

## VMware Tanzu Mission Control: Management and Operations 2024

Duration: 3 Days    Course Code: VMTMCMO    Version: 2024

### Overview:

During this three-day course, you focus on using VMware Tanzu® Mission Control™ to provision and manage Kubernetes clusters. The course covers how to apply image registry, network, security, quota, custom, and mutation policies to Kubernetes environments. It focuses on how to deploy, upgrade, back up, and monitor Kubernetes clusters on VMware vSphere® with VMware Tanzu®, and it also covers package management using the VMware Tanzu Mission Control catalog.

### Target Audience:

Administrators or application owners who are responsible for deploying and managing Kubernetes clusters and workloads

### Objectives:

- By the end of the course, you should be able to meet the following objectives:
- Describe the VMware Tanzu Mission Control architecture
- Configure user and group access
- Create and manage Kubernetes clusters
- Create image registry, network, quota, security, custom, access and mutation policies
- Connect your on-premises vSphere with Tanzu Supervisor to VMware Tanzu Mission Control
- Create, manage, and back up VMware Tanzu® Kubernetes Grid™ clusters
- Create and manage Amazon Elastic Kubernetes Service clusters
- Perform cluster inspections
- Manage packages in your clusters
- Monitor and secure Kubernetes environments

### Prerequisites:

- Experience deploying and managing multiple Kubernetes clusters
- Experience with Kubernetes RBAC, network policies, resource quotas, and pod security policies
- Attending one of the following courses is recommended:
  - VMKFCO - Kubernetes Foundations and Cluster Operations
  - VMTKGICM - VMware Tanzu Kubernetes Grid: Install, Configure, Manage
  - VMVKDM - VMware vSphere with Tanzu: Deploy and Manage

## Content:

### 1 Course Introduction

- Introduction and course logistics
- Course Objectives

### 2 Introducing VMware Tanzu Mission Control

- Describe VMware Tanzu Mission Control
- Describe vSphere with Tanzu
- Describe Tanzu Kubernetes Grid
- Describe VMware Tanzu® for Kubernetes Operations
- Describe how to manage Kubernetes clusters
- Explain VMware Tanzu Mission Control Self-Managed
- Describe VMware Aria Operations™ for Applications
- Describe VMware Tanzu® Service Mesh™ Advanced edition
- Describe VMware Aria Automation™
- List the open-source integrations
- Describe VMware Cloud™ services
- Describe the VMware Cloud services Catalog
- Explain how to access VMware Tanzu Mission Control

### 3 VMware Tanzu Mission Control Access Tools

- Explain VMware Cloud services and enterprise federation
- Describe VMware Cloud services roles
- Explain multifactor authentication
- Describe the VMware Tanzu Mission Control UI
- List the components of the VMware Tanzu Mission Control UI
- Describe the VMware Tanzu CLI
- Install the Tanzu CLI
- Describe the VMware Tanzu Mission Control API
- Access the VMware Tanzu Mission Control API

### 4 Management Clusters

- Outline the steps for registering a management cluster to VMware Tanzu Mission Control
- Discuss what a management cluster is
- Describe provisioners
- Explain the purpose of a cloud provider account
- Describe Amazon Elastic Kubernetes Service
- Create Amazon Web Services credentials
- Describe Azure Kubernetes Service

### 5 Workload Clusters

- Describe VMware Tanzu Kubernetes Grid workload clusters
- Explain how to create a cluster
- Explain how to configure a cluster
- Describe Amazon Elastic Kubernetes Service workload clusters
- Describe Microsoft Azure Kubernetes Service workload clusters
- Explain how to attach a Kubernetes cluster
- Explain how to verify the connections to the cluster
- Describe cluster health

### 6 Policy Management

- Describe the policy model
- Describe the available policy types
- Explain how access policies grant users access to different resources
- Explain how image registry policies restrict from which image registries container images can be pulled
- Outline how network policies are applied to clusters
- Discuss how security policies control deployment of pods in a cluster
- Discuss how quota policies manage resource consumption in your clusters
- Discuss how custom policies implement specialized policies that govern your Kubernetes clusters
- Describe mutation policies
- Explain how Policy Insights reports VMware Tanzu Mission Control policy issues

### 7 VMware Tanzu Mission Control Catalog

- Describe the VMware Tanzu Mission Control catalog
- Explain how to install packages
- Describe network packages
- Describe Fluent-Bit
- Explain Prometheus and Grafana
- Describe Harbor
- Describe Flux
- Describe Helm
- Describe Git repositories

### 8 Day 2 Operations

- Describe VMware Tanzu Mission Control Data Protection
- Describe the purpose of cluster inspections
- Identify the life cycle management options supported for the different workload cluster types
- List the steps to scale, upgrade, and delete clusters

## Further Information:

For More information, or to book your course, please call us on 0800/84.009

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