VMware.5V0-23.20.v2023-02-02.q22

Exam Code:	5V0-23.20
Exam Name:	VMware vSphere with Tanzu Specialist
Certification Provider:	VMware
Free Question Number:	22
Version:	v2023-02-02
# of views:	425
# of Questions views:	2647
https://www.freecram.net/torrent/VMware.5V0-23.20.v2023-02-02.q22.html	

NEW QUESTION: 1
Which external load balancer is supported in vSphere 7 U1 using the vSphere networking stack?
A. Nginx
B. Seesaw
C. Loadmaster
D. HAProxy
Answer: (SHOW ANSWER)
When using vSphere with Tanzu with vDS networking, HAProxy provides load balancing for developers accessing the Tanzu Kubernetes control plane, and for Kubernetes Services of Type Load Balancer. Review the possible topologies that you can implement for the HAProxy load balancer.
https://docs.vmware.com/en/VMware-vSphere/7.0/vmware-vsphere-with-tanzu/GUID-1F885AAE-92FF-41E6-BF04-0F0FD4173BD9.html The HAProxy appliance is an open-source solution developed by HAProxy Technologies and chosen by VMware as the first supported open-source load balancer for use with vSphere with Tanzu. With the HAProxy, external network traffic is routed to Kubernetes pods running in the vSphere with Tanzu environment.

NEW QUESTION: 2
Which value must be increased or decreased to horizontally scale a Tanzu Kubernetes cluster?
A. Namespaces
B. etcd instance
C. Worker node count
D. ReplicaSets
Answer: (SHOW ANSWER)
Scale a Cluster Horizontally With the Tanzu CLI
To horizontally scale a Tanzu Kubernetes cluster, use the tanzu cluster scale command. You change the number of control plane nodes by specifying the --controlplane-machine-count option. You change the number of worker nodes by specifying the --worker-machine-count option.

NEW QUESTION: 3
Which command displays the storage limits that have been set together with the amount of resources consumed?
A. kubect1 get resourcequotas
B. kubect1 config get-resourcequotas limits
C. kubect1 list resourcequotas
D. kubect1 describe resourcequotas
Answer: (SHOW ANSWER)
Create the ResourceQuota:

kubectl apply -f https://k8s.io/examples/admin/resource/quota-mem-cpu.yaml --namespace=quota-mem-cpu-example View detailed information about the ResourceQuota: kubectl get resourcequota mem-cpu-demo --namespace=quota-mem-cpu-example --output=yaml

NEW QUESTION: 4
Which command will show the Tanzu Kubernetes cluster versions available in the vSphere content library?
A. kubect1 get rc,services
B. kubect1 get contentlibrary
C. kubect1 get tanzukubernetesreleases
D. kubect1 get tanzuimages
Answer: (SHOW ANSWER)
kubectl get tanzukubernetesreleases
List available Tanzu Kubernetes releases.
kubectl get tkr
Short form version of the preceding command.
kubectl get tkr v1.17.8---vmware.1-tkg.1.5417466 -o yaml
Provides details on the named Tanzu Kubernetes release.
VMware Tanzu distributes Kubernetes software versions as Tanzu Kubernetes releases. To consume these releases, you configure a vSphere Content Library and synchronize the available releases. You can do so using a subscription-based model, or on-demand. If you want to provision Tanzu Kubernetes in an internet restricted environment, you can create a local library and manually import the releases.

