

# VMware Telco Cloud Automation: Install, Configure, Manage V2.x



## VMware Telco Cloud Automation: Install, Configure, Manage V2.x

Dieser fünftägige, praxisorientierte Kurs vermittelt Ihnen die fortgeschrittenen Kenntnisse, Fähigkeiten und Tools, um die VMware Telco Cloud Automation-Umgebung kompetent zu betreiben und Fehler zu beheben. In diesem Kurs werden Sie in die Infrastruktureinstellungen, Bereitstellungsoptionen und Verfahren von VMware Telco Cloud Automation eingeführt. Sie lernen Container als Service kennen und verstehen die Workflow-Details von Partnerintegrationsprozessen. Sie lernen die Infrastrukturautomatisierung und ihre Bedeutung in VMware Telco Cloud Automation kennen. Sie werden Netzwerkfunktionen und Netzwerkdienste mit Hilfe praktischer Laborübungen einbinden und instanzieren.

Darüber hinaus vermittelt dieser Kurs Workflows für das Lebenszyklusmanagement sowie verschiedene Arten von technischen Problemen in VMware Telco Cloud Automation, die Sie durch einen systematischen Prozess identifizieren, analysieren und lösen werden.

### Kursinhalt

- Course Introduction
- VMware Telco Cloud Automation Installation
- Day 1 Operations: Infrastructure Automation
- Day 1 Operations: Infrastructure Settings
- Day 1 Operations: Containers as a Service
- Day 1 Operations: Partner Integration
- Day 1 Operations: Network Functions and Network Services
- Day 2 Operations: Authorization Model
- Day 2 Operations: Life Cycle Management
- Day 2 Operations: Troubleshooting
- Day Two Operations: API Management
- Day Two Operations: Continuous Integration and Continuous Delivery

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

### Zielgruppe

- Telco Cloud System Administrators and Telco Network Operations Engineers
- Professionals who work with Telco or Enterprise and Data Center Networks
- Designers and Operations Engineers who manage Telco Workloads

### Voraussetzungen

Bevor Sie an diesem Kurs teilnehmen, sollten Sie den Kurs VMware Telco Cloud Automation Fundamentals abgeschlossen haben.

Außerdem sollten Sie über die folgenden Kenntnisse verfügen:

- Gutes Verständnis von VMware-Produkten wie VMware vSphere®, VMware NSX®, VMware vSAN™, TKG und VMware vCloud Director®
- Kenntnisse und Arbeitserfahrung in der Virtualisierung von Netzwerkfunktionen, einschließlich:
  - ETSI NFV Framework, virtualisierte Netzwerkfunktionen und zugehörige Schnittstellen
  - Kubernetes, Helm, Cloud-native Netzwerkfunktionen und CNI

Stand 26.04.2024

### Dieser Kurs im Web



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

### 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 der Schweiz	5 Tage
Online Training	5 Tage CHF 3.735,-
Termine auf Anfrage	



# Inhaltsverzeichnis

## VMware Telco Cloud Automation: Install, Configure, Manage V2.x

### 1 Course Introduction

- Introductions and course logistics
- Course objectives

### 2 VMware Telco Cloud Automation Installation

- Describe day zero operations for VMware Telco Cloud Automation
- Describe the VMware Telco Cloud Automation architecture
- List the steps to perform VMware Telco Cloud Automation deployment
- List the steps to perform VMware Telco Cloud Automation control plane integration
- Describe VMware Telco Cloud Automation control plane scaling
- Describe the requirements for other applications such as vRealize Orchestrator and Harbor
- Describe where, when, and how to use VMware Telco Cloud Automation tagging

### 3 Day 1 Operations: Infrastructure Automation

- Describe infrastructure automation
- List the use cases of infrastructure automation
- List the benefits of infrastructure automation
- Describe the infrastructure requirements of infrastructure automation
- Describe the infrastructure automation domains
- List the steps to deploy an infrastructure using infrastructure automation

### 4 Day 1 Operations: Infrastructure Settings

- Describe the VMware Telco Cloud Automation infrastructure options
- Describe VMware Telco Cloud Automation infrastructure requirements
- Outline the role of virtual infrastructure and VMware Telco Cloud Automation
- Identify the benefits of public and private infrastructures
- List the steps to integrate a VM-based virtual infrastructure
- List the steps to integrate a container-based virtual infrastructure
- Describe private infrastructure requirements

### 5 Day 1 Operations: Containers as a Service

- Define containers as a service (CaaS)
- List the challenges of CNF deployment without automation
- Describe the Kubernetes and Tanzu Kubernetes Grid

### architectures

- List steps to create a Kubernetes cluster template
- Describe the process for deploying node pools and groups
- List the steps to support anti-affinity of workload cluster nodes
- Describe cluster monitoring
- List CaaS scale options

### 6 Day 1 Operations: Partner Integration

- Describe partner integration and the types of partners
- Describe Harbor and the various Harbor platforms
- List the steps to interface with a Harbor platform
- Compare and contrast specialized VNF managers (S-VNFMs) and generic VNF managers (G-VNFMs)
- Explain how to add an S-VNFM
- Define S-VNFM use cases
- List the benefits and challenges of using Airgap

### 7 Day 1 Operations: Network Functions and Network Services

- Describe the roles of network services and network functions
- List the types of descriptors
- Describe the role of TOSCA
- Describe the role of onboarding
- List the steps to onboard network functions and network services
- Examine the results of the onboarding process
- List the steps to instantiate network functions and network services
- Examine the results of the instantiation process

### 8 Day 2 Operations: Authorization Model

- Explain the resources that can be accessed in vSphere
- Define the role of a vCenter Server system in credential management
- Define the role of Keycloak in credential management
- Describe the procedures to create, delete, and modify rules using vCenter Server
- Explain how to control and verify access to vSphere resources
- List the roles in VMware Telco Cloud Automation
- Explain the tasks and list the levels of permissions needed in VMware Telco Cloud Automation
- List all the permissions and filters that can be implemented in VMware Telco Cloud Automation

### 9 Day 2 Operations: Life Cycle Management

- Explain the life cycle stages in VMware Telco Cloud

### Automation control plane

- Explain the life cycle stages in VMware Telco Cloud Automation
- Define an upgrade schedule
- Apply an upgrade schedule for life cycle management of the VMware Telco Cloud Automation control plane
- Apply an upgrade schedule for life cycle management in VMware Telco Cloud Automation
- Describe network function and network service life cycle management events
- Execute network function and network service healing
- Perform network function and network service termination

### 10 Day 2 Operations: Troubleshooting

- List the components of the VMware Telco Cloud Automation dashboard
- Explain the features of fault management in VMware Telco Cloud Automation
- Explain the features of performance management in VMware Telco Cloud Automation
- Describe the use of fault management of VMware Telco Cloud Automation for VNFs and CNFs
- Describe the use of performance management of VMware Telco Cloud Automation for VNFs and CNFs
- Describe the use of CCLI for troubleshooting
- Define the procedures to integrate vRealize Operations Manager with VMware Telco Cloud Automation
- Describe how to use vRealize Operations

### 11 Day Two Operations: API Management

- Define the VMware Telco Cloud Automation API
- Explain the API architecture
- Describe VMware Telco Cloud Automation API use cases
- Describe how to request security tokens for implementation
- Explain how to implement commands through external systems using APIs

### 12 Day Two Operations: Continuous Integration and Continuous Delivery

- Describe continuous integration and continuous delivery (CI/CD)
- List the benefits and challenges of CI/CD
- Describe how VMware Telco Cloud Automation can be used in a CI/CD environment
- Explore VMware Telco Cloud Automation CI/CD examples

