Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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VMware Cloud Foundation: Automate and Operate [v9.1]

CODE:	LENGTH:	PRICE:
VMW_VCFAOP91	40 Hours (5 days)	kr53,000.00

Description

This five-day course provides you with the knowledge, skills, and abilities to achieve competence in automating and operating a VCF Private Cloud using VMware® Cloud Foundation™ Automation and Operations. You will learn about the architecture of VCF Automation, provider and organization management, provider and organization networking, and content library management. In addition, the course also covers blueprints, catalogs, supervisor management, and deploying workloads using the catalog and IAAS portals.
In the VCF Operations section, you will learn about the VCF Operations overview, architecture, and navigating the user Interface. You will also explore customizing alerts, views, reports, dashboards, and policies. This course explains VCF Logs and storage health and diagnostics, workbench, service discovery, and application monitoring concepts.

Objectives

- Describe VCF Automation components and supporting architecture.
- Perform infrastructure management as a cloud provider.
- Set up Regions and Organizations as the cloud provider.
- Configure networking at the cloud provider and organization level using VCF Automation 9.1 Network Architecture.
- Set up and manage content libraries at the provider and organization level, including Multi-Supervisor Region Quota (MSRQ) enhancements introduced in VCF 9.1.
- Manage access control in the organization using users and groups.
- Create and manage infrastructure blueprints and catalogs.
- Discuss the use of the embedded orchestrator to create workflows.
- Deploy VM workloads using the catalog deployment and Kubernetes-based IaaS deployments.
- List the key features and use cases of VCF Operations.
- Create custom views, reports, and dashboards.
- Create custom symptoms and alert definitions.
- Outline the role of VCF Health, Diagnostics, and Troubleshooting Workbench.
- Identify performance and health issues with Storage and Network clusters using VCF Operations.
- Create policies to meet the operational needs of your environment.
- Configure service discovery and application monitoring, including VKS cluster monitoring.

Audience

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

Prerequisites

This course has the following prerequisites:

- Implement Learning Path Stage-2 Training
  - VMware Cloud Foundation: Build, Manage and Secure [v9.1]

Programme

1.Course Introduction

- Introduction and course logistics.
- Course objectives and overview of VCF 9.1

2.VCF Automation Overview

- Describe the common terms in a VCF deployment
- Describe fleet-wide identity providers in VCF Operations
- Explain the features and benefits of VCF Automation
- Describe the building blocks and architecture of VCF Automation
- Explain VCF Management Service Platform

3.Provider Infrastructure Management

- Describe the provider management portal
- Discover infrastructure resources and validate vCenter, VCF Instance, NSX Manager, and Edge clusters
- Explain infrastructure policies in VCF Automation

4.Provider Identity Management

- Explain how to enable and configure VCF Single Sign-On for the Automation Appliance
- Describe identity providers used in VCF Automation (OpenID, LDAP, SAML)
- Explain predefined roles, rights bundles, and access control
- Describe service accounts and API tokens

5.VCF Automation Regions

- Define a region and list prerequisites for creating a region
- Explain the relationship between a region, Supervisor, and NSX Manager
- Describe VM Classes, reserved VM Classes, and storage classes
- Describe the features and capabilities of the provider content library

6.VCF Automation Organizations

- Describe the different organizations offered in VCF Automation
- Explain the region quota enhancements in VCF 9.1 over VCF 9.0
- Design Multi-Supervisor Region (MSRQ) environments, a new capability in VCF 9.1
- Explain auto-expansion and auto-shrinkage features of content libraries in MSRQ
- Describe tenant content library placement changes introduced in VCF 9.1
- Create an All Apps Organization

7.VCF Automation Networking

- Explain VCF Automation 9.1 Network Architecture and UI enhancements
- Describe Provider Networking, External IP Blocks, and shared Subnets
- Describe the integration of Infoblox IPAM introduced in VCF Automation 9.1
- Explain Regional Networking
- Configure Organization Networking (VPC, Transit Gateway, VLAN Extended Subnet)
- Configure Workload Networking and VM Load Balancer Service

8. Organization Management

- Explain creating and managing projects, vSphere namespaces, and namespace classes
- Explain Namespace Self-Service and binding workflows
- Discuss namespace update workflows
- Apply infrastructure policies in VCF Automation

9. Organization Content Management

- Identify and manage content available in Content Hub
- Create and deploy VCF Automation Blueprints using YAML
- Explain the Supervisor Namespace capture feature
- Configure and use Custom Forms
- Describe the use of the Embedded Orchestrator and Workflows

10. Deploy Modern Apps

- Discuss Cloud services deployed through vSphere Supervisor
- Explain self-service consumption with IaaS services in VCF 9.1
- Discuss direct mode versus linked mode in IaaS
- Discuss the end-to-end workflow for deploying Virtual Machine instances

● Define container service in VCF Automation

11.VCF Operations Overview

● List the key features and use cases of VCF Operations
● Identify the components of a VCF Operations node and cluster
● Discuss Availability Zones
● Perform basic VCF Operations console navigation

12. VCF Metrics, Views and Reports

● Outline the role of metrics and views in VCF Operations
● Create a basic custom view and configure view settings
● Create a basic report and configure report settings

13.Dashboards

● Describe the functions of dashboards
● Create dashboards using predefined and custom widgets
● Manage dashboards by grouping and sharing with users

14.VCF Operations Policies

● Describe the purposes of policies in VCF Operations
● Configure policies and other components

15.Symptoms and Alerts

● Describe the purpose of using alerts and identify components of an alert definition
● Create static symptom definitions and configure threshold types
● Configure a custom alert using the Create Alert Definition workflow

16.VCF Health, Findings, and Workbench

● Outline the role of VCF Health and Diagnostics
● Monitor the operational state of VCF Instances
● Describe the capabilities of Troubleshooting Workbench
● Enable support teams with full context using Log Assist

17.VCF Logs and Storage

● Describe the log management capabilities in VCF Operations
● Identify performance and health issues with Storage clusters

18.Workload Monitoring

● Describe infrastructure services and application monitoring capabilities
● Enable service discovery for a VCF deployment
● Describe VKS cluster monitoring capabilities introduced in VCF Operations 9.1
● Configure vCenter and VCF Operations to enable VKS enhanced observability
● Explain the features and benefits of VCF Automation
● Describe the building blocks and architecture of VCF Automation
● Explain VCF Management Service Platform

Test and Certification

Session Dates

Ved forespørsel. Vennligst kontakt oss

Tilleggsinformasjon

Denne treningen er også tilgjengelig som trening på stedet. Kontakt oss for å finne ut mer.