VMware Tanzu Mission Control: Management and Operations

Course Description

During this two-day course, you focus on using VMware Tanzu® Mission ControlTM to provision and manage Kubernetes clusters. The course covers how to apply access, image registry, network, security, quota, and custom policies to Kubernetes environments. For cluster provisioning and management, the course focuses on deploying, upgrading, backing up, and monitoring Kubernetes clusters on VMware vSphere® with VMware Tanzu® and also covers package management using the VMware Tanzu Mission Control catalog.

Course Duration:

2 days

Prerequisites:

- Experience deploying and managing multiple Kubernetes clusters
- Experience with Kubernetes RBAC, network policies, resource quotas, and pod security policies

The provisioning lesson in the course relies on VMware Tanzu® Kubernetes Grid™, so attending one of the following courses is recommended:

- VMware vSphere with Tanzu: Deploy and Manage [V7]
- VMware Tanzu Kubernetes Grid: Install, Configure, Manage [V1.3]

Objectives:

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

- Describe the Tanzu Mission Control architecture
- Configure user and group access
- Create access, image registry, and network policies
- Connect your on-premises vSphere with Tanzu Supervisor cluster to VMware Tanzu Mission Control
- Create and manage Tanzu Kubernetes clusters
- Monitor cluster health and perform cluster inspections

Course Outline:

1. Course Introduction
   - Introduction and course logistics
   - Course objectives
2. Introducing VMware Tanzu Mission Control
   - Explain VMware Tanzu Mission Control
   - List the problems that VMware Tanzu Mission Control solves
   - Request access to VMware Tanzu Mission Control
   - Describe VMware Cloud services
   - Describe organization roles in VMware Cloud services
   - Describe service roles in VMware Tanzu Mission Control
   - Create and manage groups in VMware Cloud services

- Describe the architecture of VMware Tanzu Mission Control
- Describe the resource hierarchy of VMware Tanzu Mission Control

3. Cluster Management
   - Describe the steps for attaching a Kubernetes cluster to VMware Tanzu Mission Control
   - Describe the connectivity requirements
   - Describe the health statuses
   - Describe the steps for registering a Management Cluster to VMware Tanzu Mission Control
   - Describe a management cluster
   - Describe provisioners
   - Describe the purpose of a cloud provider account
   - Describe the steps to provision a cluster on Tanzu Kubernetes Grid
   - Describe how clusters are scaled and upgraded
   - Describe the purpose of cluster inspections
   - Describe the purpose of Tanzu Observability
   - Describe the purpose of Tanzu Service Mesh Advanced
   - Describe VMware Tanzu Mission Control Data Protection
   - Describe the VMware Tanzu Mission Control catalog
   - Describe the installation and management of packages
4. Policy Management
   - Describe the policy model
   - Describe the available policy types
   - Describe how access policies grant users access to different resources
   - Explain how image registry policies restrict from which image registries container images can be pulled
   - Describe how network policies are applied to clusters
   - Describe how security policies control deployment of pods in a cluster
   - Describe how quota policies manage resource consumption in your clusters
   - Describe how custom policies implement specialized policies that govern your Kubernetes clusters
   - Describe how Policy Insights reports Tanzu Mission Control policy issues

Who Should Attend

Operators and application owners who are responsible for deploying and managing policies for multiple Kubernetes clusters across on-premises and public cloud environments.