

# VMware Cloud Foundation: Automate and Operate V9.x

Dieser fünftägige Kurs vermittelt Ihnen das Wissen und die Fähigkeiten, die Sie benötigen, um VCF-Private-Clouds mit VMware Cloud Foundation® Automation und VMware Cloud Foundation® Operations zu automatisieren und zu betreiben. Sie lernen die Architektur von VCF Automation, das Provider- und Organisationsmanagement, die Vernetzung von Providern und Organisationen sowie die Verwaltung von Content-Bibliotheken kennen. Der Kurs behandelt Blueprints, Kataloge, Supervisor-Management und die Bereitstellung von Workloads mithilfe des Katalogs und der IaaS-Portale. Sie lernen die Übersicht, Architektur und Navigation der Benutzeroberfläche von VCF Operations kennen. Sie beschäftigen sich mit der Anpassung von Warnmeldungen, Ansichten, Berichten, Dashboards und Richtlinien. In diesem Kurs werden auch VCF-Protokolle, Speicher- und Netzwerkbetrieb, Integrität und Diagnose, Service Discovery und Konzepte der Anwendungsüberwachung erläutert.

## Kursinhalt

- VCF Automation Overview and Architecture
- Provider Infrastructure Management
- Provider Identity Management
- Regions
- Organizations
- Provider Networking
- Organization Networking with VPC
- Provider Content Library
- Organization Management
- Organization Content Management
- IaaS Platform Architecture and Deployment
- Deploying Modern Apps with IaaS
- VCF Operations Overview
- VCF Metrics, Views, and Reports
- VCF Dashboards
- VCF Symptoms and Alerts
- VCF Health and Diagnostics
- VCF Logs, Storage, and Network Operations
- VCF Operations Policies
- VCF Centralized Monitoring

**E-Book** Sie erhalten englischsprachige Unterlagen von VMware als E-Book.

## Zielgruppe

System Architekten und System Administratoren

## Voraussetzungen

Vor der Teilnahme an diesem Kurs sollten die Teilnehmer die folgenden Kurse absolvieren:

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

## Kursziel

- Beschreiben Sie die Komponenten der VCF-Automatisierung und die unterstützende Architektur.
- Führen Sie das Infrastrukturmanagement als Cloud-Anbieter durch.
- Stellen Sie Regionen und Organisationen als Cloud-Anbieter bereit.
- Konfigurieren Sie die Vernetzung auf Cloud-Anbieter- und Organisationsebene.
- Konfigurieren und verwalten Sie Inhaltsbibliotheken auf Anbieter- und Organisationsebene.
- Verwalten Sie die Zugriffskontrolle in der Organisation mithilfe von Benutzern und Gruppen.
- Erstellen und verwalten Sie Infrastruktur-Blueprints und -Kataloge.
- Beschreiben Sie die Verwendung des integrierten Orchestrators zum Erstellen von Workflows.
- Bereitstellen von VM-Workloads mithilfe von Katalogbereitstellung und Kubernetes-basierten IaaS-Bereitstellungen
- Auflisten der wichtigsten Funktionen von VCF Operations
- Skizzieren von Anwendungsfällen für VCF Operations
- Erstellen benutzerdefinierter Ansichten und Berichte
- Beschreiben der Funktionen von Dashboards
- Erstellen benutzerdefinierter Dashboards
- Erstellen Sie benutzerdefinierte Symptome und Alarmdefinitionen.
- Skizzieren Sie die Rolle von VCF Health and Diagnostics.
- Erläutern Sie Troubleshooting Workbench.
- Beschreiben Sie die Übersicht über VMware Cloud Foundation® Operations für Protokolle.
- Identifizieren Sie Leistungs- und Integritätsprobleme mit den Speicherclustern mithilfe von Storage Operations.
- Identifizieren Sie Leistungs- und Integritätsprobleme mit den VCF-Netzwerkobjekten.
- Erstellen Sie Richtlinien, um die betrieblichen Anforderungen Ihrer Umgebung zu erfüllen.
- Konfigurieren Sie die Dienstermittlung und Anwendungsüberwachung.

## Dieser Kurs im Web



Alle tagesaktuellen Informationen und Möglichkeiten zur Bestellung finden Sie unter dem folgenden Link:  
[www.experteach.de/go/VCAO](http://www.experteach.de/go/VCAO)

## Vormerkung

Sie können auf unserer Website einen Platz kostenlos und unverbindlich für 7 Tage reservieren. Dies geht auch telefonisch unter 06074 4868-0.

## Garantierte Kurstermine

Für Ihre Planungssicherheit bieten wir stets eine große Auswahl garantierter Kurstermine an.

## Ihr Kurs maßgeschneidert

Diesen Kurs können wir für Ihr Projekt exakt an Ihre Anforderungen anpassen.

## Training

Preise zzgl. MwSt.

