Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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VMware NSX-T Data Center: Install, Configure, Manage [V3]

CODE:	LENGTH:	PRICE:
VMW_NSXTICM3	40 Hours (5 days)	€3,440.00

Description

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 3.0 release, including the overall infrastructure, logical switching, logical routing, networking and security services, micro-segmentation and firewalls, and more.
Access to a software-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

Objectives

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 switching and bridging
• Explain the tiered routing architecture and configure gateways • Configure advanced services such as VPN and load balancing
• Describe the NSX-T Data Center security model with micro-segmentation
• Configure Distributed Firewall and Gateway Firewall to protect east-west and north-south traffic
• Explain advanced security enforcement with URL analysis, IDS, and partner service insertion
• Integrate VMware Identity ManagerTM or LDAP with NSX-T Data Center and configure role-based access control
• Describe NSX-T Data Center Federation use-cases and architecture for switching, routing, and security.

Audience

•Experienced system administrators or network administrators

Prerequisites

•Good understanding of TCP/IP services and network security and working experience with firewalls
• Working experience with enterprise switching and routing 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

Programme

1 Course Introduction • Introductions and course logistics • Course objectives
2 VMware Virtual Cloud Network and NSX-T Data Center • Introduce VMware's Virtual Cloud Network vision
• Discuss NSX-T Data Center solutions, use cases, and benefits • Explain NSX-T Data Center architecture and components
• Describe VMware NSX® product portfolio and features
• Explain the management, control, data, and consumption planes and function
3 Deployment Preparing the NSX-T Data Center Infrastructure • Describe NSX Management Cluster
• Deploy VMware NSX® Manager™ nodes on VMware ESXi and KVM hypervisors • Navigate through the NSX Manager UI
• Explain data-plane components such as N-VDS, transport nodes, transport zones, profiles, and more
• Perform transport node preparation and establish the data center infrastructure • Verify transport node status and connectivity
4 NSX-T Data Center Logical Switching • Introduce key components and terminology in logical switching
• Describe the function and types of L2 segments • Explain tunneling and the GENEVE encapsulation
• Configure logical segments and attach hosts using NSX Manager UI • Describe the function and types of segment profiles

• Create segment profiles and apply them to segments and ports
• Explain the function of MAC, ARP, and TEP tables used in packet forwarding • Demonstrate L2 unicast packet flow
• Explain ARP suppression and BUM traffic handling 5 NSX-T Data Center Logical Routing
• Describe the logical routing function and use cases • Introduce the two-tier routing architecture, topologies, and components
• Explain the Tier-0 and Tier-1 Gateway functions • Describe the logical router components: Service Router and Distributed Router
• Discuss the architecture and function of VMware NSX® Edge™ nodes • Discuss deployment options of NSX Edge nodes
• Configure NSX Edge nodes and create NSX Edge clusters • Configure Tier-0 and Tier-1 Gateways
• Examine the single-tier and multitier packet flow • Configure static routing and dynamic routing • Enable ECMP on Tier-0 Gateway
• Describe NSX Edge HA, failure detection, and failback modes 6 NSX-T Data Center Bridging
• Describe the function of logical bridging • Discuss the logical bridging use cases • Compare routing and bridging solutions
• Explain the components of logical bridging • Create bridge clusters and bridge profiles 7 NSX-T Data Center Security
• Introduce the NSX-T Data Center security approach and model • Describe the micro-segmentation benefits and use cases
• Describe the Distributed Firewall architecture, components, and function • Configure Distributed Firewall sections and rules
• Describe the Gateway Firewall architecture, components, and function • Configure Gateway Firewall sections and rules
• Describe URL analysis and distributed intrusion system importance and use-cases.
• Describe the service insertion functionality for east-west and north-south security
• Discuss the integration and benefits of partner security solutions with NSX-T Data Center 8 NSX-T Data Center Services
• Describe NSX-T Data Center services • Explain and configure Network Address Translation (NAT) and NAT 64
• Explain and configure DNS and DHCP services • Describe the load-balancing function, topologies, components, and use cases
• Configure L4-L7 load balancing • Discuss the IPSec VPN and L2 VPN function and use cases
• Configure IPSec VPN and L2 VPN using NSX Manager UI 9 NSX-T Data Center Monitoring
• Explain the importance and functionality of VMware NSX® Intelligence™
• Navigate through the NSX Topology UI and identify the various key elements in the UI
• Discuss the importance and use-cases of alarms and events 10 NSX-T Data Center User and Role Management
• Describe the function and benefits of VMware Identity Manager in NSX-T Data Center
• Integrate VMware Identity Manager with NSX-T Data Center • Integrate LDAP with NSX-T Data Center
• Identify the various types of users, authentication policies, and permissions • Use role-based access control to restrict user access
• Explain the built-in roles in VMware Identity Manager and role assignment to users 11 NSX-T Data Center Federation
• Introduce the NSX-T Data Center Federation key concepts, terminology, and use-cases.
• Explain the onboarding process of NSX-T Data Center Federation
• Describe the NSX-T Data Center Federation switching and routing functions.
• Describe the NSX-T Data Center Federation security concepts and routing functions

Session Dates

On request. Please contact us

Additional Information

This training is also available as onsite training. Please contact us to find out more.