Summarize

Congratulations! You passed!

Grade received 97.50%

Latest Submission Grade 97.50%

To pass 70% or higher

Go to next item

You increased your skill score!

Cloud Computing Your score: 101 (↑5) Beginner

Keep going! At a beginner level, you have a working knowledge and are able to pass beginner content. You have limited experience applying it.

1. In what three environments can container orchestration be implemented? **0.75 / 1 point**

- [ ] A single device
- [x] Private cloud environments

Correct
Correct! Container orchestration can be implemented in on-premises, public cloud, private cloud, and multicloud environments.

- [x] On-premises environments

Correct
Correct! Container orchestration can be implemented in on-premises, public cloud, private cloud, and multicloud environments.

- [ ] Public cloud environments

You didn't select all the correct answers

2. What is the most popular container orchestration tool used as of 2022? **1 / 1 point**

- ( ) Docker Swarm
- ( ) Nomad
- ( ) Marathon
- (•) Kubernetes

Correct
Correct! The most popular container orchestration tool in 2022 is Kubernetes.

3. What does a control plane do? **1 / 1 point**

- ( ) Assigns newly created Pods to nodes
- ( ) Shares all the resources of a node
- (•) Maintains the intended Cluster state by making decisions about the Cluster and detecting and responding to events in the Cluster
- ( ) Contains Pods

Correct
Correct! A control plane maintains the intended Cluster state by making decisions about the Cluster and detecting and responding to events in the Cluster.

4. What component of a worker node ensures containers are running as desired? **1 / 1 point**

- (•) The kubelet
- ( ) The Kubernetes proxy
- ( ) Container runtime
- ( ) Etcd

Correct

Correct! The kubelet communicates with the kube-api server to receive new and modified Pod specifications and ensures that the Pods and their associated containers are running as desired.

5. What are three Kubernetes capabilities? **1 / 1 point**

- [x] Storage orchestration

  Correct
  Correct! Kubernetes offers many features, including automated rollouts, storage orchestration, and management of secrets and configuration.

- [ ] CI/CD pipelines
- [x] Automated rollouts

  Correct
  Correct! Kubernetes offers many features, including automated rollouts, storage orchestration, and management of secrets and configuration.

- [x] Secret and configuration management

  Correct
  Correct! Kubernetes offers many features, including automated rollouts, storage orchestration, and management of secrets and configuration.

6. What is automated bin packing? **1 / 1 point**

- ( ) A Kubernetes capability that scales workloads based on metrics or commands
- ( ) A Kubernetes capability that applies automatic changes
- (•) A Kubernetes capability that performs container auto-placement based on resource requirements and conditions without sacrificing high availability
- ( ) A Kubernetes capability that mounts a chosen storage system

Correct
Correct! Automated bin packing is a Kubernetes feature that performs container auto-placement based on resource requirements and conditions without sacrificing high availability.

7. What is a label? **1 / 1 point**

- ( ) A mechanism for isolating groups of resources within a single Cluster
- (•) A key-value pair attached to an object
- ( ) The simplest unit in Kubernetes
- ( ) A set of identical running Pod replicas that are horizontally scaled

Correct
Correct! Labels are defined as key-value pairs attached to objects.

8. What Kubernetes object should be used for stateless applications? **1 / 1 point**

- ( ) DaemonSet
- ( ) StatefulSet
- (•) Deployment
- ( ) ReplicaSet

Correct
Correct. A Deployment is suitable for stateless applications.

9. What is Kubectl? **1 / 1 point**

- (•) Kubernetes command line interface (CLI)
- ( ) Docker command line interface
- ( ) Cloud command line interface
- ( ) OpenShift command line interface (oc)

Correct
Correct! Kubectl stands for Kube Command Tool Line. Kubectl is the Kubernetes CLI.

10. What is the function of an External Name Service? **1 / 1 point**

- ○ Directs traffic to the NodePort Service
- ○ Provides inter-service communication within the Cluster
- ◉ Maps to a DNS name
- ○ Creates and routes the incoming requests automatically to the ClusterIP Service

Correct
Correct! The External Name Service is the service type that maps to a DNS name.