Termine in Deutschland	5 Tage	€ 3.395,-
Online Training	5 Tage	€ 3.395,-

Termine auf Anfrage

Stand 28.08.2025



# Inhaltsverzeichnis

## VMware Cloud Foundation: Automate and Operate V9.x

### 1. VCF Automation Overview and Architecture

- Describe the features, benefits, and purposes of VCF Automation
- Explain the architecture of VCF Automation

### 2. Provider Infrastructure Management

- Describe the provider management and provider consumption portals
- List the supported options for provider administrator from the provider portal
- Explain managing tasks and events from the provider portal
- Describe the features of the provider consumption organization
- Describe how to discover infrastructure resources
- Explain how to manage IP spaces and provider gateways

### 3. Provider Identity Management

- Explain how to enable VCF SSO for the Automation appliance
- Discuss configuring VMware Cloud Foundation® Identity Broker as the identity provider
- List the supported IdP (ODIC, SAML, LDAP)
- Discuss how to register a provider-scoped identity provider
- Explain managing VCF Automation roles and rights
- Discuss managing VCF Automation users and groups
- Discuss provider-scoped service accounts

### 4. Regions

- Explain the basics of a Region
- Identify the utilization of the Region
- Discuss prerequisites and available options for creating a Region

### 5. Organizations

- Describe the different Organizations offered in VCF Automation
- Identify the use cases for manual setup and multitenancy
- Identify use cases for Quick Setup
- Create a VCF Automation VM Apps Organization
- Create a VCF Automation All Apps Organization

### 6. Provider Networking

- Discuss prerequisites for creating the provider network
- Discuss the workflow for configuring the provider network
- Describe IP Spaces
- Discuss Edge nodes, Edge clusters, and the network services it offers
- Configure IP Spaces and verify the configuration
- Configure the Provider Gateway and verify the status
- Synchronize Edge clusters and verify the status
- Configure regional networking for an Organization
- Discuss steps to verify the creation of network resources in VMware NSX®, VMware vCenter®, and VCF Automation.
- Discuss the mapping of resources between VCF Automation, NSX, and vCenter

### 7. Organization Networking with VPC

- Discuss Organization Networking
- Discuss the architecture of the VPC
- Discuss access modes and subnet types in VPC
- Describe the scope of different subnet types in VPC
- Discuss Outbound Routing and Network Address Translations in VPC

- Configure VPC with a default, custom connectivity profile and verify its status
- Configure Private-TGW IP Block, associate it with a VPC, and verify its status

### 8. Provider Content Library

- Describe the Provider Content Library creation workflow
- Explain publishing and subscribing to a Content Library

### 9. Organization Management

- Identify the key components of an All Apps Organization
- Explain namespace classes
- Explain creating and managing Projects
- Discuss Chargeback for Organizations
- Integrate identity providers into Organizations
- Manage users and groups in an Organization
- Create and manage deployment-centric policies
- Create and manage Supervisor resource-centric policies

### 10. Organization Content Management

- Identify and manage the different content available in Content Hub
- Differentiate between catalog self-service versus IaaS self-service
- Publish content to Catalog for end-user consumption
- Deploy and modify Catalog items
- Configure and use custom forms
- Explain the role of YAML in configuring and managing infrastructure as code
- Publish Content to Catalog for End User Consumption
- Discuss the use of the embedded orchestrator
- Discuss the use cases of an external orchestrator
- Describe orchestrator workflows

### 11. IaaS Platform Architecture and Deployment

- Explain Supervisor architecture
- Discuss Supervisor requirements
- List Supervisor use cases
- Discuss the vSphere administrator workflow
- List the components of the Supervisor
- Discuss the types of Supervisor deployment
- Discuss the requirements of Supervisor deployment
- Describe Supervisor deployment during the VI Workload Domain creation

### 12. Deploying Modern Apps with IaaS

- Discuss self-service consumption with IaaS services in VCF 9
- Discuss the features of the IaaS console
- Describe how to get instance information from the console
- Explain the YAML Spec for the VM service
- Discuss VCF CLI command

### 13. VCF Operations Overview

- List the key features of VCF Operations
- Outline VCF Operations use cases
- Navigate the VCF Operations console
- Identify the components of a VCF Operations node
- Describe the different roles of the node in a VCF Operations cluster

### 14. VCF Metrics, Views, and Reports

- Outline the role of metrics in VCF Operations
- Outline the role of views in VCF Operations
- List the steps to create a basic custom view and configure view settings
- Outline the roles of reports in VCF Operations
- List the steps to create a basic report and configure report settings

### 15. VCF Dashboards

- Describe the functions of dashboards
- Create dashboards that use predefined and custom widgets
- Manage dashboards by grouping and sharing with users
- Explain the use cases of predefined dashboards and custom dashboards
- List VCF Operations use cases

### 16. VCF Symptoms and Alerts

- Describe the purpose of using alerts
- Identify the components of an alert definition
- Create symptom definitions
- View and manage triggered alerts in the VCF Operations console
- Configure a custom alert using the Create Alert Definition workflow

### 17. VCF Health and Diagnostics

- Outline the role of VCF Health and Diagnostics
- Describe the VCF Health and Diagnostic Findings features
- Monitor the operational state of VCF instances
- Explain Troubleshooting Workbench
- Enable support teams with full context using Log Assist

### 18. VCF Logs, Storage, and Network Operations

- Describe the VCF Operations for logs overview
- Describe the key benefits of the VCF Operations for logs
- Describe the capabilities of VCF Operations for logs
- Describe the VCF Storage Operations overview
- Identify performance and health issues with the Storage clusters
- Describe the benchmarking and optimization tool to detect issues for a new cluster
- Describe the VCF Network Operations overview
- Discuss the different widgets available in VCF Network Operations
- Identify the performance and health issues with the VCF Network object

### 19. VCF Operations Policies

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

### 20. VCF Centralized Monitoring

- Describe the infrastructure services monitoring capabilities
- Describe the application monitoring capabilities
- Describe the different types of application metrics
- Outline the requirements to enable service discovery and application monitoring
- Describe the different types of service metrics
- Use collected metrics to interpret the status of services

