

# VMware NSX-T Data Center: Install Configure Manage [4.0]

Kód kurzu: VMWNSXTICM

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 3.2 release, including the overall infrastructure, logical switching, logical routing, networking and security services, firewalls and advanced threat prevention, and more. Product Alignment • VMware NSX-T Data Center 3.2

## Pro koho je kurz určený

Experienced system administrators or network administrators.

## Čo vás naučíme

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.

## Požadované vstupné znalosti

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

## Študijné materiály

Študijné materiály VMware.

## Osnova kurzu

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

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# VMware NSX-T Data Center: Install Configure Manage [4.0]

- 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
  - 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
- ### 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

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# VMware NSX-T Data Center: Install Configure Manage [4.0]

- 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

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