

# VMWA-46 - VMWARE CLOUD FOUNDATION: BUILD, MANAGE AND SECURE

[V9.0]

Categoria: **VMware**

## INFORMAZIONI SUL CORSO



Durata:  
5 Giorni



Categoria:  
VMware



Qualifica Istruttore:  
VMware Certified  
Instructor



Dedicato a:  
Professionista IT



Produttore:  
VMware

## OBIETTIVI

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

- Define VCF and its key features
- Describe the use cases of VCF
- Explain the architecture of the VCF private cloud
- Recognize the components of the VCF private cloud
- Outline the sequence for deploying the VCF private cloud
- Describe the deployment configuration of VCF instance core components
- Explain the deployment configuration of VCF fleet management components
- Deploy VMware Cloud Foundation® Operations for networks, VMware Cloud Foundation® Operations for logs, and VMware
- Cloud Foundation® Identity Broker
- Describe the VCF licensing model
- Describe the single sign-on architecture in VCF
- Identify the steps to configure single sign-on in VCF
- Manage users and user groups in VCF
- Outline the steps to manage passwords in VCF
- Outline the steps to create a workload domain
- Configure VMware® vCenter® linked groups
- Import vCenter as a workload domain using VCF Operations
- Describe the process for configuring Fibre Channel storage
- Identify the components of an iSCSI storage system
- Outline the process of provisioning NFS storage to VMware® ESX hosts
- Identify and use built-in tools to validate a successful VMware® vSAN deployment
- Compare the various tools used to monitor a vSAN cluster
- Explain the types of vSAN reports available in VMware Cloud Foundation® Operations
- Explain Virtual Private Cloud concepts and constructs
- Differentiate between Centralized and Distributed Network Connectivity
- Identify the steps to configure virtual private cloud
- Manage certificates in VCF
- Explain the life cycle management of VCF components
- Identify the supported upgrade paths to VCF 9.0

- Define security, compliance and resilience in VCF
- Describe the integrated security features across all layers in VCF
- Discuss and perform VCF upgrade paths

## PREREQUISITI

This course has the following prerequisites:

- Working experience and knowledge of VMware vSphere®, VMware NSX®, and vSAN environments

## CONTENUTI

### Module 1. Course Introduction

- Introductions and course logistics
- Course objectives

### Module 2. VCF Private Cloud: Overview and Architecture

- Define VCF and its key features? Describe the use cases of VCF
- Explain the capabilities of VCF
- Describe the integrated security across all layers in VCF
- Explain the advanced services of VCF
- Explain the architecture of the VCF private cloud
- Recognize the components of the VCF private cloud
- Distinguish between VCF fleet-level components and VCF instance-level components
- Describe the various roles in VCF private cloud

### Module 3. VCF Private Cloud Deployment

- Identify the VCF fleet deployment considerations
- Describe the process for planning and preparing a VCF deployment
- Identify the information required for the Planning and Preparation Workbook
- Explain the high-level steps to deploy VCF private cloud
- Outline the sequence for deploying the VCF private cloud
- Describe the deployment configuration of VCF instance core components
- Explain the deployment configuration of VCF fleet management components
- Use the VCF Installer deployment wizard to deploy a new VCF fleet
- Use a deployment specification JSON file to deploy a new VCF fleet

### Module 4. VCF Post-deployment Tasks

- Navigate the VCF Operations user interface
- Navigate the VMware Cloud Foundation® Automation user interface
- Navigate the vSphere Client user interface
- Explain VCF Operations for networks, VCF Operations for logs, and VCF Identity Broker
- Deploy VCF Operations for networks, VCF Operations for logs, and VCF Identity Broker

### Module 5. VCF Fleet Management

- Describe the VCF licensing model
- Assign and manage VCF licenses
- Identify key log files to troubleshoot licensing issues

