



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)	£3,230.00

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 Manager™ 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.](#)