

# VMware NSX-T Data Center: Install, Configure, Manage (NSXTDCICM)

ID NSXTDCICM Preis 3.440,- € (exkl. MwSt.) Dauer 5 Tage

Dieser Advanced-Kurs wird direkt von VMware durchgeführt.

## Kursüberblick

This five-day, fast-paced course provides comprehensive training on how to install, configure, and manage a VMware NSX-T™ Data Center environment. This course covers key NSX-T Data Center features and functionality offered in the NSX-T Data Center 2.4 release, including the overall infrastructure, logical segments, logical routers, networking and security services, micro-segmentation and firewalls, and so on.

Access to a software-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

## Product Alignment

- NSX-T Data Center 2.4

## Zielgruppe

Experienced system administrators or network administrators

## Voraussetzungen

- Good understanding of TCP/IP services
- Working experience of enterprise switching and routing
- Good understanding of network security and working experience with firewalls
- Solid understanding of concepts presented in the following courses:
  - VMware Data Center Virtualization Fundamentals

- VMware Introduction to Network Virtualization with NSX
- VMware Network Virtualization Fundamentals

## Kursziele

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

- Describe VMware Virtual Cloud Network and the NSX-T Data Center architecture
- Describe the NSX-T Data Center components and main functions
- Explain the NSX-T Data Center key features and benefits
- Deploy and configure NSX-T Data Center infrastructure
- Configure layer 2 logical segmenting and bridging
- Explain the tiered routing architecture and configure logical routers
- Configure advanced services such as VPN and load balancing
- Explain the NSX-T Data Center security model with micro-segmentation
- Configure distributed and edge firewall to protect east-west and north-south traffic
- Explain advanced security enforcement with partner service insertion
- Gather relevant information and perform basic troubleshooting

## Kursinhalt

- NSX-T Data Center Introduction
- VMware Virtual Cloud Network and NSX-T Data Center Overview
- NSX-T Data Center Infrastructure Deployment
- NSX-T Data Center Logical Segment
- NSX-T Data Center Logical Bridging

- NSX-T Data Center Logical Routing
- NSX-T Data Center Advanced Services
- NSX-T Data Center Security
- User and Role Management
- NSX-T Data Center Basic Troubleshooting

- Verify layer 2 connectivity
- Describe various types of segment profiles
- Create segment profiles and apply them to logical segments and ports
- Explain MAC, ARP, and TEP tables used in layer 2 logical segmentation
- Demonstrate Layer 2 unicast packet flow
- Handle layer 2 BUM traffic

## **Detaillierter Kursinhalt**

### **1 NSX-T Data Center Introduction**

- Introductions and course logistics
- Overview of modules and course objectives

### **2 VMware Virtual Cloud Network and NSX-T Data Center Overview**

- Introduce VMware's Virtual Cloud Network vision
- Describe VMware NSX-T Data Center portfolio
- Describe NSX-T Data Center value proposition and use cases
- Introduce Software-Defined Networking and VMware vSphere®
- Describe NSX-T Data Center architecture and components
- Explain the management, control, data, and consumption planes and functions
- Introduce Converged Appliance

### **3 NSX-T Data Center Infrastructure Deployment**

- Deploy the Converged Appliance cluster
- Navigate through the Policy Manager user interface
- Prepare for the NSX-T Data Center infrastructure deployment
- Configure N-VDS, Transport Zones, IP pools, and uplink profiles
- Prepare ESXi and KVM hosts for NSX-T Data Center
- Verify host deployment status and connectivity

### **4 NSX-T Data Center Logical Segment**

- Introduce logical segment key concepts and terminology
- Explain N-VDS function and characteristics
- Configure logical segments using the Policy Manager GUI
- Attach VMware ESXi™ and KVM hosts to logical segments

### **5 NSX-T Data Center Logical Bridging**

- Explain the function and purpose of logical bridging
- Describe the components of logical bridging
- Create logical bridges and bridge profiles

### **6 NSX-T Data Center Logical Routing**

- Introduce the tiered routing architecture
- Explain the functions of Tier-0 and Tier-1 routers
- Describe the logical router components: Service Router and Distributed Router
- Discuss VMware NSX® Edge™ node deployment and sizing options
- Deploy NSX Edge nodes and Edge Cluster
- Configure Tier-0 and Tier-1 logical routers
- Discuss routing topologies and configure services on routers
- Configure static routing, BGP, and ECMP
- Describe NSX Edge high availability (HA)
- Explain HA failure detection and failback modes