- Discuss single sign-on in VCF
- Describe the single sign-on architecture in VCF
- Discuss VCF Identity Broker in VCF
- Identify the steps to configure single sign-on in VCF
- List the supported directories and IDPs in VCF
- Configure SSO and enablement for all components in a VCF Instance
- Manage users and user groups in VCF
- Outline the steps to manage passwords

#### **Module 6. VCF Workload Domain**

- Explain VCF domains
- Describe the management of the workload domains
- List design considerations for workload domains
- Describe design prerequisites for a workload domain
- Outline the steps to create a workload domain
- Describe vCenter Groups
- Configure vCenter linked groups
- Import vCenter as a workload domain using VCF Operations

#### **Module 7. VCF Networking**

- Describe the role of VMware NSX in VCF
- Describe the default NSX objects that are created during the VCF deployment
- Discuss the Workload domain networking options
- Describe the networking constructs in NSX
- Explain Virtual Private Cloud concepts and constructs
- Differentiate between Centralized and Distributed Network Connectivity
- Configure Distributed Network Connectivity
- Configure Centralized Network Connectivity
- Identify key CLI commands to determine the NSX Edge cluster status and BGP peering
- Create a Virtual Private Cloud
- Create subnets within a virtual private cloud

#### **Module 8. VCF Storage Management**

- Define the key components involved in Fibre Channel storage systems
- Describe the process for configuring Fibre Channel storage
- Identify the components of an iSCSI storage system
- Explain how iSCSI addressing works
- Describe the benefits and considerations of using multipathing with iSCSI storage
- List the requirements to use NFS as principal and supplemental storage
- Outline the process of provisioning NFS storage to ESX hosts
- Describe the steps involved in deploying a vSAN cluster
- Identify and use built-in tools to validate a successful vSAN deployment
- Apply a custom storage policy to an individual virtual machine or virtual disk
- Compare the various tools used to monitor a vSAN cluster
- Explain the types of vSAN reports available in VCF Operations
- Compare different maintenance mode options and their impact on object health
- Summarize the steps to power down a vSAN cluster in a workload domain

**Module 9. VCF Certificate Management**

- Describe public key infrastructure
- Explain the purpose of certificate signing requests
- Outline the steps to integrate certificates in VCF
- List the available CA options in SDDC Manager
- Integrate VCF Operations with Microsoft CA and OpenSSL CA
- Manage certificates in VCF

**Module 10. VCF Life Cycle Management**

- Discuss life cycle management in VCF
- Explain the life cycle management of VCF fleet management
- Describe how to configure software depots
- Describe how to upgrade and patch fleet management components
- Explain the life cycle management of VCF components
- Describe how to upgrade and patch the VCF management components
- Explain the process for backing up and restoring fleet-level management components
- Explain the process for backing up and restoring VCF management components

**Module 11. VCF Security**

- Define security, compliance and resilience in VCF
- Describe the integrated security features across all layers in VCF
- Explain the advanced networking and security capabilities of VCF
- Outline the steps to monitor User and Infrastructure Security
- Explain how Compliance Benchmark works
- Outline the steps to monitor Configuration Drift

**Module 12. VCF Upgrade Paths**

- Identify the supported upgrade paths to VCF 9.0
- Explain the upgrade key consideration
- Evaluate both existing and future compatibility assessments
- Explain the upgrade sequence to the VCF 9 fleet using the existing vSphere
- Explain the upgrade sequence to the VCF 9 fleet using the existing vSphere and VCF Operations
- Explain the upgrade sequence to the VCF 9 fleet using the existing VCF 5.2 with multiple Aria components

**INFO**

**Esame:** 2V0-17.25 - VMware Cloud Foundation 9.0 Administrator --- VMware Certified Professional - VMware Cloud Foundation Administrator (VCP-VCF Admin)

**Materiale didattico:** Materiale didattico ufficiale VMware in formato digitale

**Costo materiale didattico:** incluso nel prezzo del corso a Calendario

**Natura del corso:** Operativo (previsti lab su PC)