



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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**Du kan nå oss här**

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CODE:	LENGTH:	PRICE:
VMW_NSXICM64	40 Hours (5 days)	kr38,000.00

## Description

This five-day, comprehensive, fast-paced training course presents VMware NSX as a part of the software-defined data center. You will learn how to use logical switching in VMware NSX to virtualize your switching environment. The course also details logical routing to enable you to dynamically route between different virtual environments. You will also learn how to use gateway services, firewall configurations, and security services to help secure and optimize your VMware NSX environment. Access to a software-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

Product Alignment

- VMware NSX 6.4

## Objectives

	Introductions and course logistics	
Course Introduction	Review course objectives	Introduction to vSphere Networking
	Describe VMware vSphere® networking components	
	Describe vSphere standard switches	
	Describe vSphere distributed switches	
	Explain the function VMkernel ports provide	
	Explain the services provided by VMkernel ports	Introduction to NSX
	Explain what is missing in data centers today	
	Describe how network virtualization can help data centers	
	Explain how the new complete SDDC model improves data center operations	
	Describe the benefits of NSX	
	Identify NSX key use cases	NSX Architecture
	Describe the NSX architecture	
	Identify the planes of NSX operations	
	Summarize the planes of NSX operations	
	Identify the components of each plane	
	Summarize the deployment of NSX Manager	
	Describe the deployment of the control plane	
	Identify and describe user world agents	
	List the data plane components	NSX Infrastructure Preparation
	Describe the NSX installation overview	
	Identify what is involved in planning an NSX deployment	
	Verify the NSX Manager and vCenter Server registration	
	Describe the deployment and verification of the NSX Controller cluster	NSX Logical Switch Networks
	Describe the switching challenges in current data centers	
	Explain TZ, VTEP, and VXLAN	
	Describe the procedure of preparing the infrastructure for virtual networking	
	Summarize logical switching segment ID pools and address ranges	
	Discuss the NSX replication modes	
	Configure VXLAN transport parameters	
	Explain the VXLAN Network Identifier (VNI)	
	Define VLANs for VXLAN	
	Explain the special CDO logical switch and transport parameters	
	Explain logical switch packet walks	NSX Logical Routing

Describe the routing challenges in current data centers

Explain Hairpinning

Describe the East-West and North-South routing concepts

Define the NSX Distributed Logical Router

Define the NSX Edge services gateway

Explain the work flows of a DLR

Explain the logical router, interfaces, and interface addresses

Describe the logical router traffic flow on the same hosts and Between different hosts

Describe logical router deployment models

Explain the packet flows of an NSX Edge services gateway

Explain the common topologies of an NSX Edge services gateway Advanced NSX Logical Routing

Explain static and dynamic routing

Describe DLR and NSX Edge static and dynamic routing configuration

Explain OSPF and BGP routing protocols

Explain ingress and egress traffic flows

Describe and configure Equal-Cost Multipathing

Describe high availability for DLR and NSX Edge service gateways NSX L2 Bridging

Explain L2 bridging use cases

Describe software and hardware L2 bridging between VXLAN and VLANs

Discuss L2 bridging packet flows NSX Edge Services

Describe the NSX Edge Services

Explain how Network Address Translation (NAT) works

Describe source and destination NAT

Explain NAT64 NSX Edge VPN Services

Describe the NSX Edge VPN Services

Describe the VPN use cases

Explain NSX IPsec VPN services

Describe the IPsec security protocols: Encapsulating Security Payload

Configure an NSX Edge for IPsec VPN services

Explain NSX Edge L2 VPN services

Configure a L2 VPN on an NSX Edge

Explain NSX Edge SSL VPN-Plus services

Explain the SSL VPN-Plus client and installation package

Configure NSX Edge SSL VPN-Plus server settings NSX Security Services

Describe SDDC security challenges

Explain the evolution of firewalls

Describe the NSX logical firewalls

Describe the Distributed Firewall architecture

Explain how to work with firewall rule sections

Differentiate L2 and L3 firewall rules

Describe exclusion lists

Explain L7 filtering in the DFW

Define an IP address, MAC address, a security, and service group

Describe the VMware Tools IP address discovery method

Explain DHCP and ARP snooping NSX Advanced Security Services

Describe NSX SpoofGuard

Explain how to enable NSX SpoofGuard

Describe the NSX Identity Firewall

Explain how Identity Firewall works with AD

Discuss RDSH and its use in Identity Firewall

Explain Application Rule Manager

Describe the selection of virtual machines for Application Rule Manager

Explain how to create a monitoring session

Describe the publication of firewall rules from Application Rule Manager NSX Introspection Services

Describe the types of introspection services

Describe the installation and configuration of Guest and Network Introspection

Explain service chaining

Define the available advanced services

Describe Guest Introspection services

Describe Network Introspection services

Describe how to view the status of Guest and Network Introspection

Summarize Guest and Network Introspection alarms, events, and audit messages Cross-vCenter NSX

Describe cross-vCenter features and use cases

Describe the components involved in cross-vCenter NSX

Identify NSX Manager roles and NSX Controller cluster placement

Deploy universal logical networks

Describe the deployment models available for cross-vCenter NSX

Explain the design considerations for cross-vCenter NSX

## Audience

Experienced system or network administrators

## Prerequisites

- Understanding of enterprise switching and routing
- Knowledge of TCP/IP services
- Experience with firewalls and firewall rule sets
- Understanding of concepts presented in the VMware Data Center Virtualization Fundamentals course
- Understanding of the concepts presented in the VMware Introduction to Network Virtualization with NSX course

## Programme

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

- Configure and deploy VMware NSX components for management and control
- Describe basic VMware NSX layer 2 networking
- Configure, deploy, and use logical switch networks
- Configure and deploy VMware NSX distributed router appliances to establish east-west connectivity
- Configure and deploy VMware NSX® Edge™ services gateway appliances to establish north-south connectivity
- Configure VMware NSX L2 bridging
- Configure and use all main features of the NSX Edge services gateway
- Configure NSX Edge firewall rules to restrict network traffic
- Configure VMware NSX distributed firewall rules to restrict network traffic
- Configure Service Composer policies
- Configure an identity-aware firewall
- Describe VMware NSX data security
- Use the cross-vCenter VMware NSX feature

This course prepares you for the following certification:

- VMware Certified Professional 6 – Network Virtualization (VCP6-NV)

## Options

- VMware Certified Professional 6 – Network Virtualization (VCP6-NV)

## Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
24 Apr 2024			English	Self Paced Training		kr43,000.00

## Ytterligare information

[Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.](#)