



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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**Skontaktuj się z nami**

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Kod:	Czas trwania:	Cena netto:
VMW_NSXTD32	40 Hours (5 days)	zł9,900.00

### Description

### Cel szkolenia

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

- Describe and apply a design framework
- Apply a design process for gathering requirements, constraints, assumptions, and risks
- Design a VMware vSphere® virtual data center to support NSX-T Data Center requirements
- Create a VMware NSX® Manager™ cluster design
- Create a VMware NSX® Edge™ cluster design to support traffic and service requirements in NSX-T Data Center
- Design logical switching and routing
- Recognize NSX-T Data Center security best practices
- Design logical network services
- Design a physical network to support network virtualization in a software-defined data center
- Create a design to support the NSX-T Data Center infrastructure across multiple sites
- Describe the factors that drive performance in NSX-T Data Center

### Uczestnicy

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

### Wymagania wstępne

Before taking this course, you must complete the following course:

- VMware NSX-T Data Center: Install, Configure, Manage [V3.2]

You should also have the 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-L3)
  - Network and application delivery services (L4-L7)
  - Firewalling (L4-L7)

### Program szkolenia

- Course Introduction
  - Introduction and course logistics
  - Course objectives
- 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 design
- 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
- 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
- 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
- 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
- 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
- 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
- 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 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**

Na żądanie. [Prosimy o kontakt](#)

## **Dodatkowe informacje**

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