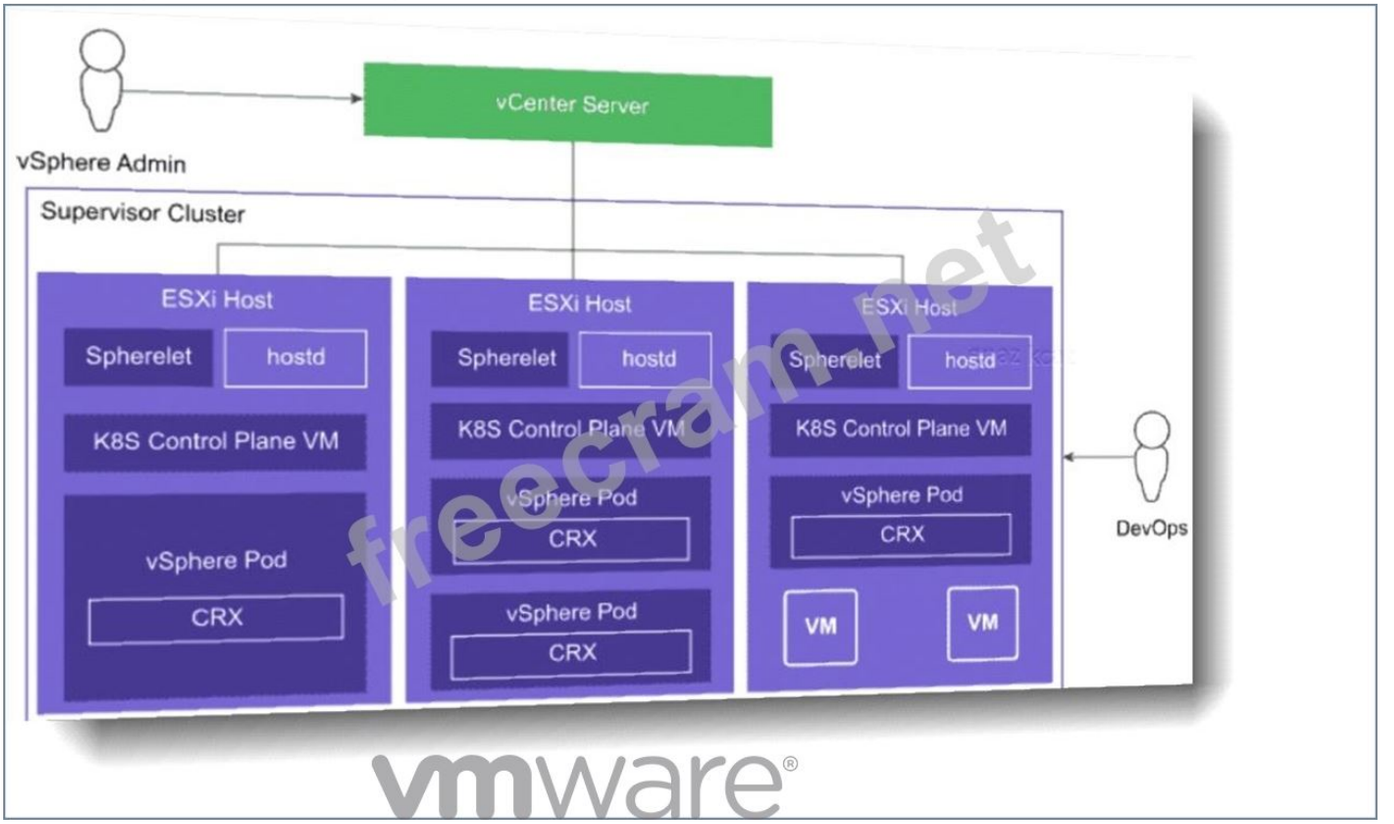
NEW QUESTION: 5
Where are the virtual machine images stored that are used to deploy Tanzu Kubernetes clusters?
A. Content Library
B. Supervisor Cluster
C. Harbor Image Registry
D. Namespace
Answer: (SHOW ANSWER)
The vSphere administrator configures a Subscribed Content Library on the Supervisor Cluster. The virtual machine image that is used for the Tanzu Kubernetes cluster nodes is pulled from this library. A Subscribed Content Library originates from a Published Content Library. After the subscription is created, the system synchronizes it with the published library. To create the Tanzu Kubernetes cluster nodes, VMware publishes a Photon OS OVA library to which you subscribe. After the subscriber is synchronized with the publisher, you associate the content library with the Supervisor Cluster.

NEW QUESTION: 6
What is required to enable Workload Management?
A. vSphere Distributed Switch
B. Windows Network Load Balancer
C. Github repository
D. NSX-V
Answer: A (LEAVE A REPLY)
https://docs.vmware.com/en/VMware-vSphere/7.0/vsphere-esxi-vcenter-server-702-vsphere-with-tanzu-guide.pdf Configuring Workload Networks You configure one or more workload networks and their respective IP address ranges.
Each workload network is assigned a vSphere Distributed Switch port group and uses a defined IP range to allocate IP addresses to workloads (VMware Tanzu Kubernetes clusters).

