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VMware Cloud Foundation: Management and Operations

Course Overview

This three-day course includes instruction on the capabilities of VMware Cloud Foundation™ to manage and operate hybrid and cloud infrastructures, which includes customization and management. The course explains the architecture of VMware Cloud Foundation and explains licensing, certificates, and storage and network management. The course also covers workload domains, availability, life cycle management, and troubleshooting.

In general, you learn how to use and configure VMware Cloud Foundation 4.0.1.

Course Objectives

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

- Describe VMware Cloud Foundation architecture
- Use SDDC Manager to perform operational tasks
- Describe user roles in VMware Cloud Foundation and VMware vSphere®
- Manage users and passwords using VMware Cloud Foundation
- Manage certificate rotation for VMware Cloud Foundation components
- Use Active Directory integration to automate certificate generation and rotation
- Describe workload domains
- Manage workload domains in VMware Cloud Foundation
- Manage VMware NSX-T™ for VMware Cloud Foundation
- Describe use cases for Application Virtual Networks (AVNs)
- Meet vSphere with Tanzu requirements
- Deploy a vSphere with VMware Tanzu™ enabled workload domain
- Manage VMware vSAN™ storage in a workload domain
- Create vSAN storage policies
- Describe Cloud Native storage
- Describe the importance of business continuity measures in VMware Cloud Foundation
- Plan appropriate backup and restore workflows for VMware Cloud Foundation components
- Implement stretched clusters in VMware Cloud Foundation workload domains

Target Audience

Experienced system administrators, system integrators, and consultants responsible for implementing and managing VMware Cloud Foundation

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Prerequisites

This class requires system administration experience with VMware vSphere deployments or completion of one of the following courses:

- VMware vSphere: Install, Configure, Manage
- VMware vSphere: Optimize and Scale

Course Delivery Options

- Classroom
- Live Online
- Onsite

Product Alignment

- VMware Cloud Foundation 4.0.x
- VMware vSphere 7
- VMware NSX® Data Center 3

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Course Modules

1 **Course Introduction**
   - Introductions and course logistics
   - Course objectives

2 **VMware Cloud Foundation Overview**
   - Describe the VMware Cloud Foundation 4 solution
   - Describe VMware Cloud Foundation 4 architecture
   - Identify VMware Cloud Foundation 4 components
   - Describe VMware Cloud Foundation 4 topology
   - Define VMware Cloud Foundation 4 terminology

3 **Post Deployment Operations**
   - Integrate VMware Cloud Foundation with VMware vCenter® Single Sign-On
   - Configure user accounts in VMware Cloud Foundation
   - Manage passwords in VMware Cloud Foundation
   - Describe the two roles in VMware Cloud Foundation

4 **Licensing**
   - Add license keys to the VMware Cloud Foundation inventory
   - Assign license keys
   - Remove license keys
   - Replace expiring licenses

5 **Managing Workload Domains**
   - Define a workload domain
   - Create, scale, and delete workload domains
   - Describe use cases for multiple clusters in a workload domain
   - Manage storage options for workload domains
   - Plan and implement network pools for consumption by workload domains
   - Compare multiple workload domains and multi-cluster options

6 **VMware Cloud Foundation Networking with NSX-T**
   - Discuss NSX-T automation in VMware Cloud Foundation
   - Discuss NSX-T in the Management Domain
   - Learn About Application Virtual Networks (AVNs)
   - Use of AVNs in the Deployment Parameter Sheet
   - Learn other AVN uses
   - Use SDDC Manager to automate NSX edge cluster deployment

7 **Kubernetes Enabled Workload Domains**
   - Describe vSphere with Tanzu
   - Describe vSphere with Tanzu containers, pods, and supervisor clusters
   - Configure Namespaces
   - Implement vSphere with Tanzu in a VMware Cloud Foundation workload domain

8 **VMware Cloud Foundation Storage Management**
   - Identify vSAN architecture and components
   - Discuss how to scale vSAN clusters in VMware Cloud Foundation
   - Explain how storage policies work with VMware Cloud Foundation vSAN clusters
   - Discuss external storage as supplemental storage
   - Describe Cloud Native Storage
   - Describe vSphere with Tanzu for Cloud Native Storage consumption

9 **VMware Cloud Foundation Certificate Management**
   - Describe the initial deployment state of certificates
   - Manage SDDC certificate rotation
   - Describe certificate creation options
   - Describe certificate rotation using Active Directory
   - Use SDDC Manager to create Certificate Signing Requests (CSRs)

10 **Life Cycle Management**
   - Describe the role of SDDC Manager in life cycle management
   - Describe the different LCM options available in VMware Cloud Foundation 4
   - Describe the upgrade prerequisites and upgrade precheck process
   - Upgrade VMware Cloud Foundation software and components
   - Describe the role of VMware vRealize® Suite Lifecycle Manager™

11   VMware Cloud Foundation Troubleshooting

- Use SOS commands to perform health checks and log bundle operations.
- Create service requests using best practices
- Troubleshoot failed workflows using log files and token IDs
- Restart services using the correct procedures

Contact

If you have questions or need help registering for this course, click here.