

VMware NSX: Troubleshooting and Operations [V6.4]

Duration 5 Days

COURSE OVERVIEW

This five-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competence in operating and troubleshooting the VMware NSX® 6.4 environment. In this course, you are introduced to several operational, management, and troubleshooting tools. You will be presented with various types of technical problems, which you will identify, analyze, and solve through a systematic process.

Product Alignment

- NSX 6.2
- VMware vRealize® Network Insight™
- VMware vRealize® Log Insight™

COURSE OBJECTIVES:

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

- Establish and apply a structured troubleshooting approach and methodology
- Explain the native NSX tools, VMware vRealize® Suite tools, and partner tools that are useful for monitoring, troubleshooting, and operations
- Explain the NSX infrastructure components and the communications between them
- Identify, analyze, and troubleshoot problems related to the NSX management, control, and data planes
- Identify, analyze and troubleshoot problems related to NSX logical switching, logical routing, and
- VMware NSX® Edge™ services
- Identify, analyze, and troubleshoot network security problems related to the NSX distributed firewall and the NSX Edge firewall

INTENDED AUDIENCE:

Network professionals who work with enterprise networks and VMware Sphere® 6.x

PREREQUISITES:

- Knowledge and working experience of computer networking, including:
 - Switching and routing technologies (L2-3)
 - Network and application delivery services (L4-7)
- Knowledge and working experience of vSphere
- Knowledge and working experience of NSX installation, configuration, management, and operations

Before taking this course, you should attend either the VMware NSX: Install, Configure, Manage course or the VMware NSX for Internetworking Experts Fast Track course.

The VMware Certified Professional 6 – Network Virtualization (VCP6-NV) certification is recommended.

COURSE OUTLINE:

Course Introduction

- Introduction and course logistics
- Course objectives
- Resources and references
- Learning paths and certifications

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

NSX Troubleshooting and Operational Tools

- Discuss NSX operational requirements
- Use the native NSX tools (such as the central CLI, the NSX dashboard, and Application Rule Manager) to solve various types of problems
- Use vRealize Network Insight to identify and analyze problems
- Use VMware vRealize® Log Insight™ Content Pack for NSX in troubleshooting and operations

Troubleshooting and Operating NSX Infrastructure

- Explain the NSX infrastructure and component communications
- Troubleshoot VMware NSX® Manager™ and the management plane
- Troubleshoot VMware NSX® Controller™ and the control plane
- Troubleshoot problems in host preparation

Troubleshooting and Operating NSX Logical Switches

- Explain VXLAN and logical switching components
- Verify the VXLAN and logical switch configuration and status
- Identify and troubleshoot common layer 2 configuration errors
- Use the GUI, the CLI, packet capture, traceflow, and other tools to troubleshoot logical switching problems

Troubleshooting and Operating NSX Logical Routers

- Describe the NSX logical routing architecture
- Explain routing components, functions, and communications
- Verify logical router configuration settings
- Use packet capture on routers and perform packet walk
- Use the GUI, the CLI, traceflow, and other tools to troubleshoot logical routing problems

Troubleshooting and Operating NSX Edge Services

- Verify edge services (such as DHCP and DNS) configuration settings and operational status
- Troubleshoot various types of VPN services (SSL VPN-Plus, L2 VPN, and IPsec VPN)
- Verify the configuration and status of logical load balancers
- Troubleshoot common load-balancing and high availability scenarios

Troubleshooting and Operating NSX Security Services

- Discuss the NSX distributed firewall architecture, components, communication channels, and features
- Use the CLI and other tools to troubleshoot the configuration and operations of the NSX distributed firewall and the NSX Edge firewall
- Explain and troubleshoot the Service Composer components and architecture
- Troubleshoot common problems related to Identity Firewall
- Examine Guest Introspection architecture, components, services, and operations
- Verify Guest Introspection deployment configuration and functions, and troubleshoot common problems