NEW QUESTION: 7
Which two items must be provided before a vSphere with Tanzu Supervisor Namespace can be created? (Choose two.)
A. vSphere with Tanzu Enabled Cluster
B. DNS-compliant Name
C. Permissions
D. Storage Policy
E. Resource Limits
Answer: (SHOW ANSWER)
Prerequisites
Configure a cluster with vSphere with Tanzu.
Create users or groups for all DevOps engineers who will access the namespace.

Create storage policies for persistent storage. Storage policies can define different types and classes of storage, for example, gold, silver, and bronze.
Create VM classes and content libraries for stand-alone VMs.
Create a content library for Tanzu Kubernetes releases for use with Tanzu Kubernetes clusters. See Creating and Managing Content Libraries for Tanzu Kubernetes releases.
Required privileges:
Namespaces.Modify cluster-wide configuration
Namespaces.Modify namespace configuration

NEW QUESTION: 8
Why would developers choose to deploy an application as a vSphere Pod instead of a Tanzu Kubernetes cluster?
A. They need the application to run as privileged pods.
B. The application works with sensitive customer data, and they want strong resource and security isolation.
C. They want to have root level access to the control plane and worker nodes in the Kubernetes cluster.
D. The application requires a version of Kubernetes that is above the version running on the supervisor cluster.
Answer: (SHOW ANSWER)



A vSphere Pod is a VM with a small footprint that runs one or more Linux containers. With vSphere Pods, workloads have the following capabilities:
* Strong isolation from a Linux kernel based on Photon OS

* Resource management using DRS
* Same level of resource isolation as VMs
* Open Container Initiative (OCI) compatible
* Equivalent to a Kubernetes Container Host

vSphere Pods are not compatible with vSphere vMotion. When an ESXi host is placed into maintenance mode, running vSphere Pods are drained and redeployed on another ESXi host, but only if the vSphere Pod is part of a ReplicaSet.

NEW QUESTION: 9

What is true of a Tanzu Kubernetes Cluster?

A. It enables vSphere High Availability and Distributed Resource Scheduler.

B. It removes the Kubernetes API for use by DevOps teams.

C. It is a Kubernetes cluster deployed by developers using a YAML specification file.

D. It use resources from hosts across vSphere clusters to form a Kubernetes cluster on vSphere.

Answer: (SHOW ANSWER)

NEW QUESTION: 10

How do Tanzu Kubemetes clusters communicate with Storage Policy Based Management to request PersistentVolumes?

A. Through a proxy VM

B. Directly with vCenter Server and the underlying ESXi hosts

C. Through the Supervisor Cluster

D. Directly with the vCenter Server

Answer: (SHOW ANSWER)

The Cloud Native Storage for vSphere with Tanzu workflow is as follows:

1. A developer deploys a pod using the kubectl CLI.
2. The vSphere with Tanzu Cloud Native Storage-Container Storage Interface (CNS-CSI) reads this request from the control plane API server.
3. CNS-CSI informs the vCenter Server CNS of the need for a disk with storage class Gold.
4. CNS interfaces with SPBM for a suitable datastore that satisfies the Gold storage class (storage policy).
5. SPBM decides on a suitable datastore and interfaces with DRS for a suitable ESXi host.
6. Hostd on the ESXi host creates a First Class Disk (VMDK) on the datastore.
7. Spherelet on the ESXi host takes the created VMDK.
8. Spherelet mounts the VMDK to the vSphere Pod.
9. Spherelet reports the mount as a successful event to the control plane API server.

