

VMware NSX for Internetworking Experts Fast Track V6.2

Duration 5 Days

COURSE DESCRIPTION

This comprehensive, fast-paced training course focuses on installing, configuring, and managing VMware NSX®. This course addresses NSX as a part of the software-defined data center, implementation use cases and features of NSX, and functionality operating at layer 2 through layer 7 of the OSI model.

Data center network architectures are examined to demonstrate how NSX intersects with and virtualizes functions of a Cisco-based infrastructure in spine-leaf and traditional core-aggregate-access architectures. Lecture and hands-on lab activities support your understanding of NSX features, functionality, and ongoing management and control.

Product Alignment

- NSX 6.2
- VMware vSphere® 6

COURSE OBJECTIVES

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

- Describe the software-defined data center
- Describe how NSX is the next step in the evolution of the software-defined data center
- Describe features and benefits of NSX network virtualization
- Identify prerequisites for NSX
- Configure and deploy NSX management, control, and data plane components
- Configure, deploy, and use logical switch networks
- Describe advanced networking products and features that are relevant to NSX
- Configure and deploy the NSX distributed router to optimize east-west data center traffic flows
- Configure and deploy VMware NSX® Edge™ services gateway appliances
- Explore advanced routing designs that optimize north-south traffic flows
- Configure and use NSX virtual private networks
- Configure and use logical load balancing
- Configure NSX Edge firewall and distributed firewall policy rules
- Configure Service Composer security groups and policies
- Use role-based access to control user account privileges
- Use activity monitoring to validate and create security policies
- Design an NSX solution that considers rack design and advanced networking capabilities

Certifications

This course prepares you for the following certification:

- VCP6-NV

COURSE OUTLINE

Course Introduction

- Introductions and course logistics
- Course objectives

Evolution of the Software-Defined Data Center

- Evolution of the software-defined data center
- Introduction to vSphere
- Introduction to network virtualization
- vSphere networking

Management and Control Components

- VMware NSX® Manager™
- VMware NSX® Controller™ clusters

Integrating vSphere and Physical Networking

- Virtual and physical network integration
- NSX preparation

NSX Logical Networking and VXLAN

- VXLAN overview and NSX switching
- NSX replication modes and frame walk

NSX Logical Routing

- IP routing fundamentals
- Overview of routing protocols
- Distributed logical router
- Edge gateway routing

NSX Layer 2 Bridging

- NSX software bridging
- Distributed logical router and bridging
- Bridging packet flow
- Bridging use case and examples
- Hardware bridging

Additional Edge Gateway Services

- Network address translation
- Network load balancing
- Virtual private networking
- Edge services gateway high availability

NSX Firewall and Security Services

- NSX security overview
- NSX Edge firewall
- NSX distributed firewall
- NSX identity-based firewall
- Service Composer
- Data security and activity monitoring
- NSX data security

NSX Operations and Monitoring Tools

- Backup and availability
- Role-based access control
- Monitoring tools
- Flow monitoring

Multi-vCenter NSX

- Introduction to multi-vCenter NSX
- Multi-vCenter NSX deployment models

VMware NSX and Design

- NSX designs: infrastructure
- NSX designs: advanced network protocols

PREREQUISITES

- System administration experience with Microsoft Windows or Linux operating systems
- Understanding of concepts presented in the VMware Data Center Virtualization Fundamentals course for VCA-DCV certification
- A solid background in a Cisco-based infrastructure or physical networking infrastructure

WHO SHOULD ATTEND

Experienced system administrators who specialize in networking