# VMware Cloud Foundation: Solution Architecture and Design [9.0]

# **Course Overview**

This five day course explores the architecture and design considerations for an initial deployment of VMware Cloud Foundation (VCF). The course explains the architecture framework and language, as well as design considerations for building, operationalizing, and consuming a VMware Cloud Foundation deployment. The scope of the course is centered on the core design considerations applicable to a VMware Cloud Foundation deployment in a single site.

# **Course Objectives**

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

- Describe and apply an appropriate design framework.
- Apply a design process for gathering requirements, constraints, assumptions and risks.
- Understand VMware VCF constructs such as site, fleet and instance.
- Understand data center fabric needs to support VCF.
- Understand VCF storage and network design options.
- Design a single site single fleet deployment of VCF with recommended design options.
- Design management and workload domains with appropriate compute and storage resources.
- Design a consumption layer leveraging VCF Automation and Supervisor.
- Understand the day-2 operating model, operations metrics, and reporting needs of VCF.
- Understand future opportunities to extend the VCF platform with advanced services.

# **Target Audience**

Technical and Solution Architects and Consultants who design enterprise-grade private cloud environments.

# **Course Delivery**

**Product Alignment** 

Classroom

VMware Cloud Foundation [9.0]

Live Online

# **Course Modules**

#### 1. Course Introduction

- Introduction and course logistics
- Course Objectives

#### 2. Architecture Frameworks and Models

- Architecture Frameworks
- Business Objectives
- Design Models

# 3. VMware Cloud Foundation Overview

- VCF Design Blueprints and Use Cases
- Upgrade Overview
- License Management Overview

#### 4. VCF Fleet and Instance Design

- · Sites, Fleets and Instances
- Management and Workload Domains
- Designing Conceptual and Logical Designs
- VCF Operations Platform Design

# Building the Physical Fabric and VCF Networking Design

- Networking Fabric Design
- VCF Networking Design

#### 6. Storage and vSAN Essentials

- VCF Storage Overview
- Storage Design Considerations

#### 7. Management Domain

- Management Domain Design Overview
- Management Domain Design Sizing Considerations
- Management Domain Design Decisions
- Storage Requirements for Management Workloads
- Networking Requirements for Management Workloads
- Platform-Based Protection Mechanisms

#### 8. Workload Domains

- Workload Domain Design Overview
- Cluster Design Overview
- Storage Requirement for Workload Domains
- Networking Requirements for Workload Domains
- Security Design Considerations

## 9. VCF AMPRS Considerations Summary

- Designing for Availability
- Designing for Manageability
- Designing for Performance
- Designing for Recoverability
- Designing for Security

# VCF Consumption Design with VCF Automation and Supervisor

- VCF Automation Overview
- VCF Automation Tenancy Models
- VCF Automation and Supervisor Components
- VCF Automation and Supervisor Design Considerations

#### 11. Day 2 Operations with VCF

- Day 2 Operations Overview
- VCF Operations Overview and Metric/Dashboard Design
- VCF Operations Key Metrics for Compute,
  Storage and Networks
- VCF Operations for Networks Overview and Design

#### 12. VCF Upgrade Considerations

- VCF Upgrade Overview
- VCF Upgrade Key Considerations

#### 13. VCF Advanced Services

- Introduction to Private AI
- Introduction to VMware Live Recovery
- Introduction to Advanced Security

#### Contact

If you have questions or need help registering for this course, please reach out to Victor Castellanos <<a href="mailto:victor-vc.castellanos@broadcom.com">victor-vc.castellanos@broadcom.com</a>

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