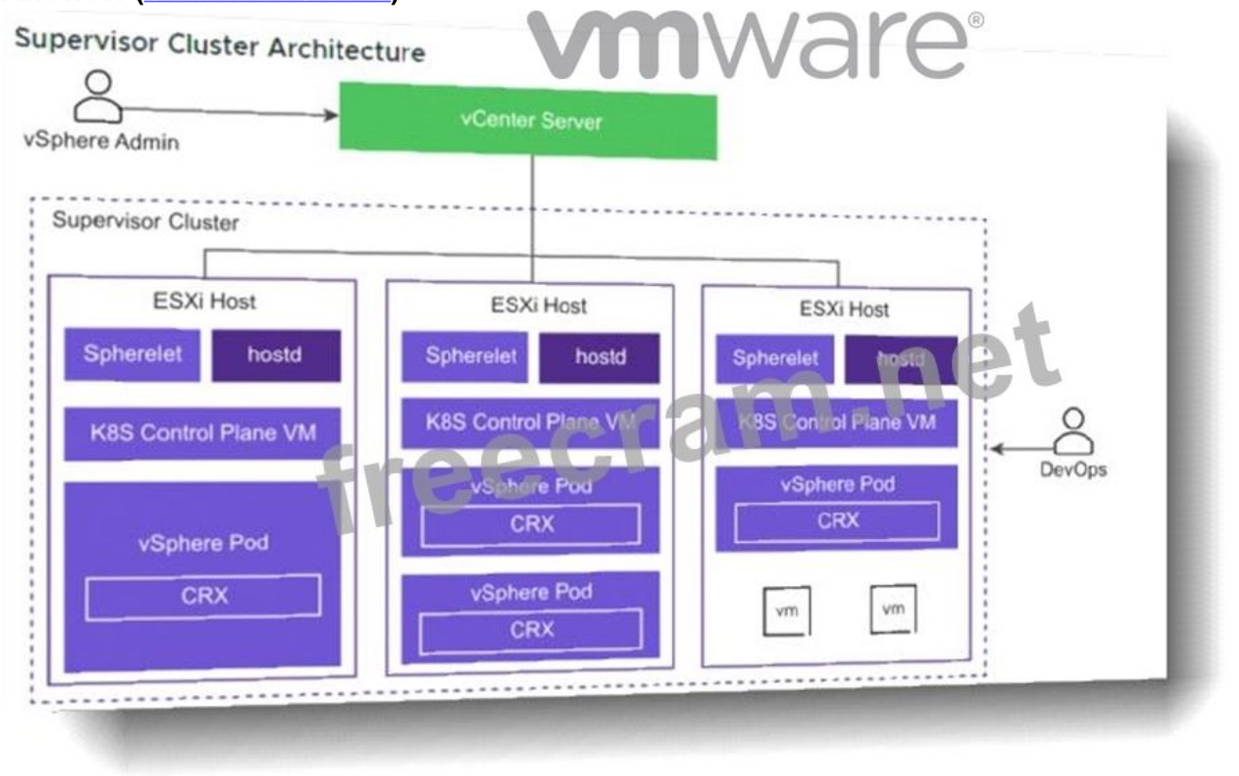
NEW QUESTION: 11

Which statement describes a characteristic of Supervisor Cluster control plane VMs?

A. Manage the lifecycle of ESXi hosts

B. Are manually created by a vSphere administrator

C. Host developer workloads
D. Run system and infrastructure pods
Answer: (SHOW ANSWER)



The Supervisor Cluster provides the management layer on which Tanzu Kubernetes clusters are built. The Tanzu Kubernetes Grid Service is a custom controller manager with a set of controllers that is part of the Supervisor Cluster. The purpose of the Tanzu Kubernetes Grid Service is to provision Tanzu Kubernetes clusters.
While there is a one-to-one relationship between the Supervisor Cluster and the vSphere cluster, there is a one-to-many relationship between the Supervisor Cluster and Tanzu Kubernetes clusters. You can provision multiple Tanzu Kubernetes clusters within a single Supervisor Cluster. The workload management functionality provided by the Supervisor Cluster gives you control over the cluster configuration and lifecycle, while allowing you to maintain concurrency with upstream Kubernetes.