### **7 NSX-T Data Center Advanced Services**

- Describe NSX-T Data Center services
- Explain the Network Address Translation (NAT) service
- Explain the DNS and DHCP services
- Explain the load-balancing features and rules
- Describe the load-balancing benefits
- Configure L4-7 load balancing
- Introduce the IPSec VPN and L2 VPN concepts
- Configure IPSec VPN and L2 VPN using Policy Manager

### **8 NSX-T Data Center Security**

- Introduce the NSX-T Data Center security approach and model
- Explain the use cases and benefits of micro-

- segmentation
- Describe the distributed firewall architecture, components, and functions
- Create distributed firewall sections and rules
- Describe the edge firewall architecture and functions
- Configure edge firewall sections and rules
- Introduce bridge firewall
- Describe the service insertion feature
- Explain the integration of partner security solutions with NSX-T Data Center
- Configure Endpoint Protection policies
- Configure Network Introspection policies

### **9 User and Role Management**

- Describe role-based Access Control and VMware Identity Manager™
- Explain the integration of NSX-T Data Center with VMware Identity Manager
- Explain authentication policies
- Identify the various types of permissions
- Describe the VMware Identity Manager built-in roles
- Explain VMware Identity Manager domains and user attributes

### **10 NSX-T Data Center Basic Troubleshooting**

- Troubleshooting methodology for troubleshooting L2, L3, and service issues
- Introduce various troubleshooting tools
- Collect local and remote log files
- Monitor the NSX-T Data Center environment

# Über Fast Lane



Die weltweite Fast Lane-Gruppe ist Spezialist für Technologie- und Business-Training und Beratung im Highend-Bereich. Fast Lane ist autorisierter Trainingspartner führender Hersteller und bietet zudem eigene IT-Trainingsprogramme zu aktuellen Technologien und den wesentlichen Trends an. Herstellerübergreifende Beratungsleistungen reichen von vorbereitenden Analysen und Evaluierungen über die Konzipierung zukunftsweisender IT-Lösungen bis zum Projektmanagement und zur Umsetzung der Konzepte im Unternehmen. Training-on-the-Job und Weiterqualifizierung der zuständigen Spezialisten bei den Kunden verbinden die Kernbereiche der Fast Lane Dienstleistungen Training und Consulting.

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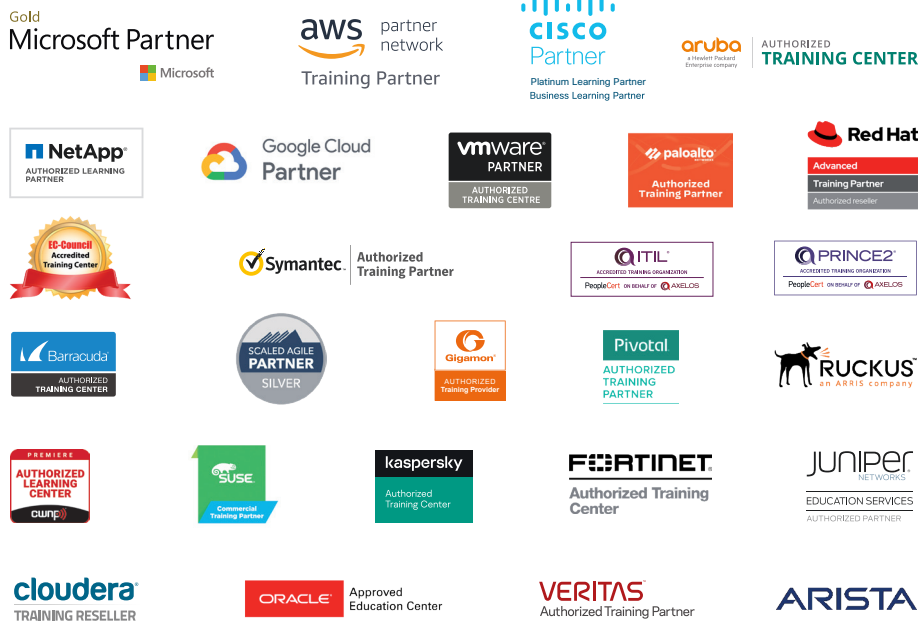
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- ✓ Content-Entwicklung
- ✓ Remote Labs
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- ✓ Eventmanagement-Services

## Trainingsmethoden

- ✓ Klassenraumtraining
- ✓ Instructor-Led Online Training
- ✓ FLEX Classroom – Klassenraum und ILO kombiniert
- ✓ Onsite & Customized Training
- ✓ E-Learning
- ✓ Blended & Hybrid Learning
- ✓ Mobiles Lernen

## Technologien und Lösungen

- ✓ Digitale Transformation
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- ✓ Cloud
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