

VMWA-8 - VMWARE CLOUD FOUNDATION: DEPLOY, CONFIGURE, MANAGE

[V5.0]

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:

- Plan a deployment for VMware Cloud Foundation
- Understand VMware Cloud Foundation and supporting architecture
- Configure VMware Cloud Foundation for VMware Cloud Connectivity
- Understand the VMware Cloud Foundation subscription licensing model
- Perform Day-Zero tasks
- Perform VMware Cloud Foundation platform onboarding
- Manage user credentials in VMware Cloud Foundation
- Configure NSX networking in VMware Cloud Foundation
- Deploy and manage Workload Domains
- Deploy vSphere with Tanzu on VMware Cloud Foundation
- Understand and implement storage solutions and related policies
- Perform maintenance tasks for the VMware Cloud Foundation platform
- Manage certificates for VMware Cloud Foundation and connected technologies
- Manage the lifecycle for VMware Cloud Foundation
- Engage with VMware Cloud Foundation Technical Support

PREREQUISITI

Before taking this course, students should take the following courses or have equivalent knowledge and experience:

- VMware vSphere: Install, Configure, Manage
- VMware NSX: Install, Configure, Manage
- VMware vSAN: Install, Configure, Manage

CONTENUTI

1 Course Introduction

- Introductions and course logistics
- Course objectives

2 VMware Cloud Foundation Overview

- Describe the VMware Cloud Foundation solution
- Describe VMware Cloud Foundation architecture
- Identify VMware Cloud Foundation components
- Describe VMware Cloud Foundation topology

3 VMware Cloud Foundation+ and VMware Cloud Connectivity

- Describe the VMware Cloud Foundation+™ architecture
- Identify the pre-requisites for VCF+
- Describe the VCF+ value added features
- Describe subscription-based licensing parameters
- Describe the subscription process
- Describe the VMware Cloud Gateway™ functionality
- Identify the VMware Cloud Gateway components
- Describe the VMware Cloud Gateway architecture
- Describe VMware Cloud Gateway connectivity to VMware Cloud
- Describe the VMware Cloud platform
- Describe the vSphere+ services used in VCF+
- Demonstrate the capabilities of the cloud UI for VCF+

4 Day Zero Tasks

- Identify the requirements for deploying VMware Cloud Foundation
- Describe the VMware Cloud Foundation bring-up process
- Identify the information required for the Planning and Preparation Workbook
- Complete the Deployment Parameter Workbook
- Describe how VMware Cloud Builder™ automates the deployment process
- Identify the configuration validation process performed by VMware Cloud Builder
- Describe the deployment of the management domain

5 Post-Deployment Operations

- Complete the onboarding wizard
- Understand VMware Cloud Foundation integration with VMware Single Sign-On
- Configure user access to VMware Cloud Foundation
- Describe the importance of user roles in vSphere
- Configure identity sources for VMware Cloud Foundation
- Perform the SDDC Manager backup and restore process
- Identify steps in the NSX backup and restore process
- Manage passwords in VMware Cloud Foundation
- Explain the importance of using VMware Cloud Foundation to manage passwords for vSphere components
- Manage and secure a primary password list
- Describe the process for rotating passwords not managed by VMware Cloud Foundation

6 VMware Cloud Foundation Networking with NSX

- Describe network virtualization with NSX
- Recognize NSX operational planes
- Identify NSX components
- Describe logical switching
- Describe NSX Data Center deployment in VMware Cloud Foundation
- Explain how logical routing works in NSX

- Identify VMware NSX® Edge™ functions
- Describe data plane preparation for NSX Edge nodes in a workload domain
- Recognize tier-0 and tier-1 gateway topologies
- Define application virtual networks
- Describe management domain rack options
- List NSX Edge cluster requirements for vSphere with Tanzu
- Discuss NSX Edge cluster placement considerations

7 Managing Workload Domains

- Define workload domains
- List the types of workload domains
- State scale limits for workload domains
- Identify use cases for multiple clusters in a workload domain
- Define network pools
- Size network pools
- Create network pools
- Commission hosts
- Identify workload domain prerequisites
- Create a workload domain
- Scale a workload domain
- Delete a workload domain
- Decommission hosts
- Describe distinctive design decisions for VMware Cloud Foundation components

8 vSphere with Tanzu in VMware Cloud Foundation

- Explain vSphere with Tanzu
- Define the role of Spherelet
- Describe the supervisor cluster control plane
- Define vSphere with Tanzu namespaces
- Describe the role of NSX networking components
- Discuss vSphere with Tanzu networking topology
- Describe control plane VM management networking requirements
- Plan appropriate IP address CIDR ranges for pod, ingress, and egress networking
- Describe prerequisites for vSphere with Tanzu cluster compatibility
- Deploy VMware vSphere® Add-on for Kubernetes
- Create a vSphere namespace
- Configure limits and permissions for a vSphere namespace

9 VMware Cloud Foundation Storage Management

- Identify storage use cases in VMware Cloud Foundation
- Determine the most appropriate storage option for a workload domain
- Describe different vSphere-native storage design options
- Identify VMware vSAN architecture and components
- Describe vSAN requirements for the management and workload domains
- Define deduplication and compression
- Discuss how to scale vSAN clusters in VMware Cloud Foundation
- Explain how storage policies work with VMware Cloud Foundation vSAN clusters
- Configure storage policies for vSAN

- Explain storage policy failure tolerance rules
- Identify a virtual machine storage policy compliance status

10 Availability and Business Continuity

- Recognize the importance of external service availability
- Describe native vSphere availability options
- Identify stretched cluster use cases
- Identify stretched cluster components
- Recognize stretched cluster requirements in VMware Cloud Foundation
- Prepare and deploy a vSAN stretched cluster using APIs

11 VMware Cloud Foundation Certificate Management

- Learn basics of public key infrastructure (PKI)
- Describe the purpose of certificate signing requests (CSRs)
- Describe the use of subject alternative names (SAN)
- Describe available options in SDDC Manager for certificate authorities
- View certificates
- Generate a CSR
- Replace and install certificates for VMware Cloud Foundation components
- Know the available CA options in SDDC Manager
- Configure the Microsoft CA server
- Add OpenSSL CA in SDDC Manager
- Install certificates issued by Microsoft, OpenSSL, and third-party certificate authorities

12 VMware Cloud Foundation Lifecycle Management

- Describe VMware Cloud Foundation Life Cycle Management
- List the products you can upgrade using VMware Cloud Foundation Lifecycle management
- Use online and offline bundle downloads using VMware Cloud Foundation Lifecycle management
- Understand the role of vSphere Lifecycle Management in VMware Cloud Foundation
- Understand vSphere Lifecycle Manager baseline-based and image-based clusters
- Understand how and when to use cluster images
- Describe the importance of Hardware Support Managers
- Describe the upgrade prerequisites
- Outline the upgrade precheck process
- Describe the order of upgrade for VMware Cloud Foundation components
- Upgrade VMware Cloud Foundation software and components

13 VMware Cloud Foundation Troubleshooting

- Use the SoS command-line tool to create log bundles, perform health checks, and check password validity
- List VMware Cloud Foundation services
- Identify VMware Cloud Foundation log files
- Use token IDs to troubleshoot failed workflows

INFO

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)