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 vCloud Foundations and explains licensing, certificates, VMware vSAN™, maintenance, and multi-instancing. The course also covers workload domains, workload migration, availability, and troubleshooting. In general, you learn how to use and configure VMware Cloud Foundations 3.9.

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 vSAN storage in a workload domain
- 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

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

- VMware vSphere: Install, Configure, Manage [V6.7]
- VMware vSphere: Optimize and Scale [V6.7]
Course Delivery Options
- Classroom
- Live Online
- Onsite

Product Alignment
- VMware Cloud Foundation 3.9.x
- VMware vSphere 6.7 U3
Course Modules

1 Course Introduction
   - Introductions and course logistics
   - Course objectives

2 VMware Cloud Foundation Overview
   - Describe VMware Cloud Foundation solution
   - Describe VMware Cloud Foundation architecture
   - Define VMware Cloud Foundation terminology
   - Navigate the SDDC Manager UI

3 Post Deployment Operations
   - Integrate VMware Cloud Foundation with VMware Single Sign On
   - Manage user roles in VMware Cloud Foundation
   - Manage passwords in VMware Cloud Foundation

4 Licensing
   - Use SDDC Manager to license managed components
   - Add, upgrade, and replace licenses in VMware Cloud Foundation
   - Use SOS commands to add licenses
   - Discuss VMware vRealize Log Insight licensing models

5 Managing Workload Domains
   - Describe workload domains
   - 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

6 vSAN Management
   - Describe vSAN
   - Configure appropriate storage policies
   - Explain de-duplication and compression in a vSAN cluster
   - Describe vSAN data-at-rest encryption
   - Describe how to scale up and scale out vSAN
   - Discuss the importance of driver/firmware compatibility

7 Availability and Business Continuity
   - Use vSAN Health to monitor vSAN clusters
   - Configure availability options for management domains
   - Backup and restore VMware Cloud Foundation components
   - Describe the importance of availability options for infrastructure and vSphere components
   - Create vSAN policies to increase availability
   - Describe backup and restore for networking, VMware vCenter®, and VMware NSX® components.
   - Configure vRealize Log Insight to provide alerts for specific conditions
   - Define prerequisites for stretched clusters in VMware Cloud Foundation environments
   - Configure stretched clusters using SOS commands
   - Troubleshoot stretched cluster workflows
   - Describe cross-site VMware vSphere® vMotion® and cross-site NSX

8 Certificates
   - Discuss general certificate concepts
   - 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 CSRs

9 Workload Migration
   - Explain migration use cases
   - Describe migration methods
   - Describe VLAN bridging using NSX
   - Explain vSphere vMotion compatibility
   - Use HCX to help with workload migration

10 Life Cycle Management
    - Describe the role of SDDC Manager in lifecycle management
    - Describe the upgrade automation process and components
    - Outline the upgrade workflow
    - Describe the role of VMware vRealize® Suite Lifecycle Manager™
• Manage offline local depots

11 Hardware and System Maintenance
• Perform the correct power on and power off procedures
• Identify and remediate degraded hosts
• Replace dead hosts
• Recommission hosts following failures

12 Troubleshooting
• Use SOS commands to perform health checks and log bundle operations.
• Create service requests using best practices
• Troubleshoot failed workflows
• Restart services using the correct procedures
• Avoid common user errors

13 Multi-Instance Federation
• Describe prerequisites for Multi-Instance Federation
• Follow configuration maximums
• Explain design considerations

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