

B. apiVersion: v1

kind: Pod

metadata:

name: redis

spec:

containers:

- name: redis

image: redis

volumeMounts:

- name: redis-storage

mountPath: /data/redis

ports:

- containerPort: 6379

volumes:

- name: redis-storage

emptyDir: {}

Answer: B

NEW QUESTION: 19

List pod logs named "frontend" and search for the pattern "started" and write it to a file "/opt/error-logs"

Answer:

Kubectl logs frontend | grep -i "started" > /opt/error-logs

NEW QUESTION: 20

Create a Pod with three busy box containers with commands "ls; sleep 3600;", "echo Hello World; sleep 3600;" and "echo this is the third container; sleep 3600" respectively and check the status

A. // first create single container pod with dry run flag

```
kubectl run busybox --image=busybox --restart=Always --dry-run
```

```
-o yaml -- bin/sh -c "sleep 3600; ls" > multi-container.yaml
```

// edit the pod to following yaml and create it

```
apiVersion: v1
```

```
kind: Pod
```

```
metadata:
```

```
labels:
```

```
run: busybox
```

```
name: busybox
```

```
spec:
```

```
containers:
```

```
- args:
```

```
- bin/sh
```

```
- -c
```

```
- ls; sleep 3600
```

```
image: busybox
```

```
name: busybox-container-1
```

```
- args:
```

```
- bin/sh
```

```
- -c
```

```
- echo Hello world; sleep 3600
```

```
image: busybox
```

```
name: busybox-container-2
```

```
- args:
```

```
- bin/sh
```

```
- -c
```

```
- echo this is third container; sleep 3600
```

```
image: busybox
```

```
name: busybox-container-3
```

```
restartPolicy: Always
```

// Verify

```
Kubectl get pods
```

B. // first create single container pod with dry run flag

```
kubectl run busybox --image=busybox --restart=Always --dry-run
```



```
-o yaml -- bin/sh -c "sleep 3600; ls" > multi-container.yaml
```

```
// edit the pod to following yaml and create it
```

```
apiVersion: v1
```

```
kind: Pod
```

```
metadata:
```

```
labels:
```

```
run: busybox
```

```
name: busybox
```

```
spec:
```

```
containers:
```

```
- args:
```

```
- bin/sh
```

```
- -c
```

```
- ls; sleep 3600
```

```
- echo Hello world; sleep 3600
```

```
image: busybox
```

```
name: busybox-container-2
```

```
- args:
```

```
- bin/sh
```

```
- -c
```

```
- echo this is third container; sleep 3600
```

```
image: busybox
```

```
name: busybox-container-3
```

```
restartPolicy: Always
```

```
// Verify
```

```
Kubectrl get pods
```

Answer: A

NEW QUESTION: 21

Create an nginx pod with container Port 80 and it should only receive traffic only it checks the endpoint / on port 80 and verify and delete the pod.

A. `kubectrl run nginx --image=nginx --restart=Never --port=80 --`

```
dry-run -o yaml > nginx-pod.yaml
```

```
// add the readinessProbe section and create
```

```
vim nginx-pod.yaml
```

```
run: nginx
```

```
name: nginx
```

```
spec:
```

```
containers:
```

```
- image: nginx
```

```
name: nginx
```

```
ports:
- containerPort: 60
readinessProbe:
httpGet:
path: /
port: 60
restartPolicy: Never
kubectl apply -f nginx-pod.yaml
// verify
kubectl describe pod nginx | grep -i readiness
kubectl delete po nginx
B. kubectl run nginx --image=nginx --restart=Never --port=80 --
dry-run -o yaml > nginx-pod.yaml
// add the readinessProbe section and create
vim nginx-pod.yaml
apiVersion: v1
kind: Pod
metadata:
labels:
run: nginx
name: nginx
spec:
containers:
- image: nginx
name: nginx
ports:
- containerPort: 80
readinessProbe:
httpGet:
path: /
port: 80
restartPolicy: Never
kubectl apply -f nginx-pod.yaml
// verify
kubectl describe pod nginx | grep -i readiness
kubectl delete po nginx
```

