VMware Cloud Foundation: Solution Architecture and Design [9.0]

Duration: *5 Day(s)*

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.

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.
- Design a consumption layer leveraging VCF Automation and Supervisor.

Who Should Attend

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

Prerequisites

Course Outline

Course Introduction

1. Introduction and course logistics
2. Course Objectives

Architecture Frameworks and Models

3. Architecture Frameworks
4. Business Objectives
5. Design Models

VMware Cloud Foundation Overview

6. VCF Design Blueprints and Use Cases
7. Upgrade Overview
8. License Management Overview

VCF Fleet and Instance Design

9. Sites, Fleets and Instances
10. Management and Workload Domains
11. Designing Conceptual and Logical Designs
12. VCF Operations Platform Design

Building the Physical Fabric and VCF Networking Design

13. Networking Fabric Design
14. VCF Networking Design

Storage and vSAN Essentials

15. VCF Storage Overview
16. Storage Design Considerations

Management Domain

17. Management Domain Design Overview
18. Management Domain Design Sizing Considerations
19. Management Domain Design Decisions
20. Storage Requirements for Management Workloads
21. Networking Requirements for Management Workloads
22. Platform-Based Protection Mechanisms

Workload Domains

23. Workload Domain Design Overview
24. Cluster Design Overview
25. Storage Requirement for Workload Domains
26. Networking Requirements for Workload Domains
27. Security Design Considerations

VCF AMPRS Considerations Summary

28. Designing for Availability
29. Designing for Manageability
30. Designing for Performance
31. Designing for Recoverability
32. Designing for Security

VCF Consumption Design with VCF Automation and Supervisor

33. VCF Automation Overview

34. VCF Automation Tenancy Models
35. VCF Automation and Supervisor Components
36. VCF Automation and Supervisor Design Considerations

Day 2 Operations with VCF

37. Day 2 Operations Overview
38. VCF Operations Overview and Metric/Dashboard Design
39. VCF Operations Key Metrics for Compute, Storage and Networks
40. VCF Operations for Networks Overview and Design

VCF Upgrade Considerations

41. VCF Upgrade Overview
42. VCF Upgrade Key Considerations

VCF Advanced Services

43. Introduction to Private AI
44. Introduction to VMware Live Recovery
45. Introduction to Advanced Security