

# **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

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# VMware NSX: Troubleshooting and Operations [V6.3]

CODE: LENGTH: PRICE:

VM-NSX-TSO-V6.3 40 Hours (5 days) \$4,625.00

# **Description**

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® 6.3 environment.

In this course, you will be presented with various types of technical problems.

You will learn how to identify the problems and solve them through a systematic process.

You will also be introduced to several operational, management, and troubleshooting tools.

### **Objectives**

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

- 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
- Troubleshoot advanced edge services
- Troubleshoot network security problems
- Use tools to monitor, operate, and troubleshoot NSX deployments

#### **Audience**

Network professionals who work with enterprise networks and VMware Sphere®

#### **Prerequisites**

- Understanding of layers 2 through 3 networking protocols, and switching and routing methodology
- Understanding of layers 4 through 7 network services
- Understanding of the concepts presented in the VMware NSX: Install, Configure, Manage course or the VMware NSX for Internetworking Experts Fast Track course, or equivalent networking and vSphere experience VCP6-NV certification is recommended.

### **Programme**

#### Course Introduction Troubleshooting Methodology

- Introduction and course logistics Develop a structured troubleshooting approach
- Course objectives Differentiate between symptoms and root causes
- Resources and references Identify and isolate problems residing in various areas
- · Learning paths and certifications· Apply an appropriate methodology and procedure to troubleshooting

#### **Troubleshooting and Operating NSX Infrastructure**

- Describe the NSX infrastructure and component communications
- Describe NSX and vSphere distributed switches
- Explain VMware NSX® Manager™ to VMware vCenter Server® connectivity
- Identify vSphere 6.5 compatibility with NSX 6.3
- · Explain control plane agent autorecovery

#### **Troubleshooting and Operating NSX Logical Switches**

- · Describe the components involved in NSX logical switching
- Describe the logical switching control plane operations
- Explain the management plane operations and solve NSX Manager issues
- Describe user world agents and their functions
- · Configure vSphere distributed switches for VXLAN
- Back up and restore vSphere distributed switch configurations

## **Troubleshooting and Operating NSX Logical Routers**

- Describe the communications between routing components
- · Differentiate between the distributed logical router (DLR) and the edge services gateway (ESG)
- · Describe DLR packet flow
- Describe ESG and DLR packet flow with ECMP enabled
- Describe the prerequisites for logical routing
- Correctly configure the transport zone
- Understand the rules of DLR
- Describe VMware NSX® Edge™ nodes

#### **Troubleshooting and Operating NSX Security Services**

- Explain the DFW dependency on NSX Manager
- Explain how DFW and NSX Edge firewall rules are managed by NSX Manager
- Explain the architecture of guest introspection with third-party devices
- Understand VMware Tools<sup>™</sup> and the NSX thin agent
- · Explain how NSX service chaining dynamically responds to changing security conditions
- Describe automated security operations
- Explain how DFW, the filtering module, and the traffic redirection modules work together
- · Describe the changes in the DFW packet log format

#### **Troubleshooting and Operating NSX Edge Services**

- Use the GUI and the CLI to verify DHCP relay configuration
- · Verify the settings of a DHCP server
- Describe the SSL VPN-Plus remote access solution available on ESG
- Describe the L2 VPN features and explain how they work
- Properly configure L2 VPN service
- · Configure the SSL VPN-Plus server and clients
- Properly configure IPsec VPN tunnels between sites
- Use the GUI, CLI commands, and logs to examine IPsec VPN tunnel status and statistics
- · Differentiate between L4 and L7 load balancing
- · Explain how high availability works
- Analyze common high-availability configuration issues and provide solutions

#### vRealize Operational Tools for NSX Operations Management

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

#### **Session Dates**

On request. Please Contact Us

#### **Additional Information**

This training is also available as onsite training. Please contact us to find out more.