Answer: B

NEW QUESTION: 22

Check nodes which are ready and print it to a file /opt/nodestatus

A. JSONPATH='{range .items[*]}{@.metadata.name}:{range

```
@.status.conditions[*]]{@.type}={@.status};{end}{end}' \
//Verify
cat /opt/node-status
B. JSONPATH='{range .items[*]]{@.metadata.name}:{range
@.status.conditions[*]]{@.type}={@.status};{end}{end}' \
&& kubectl get nodes -o jsonpath="$JSONPATH" | grep
"Ready=True" > /opt/node-status
//Verify
cat /opt/node-status
```

Answer: B

NEW QUESTION: 23

Create a file called "config.txt" with two values key1=value1 and key2=value2. Then create a configmap named "keyvalcfgmap" and read data from the file "config.txt" and verify that configmap is created correctly

```
A. cat >> config.txt << EOF
key1=value1
key2=value2
EOF
cat config.txt
// Create configmap from "config.txt" file
kubectl create cm keyvalcfgmap --from-file=config.txt
//Verify
kubectl get cm keyvalcfgmap -o yaml
B. cat >> config.txt << EOF
key1=value1
key2=value2
EOF
kubectl create cm keyvalcfgmap --from-file=config.txt
//Verify
kubectl get cm keyvalcfgmap -o yaml
```

Answer: A

NEW QUESTION: 24

Resume the rollout of the deployment

Answer:

```
kubectl rollout resume deploy webapp
```

NEW QUESTION: 25

Create a secret mysecret with values user=myuser and password=mypassword

A. `kubectrl create secret generic my-secret --fromliteral=username=user --from-literal=password=mypassword`

// Verify

`kubectrl get secret --all-namespaces`

`kubectrl get secret generic my-secret -o yaml`

B. `kubectrl create secret generic my-secret --fromliteral=username=user --from-literal=password=mypassword`

// Verify

`kubectrl get secret generic my-secret -o yaml`

Answer: A

NEW QUESTION: 26

Create a busybox pod which executes this command `sleep 3600` with the service account admin and verify

A. `kubectrl run busybox --image=busybox --restart=Always --dry-run`

`-o yaml -- /bin/sh -c "sleep 3600" > busybox.yml`

// Edit busybox.yaml file

`apiVersion: v1`

`kind: Pod`

`metadata:`

`creationTimestamp: null`

`labels:`

`run: busybox`

`name: busybox`

`spec:`

`serviceAccountName: admin`

`containers:`

`- args:`

`- /bin/sh`

`- -c`

`- sleep 3600`

`image: busybox`

`name: busybox`

`restartPolicy: Always`

// verify

`K kubectrl describe po busybox`

B. `kubectrl run busybox --image=busybox --restart=Always --dry-run`

`-o yaml -- /bin/sh -c "sleep 3600" > busybox.yml`

// Edit busybox.yaml file

`apiVersion: v1`

`kind: Pod`

```
metadata:
creationTimestamp: null
labels:
run: busybox
name: busybox
spec:
serviceAccountName: admin
containers:
- args:
- /bin/sh
- -c
- sleep 3800
image: busybox
name: busybox
restartPolicy: Always
// verify
K kubectl describe po busybox
```

Answer: A

NEW QUESTION: 27

Get the number of schedulable nodes and write to a file
/opt/schedulable-nodes.txt

A. kubectl get nodes -o jsonpath="{range
.items[*]}{.metadata.name}
{.spec.taints[?(@.effect=='NoSchedule')].effect}{\"\n\"}{end}"
| awk 'NF==1 {print \$0}' > /opt/schedulable-nodes.txt
// Verify

cat /opt/schedulable-nodes.txt

B. kubectl get nodes -o jsonpath="{range
.items[*]}{.metadata.name}
{.spec.taints[?(@.effect=='NoSchedule')].effect}{\"\n\"}{end}"
| awk 'NF==11 {print \$0}' > /opt/schedulable-nodes.txt
// Verify

cat /opt/schedulable-nodes.txt

Answer: A

NEW QUESTION: 28

Install a kubernetes cluster with one master and one worker using kubeadm

A. This is a straightforward question, you need to install kubernetes cluster using kubeadm with one master and one worker.