NEW QUESTION: 12
Which kubectl command should be used to change the active vSphere namespace to namespace-01?
A. kubectl config use-context namespace-01
B. kubectl describe ns namespace-01
C. kubectl get ns namespace-01
D. kubectl config change-context namespace-01
Answer: (SHOW ANSWER)

A context element in a kubeconfig file is used to group access parameters under a convenient name. Each context has three parameters: cluster, namespace, and user. By default, the kubectl command-line tool uses parameters from the current context to communicate with the cluster.
To choose the current context:
kubectl config use-context ctx001

NEW QUESTION: 13
Which command should be used by a developer to log in to the vSphere with Tanzu Supervisor Cluster?
A. vmwarectl login --server-<KUBERNETES-CONTROL-PLANE-IP-ADDRESS> --vsphere-username <VCENTER-SSO-USER>
B. kubectl vsphere login --server=<KUBERNETES-CONTROL-PLANE-IP-ADDRESS> --vsphere-username <vcENTER-SSO-USER>
C. vmwarectl vsphere login --server-<KUBERNETES-CONTROL-PLANE-IP-ADDRESS> --vsphere-username <VCENTER-SSO-USER>
D. kubectl login --server=<KUBERNETES-CONTROL-PLANE-IP-ADDRESS> --vsphere-username <VCENTER-SSO-USER>
Answer: (SHOW ANSWER)
Authenticating Using kubectl
In vSphere with Tanzu, authentication is performed using vCenter Single Sign-On. You run the command kubectl vsphere login to authenticate a user through vCenter Single Sign-On to Kubernetes clusters.
kubectl vsphere login --server <kubernetes control plane> -u <username> The --insecure-skip-tls-verify flag is required if the certificate presented by the vSphere with Tanzu control plane is not trusted by the client machine. The control plane is signed by the vCenter Server VMware CA by default. You can replace the control plane certificate with a trusted certificate if needed. Alternatively, install the vCenter Server VMware CA root certificate into your client machine to remove the need for the --insecure-skip-tls-verify flag.

NEW QUESTION: 14
Which command provides valid syntax to deploy a vSphere Pod?
A. tkg apply -c containerName
B. docker run containerName
C. kubectl apply -f deployment.yaml
D. kubectl apply -t deployment.yaml
Answer: (SHOW ANSWER)
You can deploy an application on a namespace on a Supervisor Cluster. Once the application is deployed, the respective number of vSphere Pods are created on the Supervisor Cluster within the namespace.
Common kubectl commands include the apply, get, describe, and delete commands:

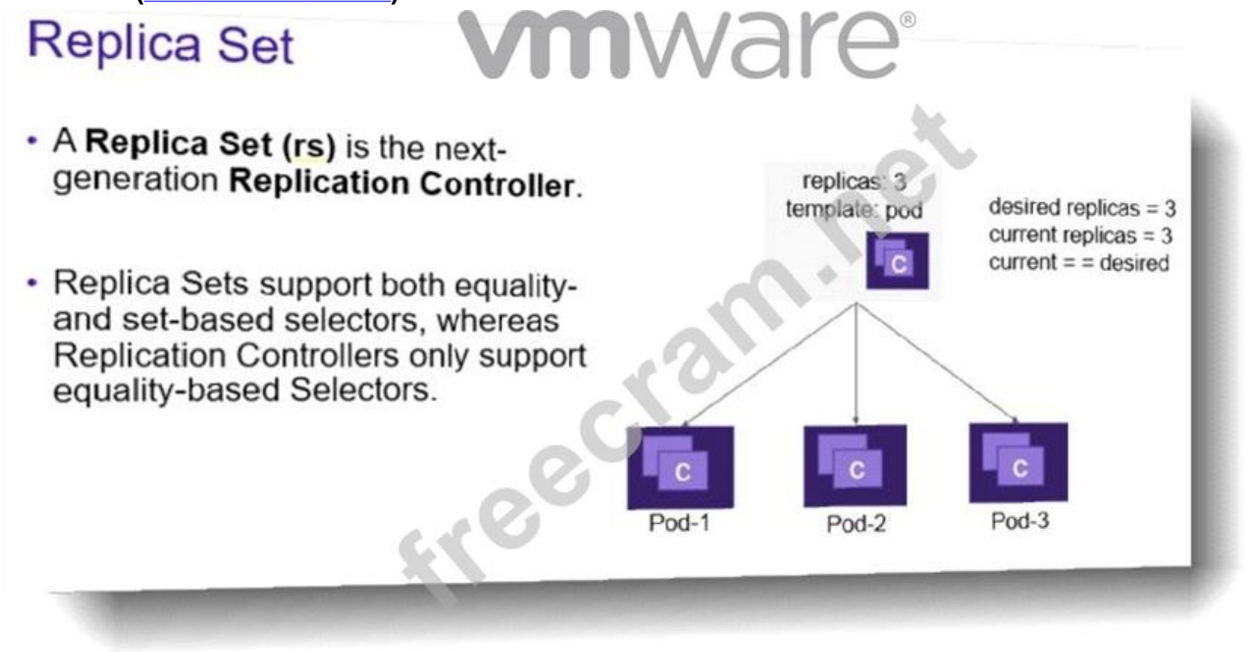
* The kubectl apply command applies the contents of a YAML file. Typically, this command is used to create a pod or deployment: - kubectl apply -f /path/to/my.yaml
* The kubectl get command returns basic information about an object: - kubectl get pod <pod_name_name>

