



VMware NSX: Install, Configure, Manage plus Troubleshooting & Operations Fast Track [V6.2]

Summary:

- Formats: **Classroom, Live Online, Onsite**
- Length: 5 Days

Overview:

This intensive five-day, extended-hours course focuses on installing, configuring, and managing VMware NSX®. This course presents VMware NSX as a part of the software-defined data center. The course also details logical routing to enable you to dynamically route between different virtual environments. You will learn how to use logical switching in VMware NSX to virtualize your switching environment and how to use gateway services, firewall configurations, and security services to help secure and optimize your VMware NSX environment. In addition, you will be presented with various types of technical problems which you will learn how to identify and solve through a systematic process. You will also be introduced to several operational, management, and troubleshooting tools. A software-defined data center environment with hands-on labs is provided to reinforce the skills and concepts presented in the course.

****Special Offer****

Attend a VMware delivered Fast Track course and receive a free VCP Exam voucher to use toward certification.

Product Alignment

- VMware vSphere® 6
- VMware NSX 6.2

Objectives:

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

- Describe the evolution of the software-defined data center
- 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 use all main features of the VMware 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
- Establish and apply a structured approach and methodology for troubleshooting
- Troubleshoot NSX infrastructure and component problems
- Troubleshoot physical and logical networking problems involving switching and routing
- Use tools to monitor, operate, and troubleshoot NSX deployments

Certifications

This course prepares you for the following certifications:

- VMware Certified Professional 6 – Network Virtualization (VCP6-NV)
- VMware Certified Advanced Professional 6 – Network Virtualization Deployment (VCAP6-NV Deploy)

Intended Audience: Experienced system or network administrators

**Prerequisites:**

This course requires that you have completed the VMware Data Center Virtualization Fundamentals course or VCA-DCV certification or that you have the following skills and knowledge:

- Understanding of enterprise switching and routing
- Knowledge of TCP/IP services
- Experience with firewalls and firewall rule sets

Outline:**1. Course Introduction**

- Introductions and course logistics
- Course objectives
- Identify additional resources

2. Software-Defined Data Center

- Describe the evolution of the software-defined data center
- Describe VMware vSphere
- Describe VMware NSX

3. Management and Control Plane Components

- Understand the management, control, and data planes
- Describe VMware NSX® Manager™
- Describe the VMware NSX® Controller™ cluster

4. Logical Switch Networks

- Describe Ethernet fundamentals
- Describe VMware vSphere® Distributed Switch™
- Describe switch link aggregation
- Describe VLAN
- Describe VXLAN logical switch networks
- Describe VMware NSX Controller replication

5. VMware NSX Logical Routing

- Discuss routing protocols
- Describe the VMware NSX logical router
- Describe the NSX Edge services gateway

6. NSX Edge Gateway Services

- Describe network address translation
- Describe load balancing
- Describe high availability
- Describe virtual private networking
- Configure L2 VPN
- Configure SSL VPN Plus



7. VMware NSX Firewall and Security Services

- Describe the NSX Edge firewall
- Describe the VMware NSX distributed firewall
- Describe VMware NSX data security
- Describe the Service Composer
- Describe the identity-aware firewall

8. Cross vCenter VMware NSX

- Understand and identify the benefits of the cross- vCenter VMware NSX feature
- Configure the cross-vCenter VMware NSX
- Discuss the deployment models for cross-vCenter
- VMware NSX

9. Troubleshooting Methodology

- Develop a structured troubleshooting approach
- Differentiate between symptoms and root causes
- Identify and isolate problems residing in various areas
- Apply an appropriate methodology and procedure to troubleshooting

10. Troubleshooting and Operating NSX Infrastructure

- Describe the NSX infrastructure and component communications
- Discuss common VMware NSX® Controller™ deployment problems
- Troubleshoot host preparation problems
- Troubleshoot management and control plane sync
- Introduce the NSX central CLI

11. Troubleshooting and Operating NSX Logical Switches

- Describe the VXLAN architecture
- Create logical switches
- Troubleshoot the logical switch control plane and the data plane
- Use the central CLI to troubleshoot logical switch problems

12. Troubleshooting and Operating NSX Logical Routers

- Describe the NSX logical routing architecture
- Understand logical routing prerequisites
- Gather logical routing information for operations and troubleshooting
- Explain the logical routing subsystem requirements
- Use the CLI to troubleshoot problems related to the controller and the control VM



- Troubleshoot routing subsystem component failures
- Use tools such as logs and packet capture to identify and solve routing problems

13. Troubleshooting and Operating NSX Security Services

- Discuss the NSX distributed firewall components and communication channels
- Validate and troubleshoot distributed firewall configurations

14. Additional NSX Operational Tools

- Discuss NSX operational requirements and tools overview
- Introduce vRealize Network Insight
- Introduce vRealize Log Insight Content Pack for VMware NSX