vSphere Kubernetes Service: Design, Deploy and Operate [V9.0] (VKSDDO9)

ID VKSDDO9 **Price** on request **Duration** 5 days

Who should attend

System Administrators, Solution Engineers, Consultants, Architects, and Support Personnel

Prerequisites

This course has the following prerequisites:

- VCF Stage-1 Training
- Working experience and knowledge of VMware vSphere®, VMware NSX®, and vSAN environments

Course Objectives

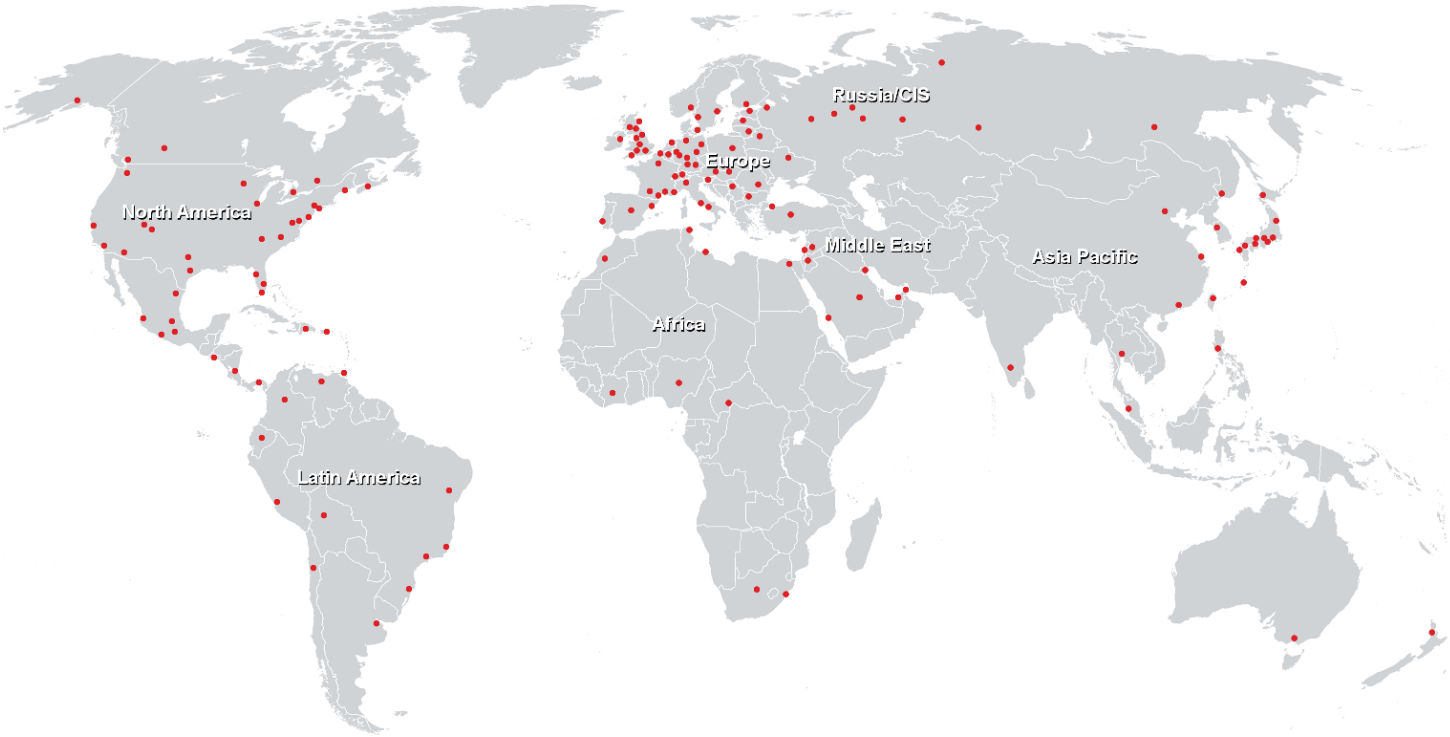
By the end of the course, you should be able to meet the following objectives:

- Identify the key components of a Kubernetes architecture
- Explain Volumes and persistent storage mechanisms in Kubernetes
- Explain Kubernetes networking
- Explain the concepts and components of vSphere Supervisor
- Explain the vSphere Supervisor authentication workflow using vCenter Single Sign-On
- Explain the key features of VCF Consumption CLI
- Describe the vSphere Supervisor deployment models
- Identify the vSphere Supervisor networking and load-balancing requirements
- Explain the vSphere Supervisor storage options including cross Datacenter topologies
- Outline the steps to configure vSphere Namespaces and Zones
- Explain the VCF Cloud Services enablement options
- Identify available Services in vSphere Supervisor including Velero and Extensible Services
- Explain how the vSphere Supervisor is monitored and upgraded.
- Explain the VM creation workflow with VM Service
- Outline the VM Service deployment models for Virtual Machines with configurable OVF Properties
- Explain how to deploy a vSphere Pod using kubectl and expose it through a Load Balancer IP
- Describe how building an extensible ecosystem enables organizations to deploy cloud-native applications with integrated services
- Explain how VKS Cluster monitoring functions and how standard packages are managed
- Describe VKS Cluster provisioning using TanzuKubernetesCluster and ClusterClass
- Describe the application deployment workflow using Helm
- Describe the steps for creating snapshots in VKS Cluster
- Explain the process of upgrading the VKS Version
- Outline the steps to update VKS Cluster using VCF CLI
- Explain how VKS cluster management enables platform engineers to manage VKS clusters at scale
- Outline the process for installing Istio on a VKS cluster.
- Illustrate how to visualize the Istio Service Mesh using Kiali.
- Explain how to use the Gateway API to configure traffic routing within Istio the service mesh.

Course Content

- Course Introduction
- Kubernetes Overview
- VCF Cloud Services Overview
- vSphere Supervisor Deployment Models
- VCF Cloud Services Enablement Options
- vSphere Supervisor Storage Topologies
- Configuring and Managing vSphere Namespaces and Zones
- Services in vSphere Supervisor
- Monitoring and Lifecycle Management of vSphere Supervisor
- Managing Virtual Machines with VM Service
- Multi-Tenancy in VCF
- Consuming VCF Cloud Services for building an Extensible Ecosystem
- VKS Cluster Deployment using Kubectl
- Monitoring and Lifecycle Management of VKS Clusters
- Deploying Workloads on VKS Clusters using Helm
- VKS Cluster Day-2 Operations
- VKS Cluster Management and Istio Service Mesh

Training Centres worldwide



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