

Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Du kan nå os her

Email: training.ecs.dk@arrow.com Phone: +45 7025 4500



VMware NSX: Install Configure Manage [V6.4]

CODE: LENGTH: PRICE:

VMW_NSXICM64 40 Hours (5 dage) kr 25,662.00

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

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

NSX Architecture

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

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

NSX Edge 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)

Session Dates

På anmodning. Kontakt os venligst

Yderligere Information

Denne træning er også tilgængelig som træning på stedet. Kontakt os for at finde ud af mere.