NEW QUESTION: 15
An organization is preparing to deploy vSphere with Tanzu and will be using the vSphere Networking stack.
How should the administrator allocate management network IP addresses for the Kubernetes Control Plane within the Supervisor Cluster?
A. Five IP addresses are required, one for each of the Control Plane VMs. one for the floating IP address of the Control Plane VM, and one spare for performing rolling cluster upgrades
B. Four IP addresses are required, one for each of the Control Plane VMs and one spare for performing rolling cluster upgrades
C. Three IP addresses are required, one for each of the Control Plane VMs
D. Six IP addresses are required, one for each of the Control Plane VMs, one for the floating IP address of the Control Plane VM. one for performing rolling cluster upgrades and one for the image Registry VM.
Answer: (SHOW ANSWER)
Static IPs for Kubernetes control plane VMs
Block of 5A block of 5 consecutive static IP addresses to be assigned to the Kubernetes control plane VMs in the Supervisor Cluster.

NEW QUESTION: 16
How can you remove unreferenced container images from a project in an embedded Registry Service?
A. Delete images in Content Library.
B. Use kubectl to delete the images.
C. Delete the namespace using the vSphere Client.
D. Purge a namespace using the vSphere Client.
Answer: (SHOW ANSWER)
Deleting Artifact:
When an artifact is not referenced by any OCI index, you can delete the artifact freely which will delete its manifest and all associated tags.
When an artifact is referenced by an OCI index, you cannot delete it. In order to delete this artifact, you must first delete all OCI indexes referencing this artifact first, remembering that an artifact can be referenced by multiple parents artifacts pushed onto Harbor by different users. So when deleting an OCI index holding 9 children artifacts not referenced by any other index and 1 child artifact referenced by another index, only 9 out of 10 children artifacts will be deleted.
To delete any artifact in the Harbor interface, click on the artifact and select 'Delete' and confirm.

Not Purge: As a vSphere administrator, you can purge the images for a project in the private image registry by request from DevOps engineers. Purging images from the private image registry deletes all references to the images made by pods, but it does not remove the images from the image registry.

NEW QUESTION: 17
Which object helps maintain copies of a vSphere pod?
A. ReplicaSets
B. Network Policies
C. Namespaces
D. Persistent Volume
Answer: (SHOW ANSWER)



A ReplicaSet declares how the functionality of a pod is made scalable and resilient through redundancy. The ReplicaSet ensures that a specified number of pods is kept running. Example: Deploy a ReplicaSet. * The ReplicaSet name is nginx-replica-demo. * Two replicas are expected to be running. * The ReplicaSet applies to pods with label nginx.

For more information about Kubernetes replica sets, see
https://kubernetes.io/docs/concepts/workloads/controllers/replicaset/

NEW QUESTION: 18
Which kubectl command is used to list al pods in the current active namespace?
A. kubectl get nodes
B. kubectl get pods
C. kubectl get services
D. kubectl list pods
Answer: (SHOW ANSWER)
Fetch all Pods in all namespaces using kubectl get pods --all-namespaces Pods Shortcode = po List one or more pods kubectl get pod Delete a pod kubectl delete pod <pod_name> Display the detailed state of a pods kubectl describe pod <pod_name> Create a pod kubectl create pod <pod_name> Execute a command against a container in a pod kubectl exec <pod_name> -c <container_name> <command> Get interactive shell on a a single-container pod kubectl exec -it <pod_name> /bin/sh Display Resource usage (CPU/Memory/Storage) for pods kubectl top pod Add or update the annotations of a pod kubectl annotate pod <pod_name> <annotation> Add or update the label of a pod kubectl label pod <pod_name>