Refer : <https://kubernetes.io/docs/setup/production-environment/tools/kubeadm/>

B. This is a straightforward question, you need to install kubernetes cluster using kubeadm with one master and one worker.

Installation is considered success once both master and worker nodes become available.

Refer : <https://kubernetes.io/docs/setup/production-environment/tools/kubeadm/>

Answer: B

NEW QUESTION: 29

Create an nginx pod and set an env value as 'var1=val1'. Check the env value existence within the pod

A. `kubectrl run nginx --image=nginx --restart=Never --env=var1=val1`

then

`kubectrl exec -it nginx -- env`

or

`kubectrl run nginx --restart=Never --image=nginx --env=var1=val1`

`-it --rm -- env`

B. `kubectrl run nginx --image=nginx --restart=Never --env=var1=val1`

then

`kubectrl exec -it nginx -- env`

or

`kubectrl exec -it nginx -- sh -c 'echo $var1'`

or

`kubectrl describe po nginx | grep val1`

or

`kubectrl run nginx --restart=Never --image=nginx --env=var1=val1`

`-it --rm - env`

Answer: B

NEW QUESTION: 30

Modify "hello-job" and make it run 10 times one after one and 5 times parallelism: 5

A. `kubectrl create job hello-job --image=busybox --dry-run -o yaml`

`-- echo "Hello I am from job" > hello-job.yaml`

// edit the yaml file to add completions: 10 and

`kubectrl create -f hello-job.yaml`

YAML File:

`apiVersion: batch/v1`

`kind: Job`

`metadata:`

`name: hello-job`

`spec:`

`completions: 10`

parallelism: 5

template:

metadata:

spec:

containers:

- command:

- echo

- Hello I am from job

image: busybox

name: hello-job

restartPolicy: Never

B. `kubectl create job hello-job --image=busybox --dry-run -o yaml`

`-- echo "Hello I am from job" > hello-job.yaml`

`// edit the yaml file to add completions: 16 and`

`kubectl create -f hello-job.yaml`

YAML File:

apiVersion: batch/v1

kind: Job

metadata:

name: hello-job

spec:

completions: 16

parallelism: 5

template:

metadata:

spec:

containers:

- command:

- echo

- Hello I am from job

image: busybox

name: hello-job

restartPolicy: Never

Answer: A

NEW QUESTION: 31

Create a nginx pod that will be deployed to node with the label

"gpu=true"

A. `kubectl run nginx --image=nginx --restart=Always --dry-run -o`

`yaml > nodeselector-pod.yaml`

`// add the nodeSelector like below and create the pod`

```

kubecttl apply -f nodeselector-pod.yaml
vim nodeselector-pod.yaml
apiVersion: v1
kind: Pod
metadata:
name: nginx
spec:
nodeSelector:
gpu: true
containers:
- image: nginx
name: nginx
restartPolicy: Always
kubecttl apply -f nodeselector-pod.yaml
//Verify
kubecttl get no -show-labels
kubecttl get po
kubecttl describe po nginx | grep Node-Selectors
B. kubecttl run nginx --image=nginx --restart=Always --dry-run -o
yaml > nodeselector-pod.yaml
// add the nodeSelector like below and create the pod
kubecttl apply -f nodeselector-pod.yaml
vim nodeselector-pod.yaml
apiVersion: v1
kind: Pod
metadata:
name: nginx
spec:
nodeSelector:
gpu: true
yaml
//Verify
kubecttl get no -show-labels
kubecttl get po
kubecttl describe po nginx | grep Node-Selectors
Answer: A

```


NEW QUESTION: 32

Fix a node that shows as non-ready

A. Kubectl get nodes

// Check which node shows a not ready

kubectl describe nodes "node-name"

// Login to the node which shows as not ready and check the
systemctl start kubelet / docker

// Verify

ps -auxww | grep -i "process-name"

kubectl get nodes

B. Kubectl get nodes

// Check which node shows a not ready

kubectl describe nodes "node-name"

// Login to the node which shows as not ready and check the
process for kubelet, docker , kube-proxy.

