Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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VMware NSX: Design [V4.x]

Kod:	Czas trwania:	Cena netto:
VMW_NSXD4	40 Hours (5 days)	zł9,900.00

Description

This five-day, hands-on training course provides the advanced knowledge, skills, and tools to achieve competency in operating and troubleshooting the VMware NSX infrastructure. This course introduces you to workflows of various networking and security constructs along with several operational and troubleshooting tools that help you manage and troubleshoot your VMware NSX environment.
In addition, various types of technical problems are presented to you, which you will identify, analyze, and solve through a systematic process.

Cel szkolenia

By the end of the course, you should be able to meet the following objectives:
• Use the native tools available in NSX to identify and troubleshoot the problems.
• Use VMware Aria Operations for Logs and VMware Aria Operations for Networks to identify and troubleshoot problems related to the NSX environment
• Explain the NSX infrastructure components and the communications between them
• Identify, analyze, and troubleshoot problems related to the management, control, and data planes in NSX
• Identify, analyze, and troubleshoot problems related to infrastructure preparation and VMware NSX Edge deployments
• Identify, analyze, and troubleshoot problems related to logical switching and logical routing
• Identify, analyze, and troubleshoot network security problems related to the Distributed firewalls, Gateway firewalls, and Distributed IDS/IPS.
• Identify, analyze, and troubleshoot problems related to VPN and VMware NSX Advanced Load Balancer
• Identify the components and packet flows involved in the NSX datapath and troubleshoot related problems

Uczestnicy

Network and security architects and consultants who design the enterprise and data center networks and NSX environments

Wymagania wstępne

Before taking this course, you must complete the following course: VMware NSX: Install, Configure, Manage [V4.0]
You should also have understanding or knowledge of these technologies:
• Good understanding of TCP/IP services and protocols
• Knowledge and working experience of computer networking and security, including:
• Switching and routing technologies (L2 and L3)
• Network and application delivery services (L4 through L7)
• Firewalling (L4 through L7) vSphere environments

Program szkolenia

1. Course Introduction
• Introduction and course logistics
• Course objectives

2. Design Concepts
• Identify design terms
• Describe framework and project methodology
• Describe VMware Validated Design™
• Identify customers' requirements, assumptions, constraints, and risks
• Explain the conceptual design
• Explain the logical design
• Explain the physical desig

3. NSX Architecture and Components
• Recognize the main elements in the NSX-T Data Center architecture
• Describe the NSX management cluster and the management plane
• Identify the functions and components of management, control, and data planes
• Describe the NSX Manager sizing options
• Recognize the justification and implication of NSX manager cluster design decisions
• Identify the NSX management cluster design option
4. NSX Edge Design
• Explain the leading practices for edge design
• Describe the NSX Edge VM reference designs
• Describe the bare-metal NSX Edge reference designs
• Explain the leading practices for edge cluster design
• Explain the effect of stateful services placement
• Explain the growth patterns for edge clusters
• Identify design considerations when using L2 bridging services
5. NSX Logical Switching Design
• Describe concepts and terminology in logical switching
• Identify segment and transport zone design considerations
• Identify virtual switch design considerations
• Identify uplink profile, VMware vSphere® Network I/O Control profile, and transport node profile design considerations
• Identify Geneve tunneling design considerations
• Identify BUM replication mode design consideration
6. NSX Logical Routing Design
• Explain the function and features of logical routing
• Describe NSX-T Data Center single-tier and multitier routing architectures
• Identify guidelines when selecting a routing topology
• Describe the BGP and OSPF routing protocol configuration options
• Explain gateway high availability modes of operation and failure detection mechanisms
• Identify how multitier architectures provide control over stateful service location
• Identify VRF Lite requirements and considerations
•Identify the typical NSX scalable architecture
7. NSX Security Design
• Identify different security features available in NSX[1]T Data Center
• Describe the advantages of an NSX Distributed Firewall
• Describe the use of NSX Gateway Firewall as a perimeter firewall and as an intertenant firewall
• Determine a security policy methodology
• Recognize the NSX-T Data Center security best practices
8. NSX Network Services
• Identify the stateful services available in different edge cluster high availability modes
• Describe failover detection mechanisms
• Explain the design considerations for integrating VMware NSX® Advanced Load Balancer™ with NSX-T Data Center
• Describe stateful and stateless NSX-T Data Center NAT
• Identify benefits of NSX-T Data Center DHCP
• Identify benefits of metadata proxy
• Describe IPSec VPN and L2 VP
9. Physical Infrastructure Design
• Identify the components of a switch fabric design
• Assess Layer 2 and Layer 3 switch fabric design implications
• Review guidelines when designing top-of-rack switches
• Review options for connecting transport hosts to the switch fabric
• Describe typical designs for VMware ESXi™ compute hypervisors with two pNICs
• Describe typical designs for ESXi compute hypervisors with four or more pNICs
• Describe a typical design for a KVM compute hypervisor with two pNICs
• Differentiate dedicated and collapsed cluster approaches to SDDC design 10 NSX
10. Multilocation Design
• Explain scale considerations in an NSX-T Data Center multisite design
• Describe the main components of the NSX Federation architecture
• Describe the stretched networking capability in Federation
• Describe stretched security use cases in Federation
• Compare Federation disaster recovery designs 11 NSX Optimization
• Describe Geneve Offload
• Describe the benefits of Receive Side Scaling and Geneve Rx Filters
• Explain the benefits of SSL Offload
• Describe the effect of Multi-TEP, MTU size, and NIC speed on throughput
•Explain the available N-VDS enhanced datapath modes and use cases
• List the key performance factors for compute nodes and NSX Edge node

Terminy

Data	Lokalizacja	Strefa czasowa	Język	Typ szkolenia	Gwarancja	Cena netto
31 Mar 2025	Virtual Classroom	CEDT	Polish	Instructor Led Online		zł9,900.00

Dodatkowe informacje

Jeśli interesują Cię inne szkolenia tego producenta - skontaktuj się z nami.