NEW QUESTION: 19
A developer is connecting to a Tanzu Kubernetes Cluster using the kubectl vsphere login command Which information must be specified, in addition to both the name of the cluster and the Supervisor Cluster Control Wane IP?
A. The path to the existing kubeconfig file and the SSO Username
B. The path to the existing kubeconfig file and the Token D for the SSO credentials
C. The name of the Supervisor Namespace and the Token ID for the SSO credentials
D. The name of the Supervisor Namespace and the SSO Username
Answer: (SHOW ANSWER)
To connect to the Supervisor Cluster, run the following command.
kubectl vsphere login --server=SUPERVISOR-CLUSTER-CONTROL-PLANE-IP
--tanzu-kubernetes-cluster-name TANZU-KUBERNETES-CLUSTER-NAME
--tanzu-kubernetes-cluster-namespace SUPERVISOR-NAMESPACE-WHERE-THE-CLUSTER-IS-DEPLOYED
--vsphere-username VCENTER-SSO-USER-NAME
For example:
kubectl vsphere login --server=10.92.42.137
--tanzu-kubernetes-cluster-name tanzu-kubernetes-cluster-01
--tanzu-kubernetes-cluster-namespace tanzu-ns-1
--vsphere-username administrator@example.com

NEW QUESTION: 20

Which type of service is created by default when publishing a Kubernetes service?

A. Cluster IP

B. Node Port

C. LoadBalancer

D. ExternalName

Answer: (SHOW ANSWER)

For some parts of your application (for example, frontends) you may want to expose a Service onto an external IP address, that's outside of your cluster.

Kubernetes ServiceTypes allow you to specify what kind of Service you want. The default is ClusterIP.

NEW QUESTION: 21

An administrator is tasked with increasing the amount of CPU and memory in an existing Tanzu Kubernetes cluster.

Which change must the administrator complete to ensure the cluster scales successfully when updating the YAML definition?

A. Manually update the CPU and memory of the nodes

B. Update the Virtual Machine Class Type

C. Increase the number of worker nodes

D. Increase the number of control plane nodes

Answer: (SHOW ANSWER)

Virtual Machine Class Types for Tanzu Kubernetes Clusters

A virtual machine class defines the resource sizing for Tanzu Kubernetes cluster VMs: * CPU * Memory * Storage Virtual machine class types range from extra small (xsmall) to extra large (xlarge). Class types are categorized as guaranteed or best effort:

* Guaranteed: Reserve all CPU and memory allocations. * Best effort: Allocate the same CPU and memory but do not reserve the resources.

The class type guaranteed-small allocates 2 CPU, 4 GB of memory, and 16 GB of storage and reserves CPU and memory allocations. Custom virtual machine class types cannot be defined.

NEW QUESTION: 22

Kubernetes object types are going to be limited by an administrator within a vSphere with Tanzu namespace. Which three Kubernetes object types may be limited? (Choose three.)

A. Number of Persistent Volume Claims

B. Number of Pods

C. Number of Operators

D. Number of DaemonSets

E. Number of Ingress frontends

F. Number of Load Balancer Services

Answer: (SHOW ANSWER)

https://docs.vmware.com/en/VMware-vSphere/7.0/vmware-vsphere-with-tanzu/GUID-1238AFD8-232C-4EFC-BD54-796CB9F8C45F.html Resource Name Description
configmaps The total number of ConfigMaps that can exist in the namespace.
persistentvolumeclaims The total number of PersistentVolumeClaims that can exist in the namespace.
pods The total number of Pods in a non-terminal state that can exist in the namespace. A pod is in a terminal state if .status.phase in (Failed, Succeeded) is true.
replicationcontrollers The total number of ReplicationControllers that can exist in the namespace.
resourcequotas The total number of ResourceQuotas that can exist in the namespace.
services The total number of Services that can exist in the namespace.
services.loadbalancers The total number of Services of type LoadBalancer that can exist in the namespace.
services.nodeports The total number of Services of type NodePort that can exist in the namespace.
secrets The total number of Secrets that can exist in the namespace.