// systemctl status kubelet (or) ps -aux | grep -i "processname"

// If the process is not started, then start using

systemctl start kubelet / docker

// Verify

ps -auxww | grep -i "process-name"

kubectl get nodes

Answer: B

NEW QUESTION: 33

Verify certificate expiry date for ca certificate in /etc/kubernetes/pki

Answer:

openssl x509 -in ca.crt -noout -text | grep -i validity -A 4

NEW QUESTION: 34

// Create a configmap

kubectl create configmap redis-config --from-file=/opt/redisconfig

// Verify

kubectl get configmap redis-config -o yaml

// first run this command to save the pod yaml

kubectl run redis-pod --image=redis --restart=Always --dry-run

-o yaml > redis-pod.yaml

```
// edit the yml to below file and create
apiVersion: v1
kind: Pod
metadata:
  name: redis
spec:
  containers:
    - name: redis
      image: redis
      env:
        - name: MASTER
          value: "true"
      ports:
        - containerPort: 6379
      volumeMounts:
        - mountPath: /redis-master-data
          name: data
        - mountPath: /redis-master
          name: config
      volumes:
        - name: data
          emptyDir: {}
        - name: config
          configMap:
            name: example-redis-config
A. items:
      - key: redis-config
        path: redis.conf
        cf
// // Verify
K kubectl exec -it redis - cat /redis-master-data/redis.conf
B. items:
      - key: redis-config
        path: redis.conf
        cf
kk kubectl apply -f redis-pod.yml
// // Verify
K kubectl exec -it redis - cat /redis-master-data/redis.conf
Answer: B
```

NEW QUESTION: 35

Pause the rollout of the deployment

Answer:

```
kubectl rollout pause deploy webapp
```

NEW QUESTION: 36

Create a deployment called webapp with image nginx having 5 replicas in it, put the file in /tmp directory with named webapp.yaml

A. //Create a file using dry run command

```
kubectl create deploy --image=nginx --dry-run -o yaml >
```

```
/tmp/webapp.yaml
```

// Now, edit file webapp.yaml and update replicas=5

```
apiVersion: apps/v1
```

```
kind: Deployment
```

```
metadata:
```

```
labels:
```

```
app: webapp
```

```
name: webapp
```

```
spec:
```

```
replicas: 5
```

```
selector:
```

```
matchLabels:
```

```
app: webapp
```

```
template:
```

```
metadata:
```

```
labels:
```

```
app: webapp
```

```
spec:
```

```
containers:
```

```
- image: nginx
```

```
name: nginx
```

Note: Search "deployment" in kubernetes.io site , you will get the page

<https://kubernetes.io/docs/concepts/workloads/controllers/deployment/>

// Verify the Deployment

```
kubectl get deploy webapp --show-labels
```

// Output the YAML file of the deployment webapp

```
kubectl get deploy webapp -o yaml
```

B. //Create a file using dry run command

```
kubectl create deploy --image=nginx --dry-run -o yaml >
```

```
/tmp/webapp.yaml
```

```
// Now, edit file webapp.yaml and update replicas=5
apiVersion: apps/v1
kind: Deployment
metadata:
  labels:
    app: webapp
  name: webapp
spec:
  replicas: 5
  selector:
    matchLabels:
      app: webapp
  template:
    metadata:
      labels:
        app: webapp
Note: Search "deployment" in kubernetes.io site , you will get
the page
https://kubernetes.io/docs/concepts/workloads/controllers/deployment/
// Verify the Deployment
kubectl get deploy webapp --show-labels
// Output the YAML file of the deployment webapp
kubectl get deploy webapp -o yaml
```

Answer: A

NEW QUESTION: 37

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

Answer:

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

NEW QUESTION: 38

Apply the autoscaling to this deployment with minimum 10 and maximum 20 replicas and target CPU of 85% and verify hpa is created and replicas are increased to 10 from 1

Answer:

```
kubectl autoscale deploy webapp --min=10 --max=20 --cpu percent=85 kubectl get hpa
kubectl get pod -l app=webapp
```

