

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

## [V5.2]

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
- Describe VMware Cloud Foundation components and supporting architecture
- Explain the VMware Cloud Foundation licensing model
- Perform day 0 tasks
- Perform VMware Cloud Foundation platform onboarding
- Manage user credentials in VMware Cloud Foundation
- Configure VMware NSX® networking in VMware Cloud Foundation
- Deploy and manage workload domains
- 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 life cycle for VMware Cloud Foundation
- Deploy and manage VMware Aria Suite on VMware Cloud Foundation
- Understand the Private AI Foundation with NVIDIA architecture and components
- Engage with VMware Cloud Foundation Technical Support services

### 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 components and architecture
- Describe vSphere and VMware Cloud Foundation licensing options

## 3 Day Zero Tasks

- Describe the process for planning and preparing a VMware Cloud Foundation design
- Identify the information required for the Planning and Preparation Workbook
- Describe the fully automated deployment process of VMware SDDC components

## 4 Post-Deployment Operations

- Use the VMware Cloud Foundation onboarding wizard to complete preliminary SDDC Manager setup tasks.
- Configure user access to VMware Cloud Foundation
- Manage passwords in VMware Cloud Foundation
- Describe password management with SDDC Manager APIs

## 5 VMware Cloud Foundation Networking with NSX

- Describe NSX management and control planes
- Explain virtual IP addressing
- Describe logical switching
- Identify NSX Edge functions
- Describe NSX deployment in VMware Cloud Foundation
- Explain how logical routing works in NSX
- Identify NSX Edge functions
- Recognize Tier-0 and Tier-1 gateway topologies
- Describe the spine-and-leaf design
- Describe the multi-NIC design
- Describe NSX Edge node design
- Discuss BGP and OSPF peering with the physical network
- Describe cluster design and rack design
- Define application virtual networks
- Recognize management domain rack options
- Recognize NSX Edge cluster placement considerations
- Use SDDC Manager to deploy an application virtual network

## 6 Managing Workload Domains

- Define the concept of workload domain
- Identify use cases for multiple clusters in a workload domain
- Describe the SSO domain architecture
- Define the concept of a network pool
- Explain how to create, edit, and delete a network pool
- Use SDDC Manager to commission hosts
- Describe workload domain design considerations
- Describe ESXi design considerations for a VI workload domain
- Describe vSphere design considerations for a VI workload domain
- Describe software-defined networking design considerations for a VI workload domain
- Describe shared storage design considerations for a VI workload domain
- Describe how to make workload domain design decisions
- Expand the workload domain

- Perform simultaneous cluster operations

## **7 VMware Cloud Foundation Storage Management**

- Describe storage options in VMware Cloud Foundation
- Recognize vSAN design considerations
- Identify sizing and performance considerations that impact the storage design
- Recognize vSAN design principles
- Identify components in the vSAN architecture
- Recognize vSAN requirements for the management domain and workload domains
- Define the concepts of deduplication and compression
- Describe how to scale vSAN clusters in VMware Cloud Foundation

## **8 Availability and Business Continuity**

- Explain the importance of external service availability
- Identify the steps in the SDDC Manager backup and restore process
- Identify the steps in the NSX backup and restore process
- Describe native vSphere availability options
- Describe the stretched cluster architecture and use cases
- List the stretched cluster requirements in VMware Cloud Foundation
- Describe the stretched cluster architecture and use cases
- List the stretched cluster requirements in VMware Cloud Foundation

## **9 VMware Cloud Foundation Certificate Management**

- Describe public key infrastructure (PKI)
- Explain the purpose of certificate signing requests (CSRs)
- List the available certificate authority (CA) options in SDDC Manager
- Manage certificates in VMware Cloud Foundation
- Integrate SDDC Manager with Microsoft CA and OpenSSL CA
- Install certificates issued by Microsoft CA, OpenSSL CA, or third-party CAs

## **10 VMware Cloud Foundation Life Cycle Management**

- Describe life cycle management in VMware Cloud Foundation and the software components it supports
- Describe the role of vSphere Lifecycle Manager and ESXi host images in VMware Cloud Foundation
- Describe the role of NSX Upgrade Coordinator in VMware Cloud Foundation
- Describe VMware® Aria Suite Lifecycle™ and its supported products
- Describe the types of bundles and download options available in VMware Cloud Foundation
- Configure SDDC Manager to download VCF online bundles
- Configure a proxy server to download VCF bundles
- Download VMware Cloud Foundation bundles using the Bundle Transfer utility
- Explain the workflow for using vSphere Lifecycle Manager Images in VMware Cloud Foundation
- Create a vSphere Lifecycle Manager image
- Make a vSphere Lifecycle Manager image available in VMware Cloud Foundation
- Configure custom ESXi ISO images and perform firmware upgrades using vSphere Lifecycle Manager
- Explain the upgrade considerations for VMware Cloud Foundation components
- Outline the upgrade precheck process
- Monitor VMware Cloud Foundation updates
- Use the Async Patch Tool to apply patches between BOM releases

## **11 VMware Aria Suite on VMware Cloud Foundation**

- Describe the VMware Aria Suite architecture running on VMware Cloud Foundation
- Explain the networking prerequisites for deploying VMware Aria Suite on VMware Cloud Foundation
- Describe the steps to install and configure VMware Aria Suite Lifecycle and VMware Workspace ONE®
- Explain the common operational tasks in VMware Aria Suite Lifecycle
- Identify the VMware validated solutions for VMware Aria Suite products
- Describe how to use VMware Aria Suite Lifecycle to deploy and manage VMware Aria Suite products

## 12 VMware Private AI Foundation with NVIDIA

- Describe the Private AI Foundation with NVIDIA solution
- Describe the Private AI Foundation with NVIDIA architecture
- Identify Private AI Foundation with NVIDIA components
- Describe VMware Cloud Foundation use cases for machine learning

## 13 VMware Cloud Foundation Troubleshooting

- Use the Support and Serviceability (SoS) command-line tool to create log bundles, perform health checks, and check password validity
- List the VMware Cloud Foundation services
- Identify the 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)