

VMware NSX: Design V4.x

Dieser fünftägige Kurs bietet eine umfassende Schulung zu Überlegungen und Praktiken für das Design einer VMware NSX®-Umgebung als Teil einer Software-definierten Rechenzentrumsstrategie. Dieser Kurs bereitet die Teilnehmer mit den Fähigkeiten vor, das Design einer NSX-Umgebung zu leiten, einschließlich Designprinzipien, Prozessen und Frameworks. Die Teilnehmer erhalten ein tieferes Verständnis der NSX-Architektur und erfahren, wie sie genutzt werden kann, um Lösungen für die Geschäftsanforderungen des Kunden zu entwickeln.

Kursinhalt

- Course Introduction
- NSX Design Concepts
- NSX Architecture and Components
- NSX Edge Design
- NSX Logical Switching Design
- NSX Logical Routing Design
- NSX Security Design
- NSX Network Services
- Physical Infrastructure Design
- NSX Multilocation Design
- NSX Optimization and DPU-Based Acceleration

E-Book Sie erhalten englischsprachige Unterlagen von VMware als E-Book.

Zielgruppe

- Network and Security Architects
- Consultants who design the Enterprise and Data Center Networks and NSX Environments.

Voraussetzungen

Vor dem Besuch dieses Kurses müssen Sie den folgenden Kurs absolvieren:

- VMware NSX: Install, Configure, Manage [V4.0]

Außerdem sollten Sie diese Technologien verstehen oder kennen:

- gute Kenntnisse von TCP/IP-Diensten und -Protokollen
- Kenntnisse und Arbeitserfahrung in den Bereichen Computernetzwerke und Sicherheit, einschließlich:
 - Switching- und Routing-Technologien (L2 und L3)
 - Netzwerk- und Anwendungsbereitstellungsdienste (L4 bis L7)
 - Firewalling (L4 bis L7)
 - vSphere-Umgebungen

Die Zertifizierung VMware Certified Professional - Network Virtualization wird empfohlen.

Dieser Kurs im Web



Alle tagesaktuellen Informationen und Möglichkeiten zur Bestellung finden Sie unter dem folgenden Link: www.experteach.de/go/VNDD

Vormerkung

Sie können auf unserer Website einen Platz kostenlos und unverbindlich für 7 Tage reservieren. Dies geht auch telefonisch unter 06074 4868-0.

Garantierte Kurstermine

Für Ihre Planungssicherheit bieten wir stets eine große Auswahl garantierter Kurstermine an.

Ihr Kurs maßgeschneidert

Diesen Kurs können wir für Ihr Projekt exakt an Ihre Anforderungen anpassen.

Training	Preise zzgl. MwSt.	
Termine in Deutschland	5 Tage	€ 3.750,-
Online Training	5 Tage	€ 3.750,-
Termine auf Anfrage		

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VMware NSX: Design V4.x

1 Course Introduction

- Introduction and course logistics
- Course objectives

2 NSX Design Concepts

- Identify design terms
- Describe framework and project methodology
- Describe the role of VMware Cloud Foundation™ in NSX design
- Identify customers' requirements, assumptions, constraints, and risks
- Explain the conceptual design
- Explain the logical design
- Explain the physical design

3 NSX Architecture and Components

- Recognize the main elements in the NSX 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 options

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 and transport node profile design considerations
- Identify Geneve tunneling design considerations
- Identify BUM replication mode design considerations

6 NSX Logical Routing Design

- Explain the function and features of logical routing
- Describe the NSX 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 EVPN requirements and design considerations
- Identify VRF Lite requirements and considerations
- Identify the typical NSX scalable architectures

7 NSX Security Design

- Identify different security features available in NSX
- 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 security best practices

8 NSX Network Services

- Identify the stateful services available in different edge cluster high availability modes
- Describe failover detection mechanisms
- Compare NSX NAT solutions
- Explain how to select DHCP and DNS services
- Compare policy-based and route-based IPSec VPN
- Describe an L2 VPN topology that can be used to interconnect data centers
- Explain the design considerations for integrating VMware NSX® Advanced Load Balancer™ with NSX

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
- Differentiate dedicated and collapsed cluster approaches to SDDC design

10 NSX Multilocation Design

- Explain scale considerations in an NSX 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 the Federation disaster recovery designs

11 NSX Optimization and DPU-Based Acceleration

- 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 enhanced datapath modes and use cases
- List the key performance factors for compute nodes and NSX Edge nodes
- Describe DPU-Based Acceleration
- Define the NSX features supported by DPUs
- Describe the hardware and networking configurations supported with DPUs