NEW QUESTION: 39

Create PersistentVolume named task-pv-volume with storage 10Gi, access modes ReadWriteMany, storageClassName manual, and volume at /mnt/data and Create a PersistentVolumeClaim of at least 3Gi storage and access mode ReadWriteOnce and verify

A. vim task-pv-volume.yaml

apiVersion: v1

kind: PersistentVolume

metadata:

name: task-pv-volume

labels:

type: local

spec:

storageClassName: manual

capacity:

storage: 10Gi

accessModes:

- ReadWriteMany

hostPath:

path: "/mnt/data"

kubectl apply -f task-pv-volume.yaml

//Verify

kubectl get pv

vim task-pvc-volume.yaml

apiVersion: v1

- ReadWriteMany

resources:

requests:

storage: 3Gi

kubectl apply -f task-pvc-volume.yaml

//Verify

Kuk kubectl get pvc

B. vim task-pv-volume.yaml

apiVersion: v1

kind: PersistentVolume

metadata:

name: task-pv-volume

labels:

type: local

spec:

storageClassName: manual

capacity:

```

storage: 10Gi
accessModes:
- ReadWriteMany
hostPath:
path: "/mnt/data"
kubectl apply -f task-pv-volume.yaml
//Verify
kubectl get pv
vim task-pvc-volume.yaml
apiVersion: v1
kind: PersistentVolumeClaim
metadata:
name: task-pv-claim
spec:
storageClassName: manual
accessModes:
- ReadWriteMany
resources:
requests:
storage: 3Gi
kubectl apply -f task-pvc-volume.yaml
//Verify
Kuk kubectl get pvc

```

Answer: B

NEW QUESTION: 40

Get the pods with labels env=dev and env=prod and output the labels as well

Answer:

```
kubectl get pods -l 'env in (dev,prod)' --show-labels
```

NEW QUESTION: 41

Create 2 nginx image pods in which one of them is labelled with env=prod and another one labelled with env=dev and verify the same.

A. kubectl run --generator=run-pod/v1 --image=nginx -- labels=env=prod nginx-prod --dry-run -o yaml > nginx-prod-pod.yaml Now, edit nginx-prod-pod.yaml file and remove entries like "creationTimestamp: null" "dnsPolicy: ClusterFirst" vim nginx-prod-pod.yaml

```
apiVersion: v1 kind: Pod metadata:
```

```
labels:
```

```
env: prod
```

```
name: nginx-prod
```

```
spec:
```

containers:

- image: nginx

name: nginx-prod

restartPolicy: Always

kubectl create -f nginx-prod-pod.yaml

kubectl run --generator=run-pod/v1 --image=nginx --

labels=env=dev nginx-dev --dry-run -o yaml > nginx-dev-pod.yaml

apiVersion: v1

kind: Pod

metadata:

labels:

env: dev

name: nginx-dev

spec:

containers:

- image: nginx

name: nginx-dev

restartPolicy: Always

kubectl create -f nginx-prod-dev.yaml

Verify :

kubectl get po --show-labels

kubectl get po -l env=prod

kubectl get po -l env=dev

B. kubectl run --generator=run-pod/v1 --image=nginx -- labels=env=prod nginx-prod --dry-run -o yaml > nginx-prod-pod.yaml Now, edit nginx-prod-pod.yaml file and remove entries like "creationTimestamp: null" "dnsPolicy: ClusterFirst" vim nginx-prod-pod.yaml

apiVersion: v1 kind: Pod metadata:

labels:

env: prod

name: nginx-prod

spec:

containers:

- image: nginx

name: nginx-prod

restartPolicy: Always

kubectl create -f nginx-prod-pod.yaml

kubectl run --generator=run-pod/v1 --image=nginx --

labels=env=dev nginx-dev --dry-run -o yaml > nginx-dev-pod.yaml

apiVersion: v1

kind: Pod

metadata:

```
- image: nginx
name: nginx-dev
restartPolicy: Always
# kubectl create -f nginx-prod-dev.yaml
Verify :
kubectl get po --show-labels
kubectl get po -l env=dev
Answer: A
```