



ID VCFBMS Prix sur demande Durée 5 jours

#### A qui s'adresse cette formation

System Administrators, Solution Engineers, Consultants, Architects, and Support Personnel

# Cette formation prépare à la/aux certifications

VMware Certified Professional – VMware Cloud Foundation Administrator (VCP-VCFA) VMware Certified Professional – VMware vSphere Foundation Administrator (VCP-VVFA)

#### Pré-requis

This course has the following prerequisites:

- Implement Learning Path Stage-1 Training
- Working experience and knowledge of VMware vSphere®, VMware NSX®, and vSAN environments

### **Objectifs**

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

#### Contenu

#### Course Introduction

- · Introduction and course logistics
- · Course objectives

#### **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

#### **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

#### **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

#### **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

# **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

# **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

#### **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

### **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

# **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

# **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

# **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



# Centres de formation dans le monde entier





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