Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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VMware NSX-T Data Center: Troubleshooting and Operations [V3.0]

CODE:	LENGTH:	PRICE:
VM-NSX-TDC-T-O-V2.4	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 competency in operating and troubleshooting the VMware NSX-T Data Center environment. In this course, you are introduced to workflows of various networking and security constructs along with several operational and troubleshooting tools that help managing and troubleshooting your NSX-T Data Center. In addition, you are presented with various types of technical problems, which you will identify, analyze, and solve through a systematic process.

Product Alignment

- NSX-T Data Center 2.4

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 NSX-T Data Center infrastructure components and the communications between them
- Identify, analyze, and troubleshoot problems related to the NSX-T Data Center management, control, and data planes
- Identify, analyze, and troubleshoot problems related to the NSX-T Data Center installation and upgrade
- Identify, analyze, and troubleshoot problems related to the NSX-T Data Center logical switching, logical routing, and load balancer services
- Identify, analyze, and troubleshoot network security problems related to the NSX-T Data Center Distributed firewall and Gateway firewall.
- Identify the components and packet flows involved in the NSX-T Data Center Datapath and troubleshoot various problems that could occur in the Datapath
- List the native tools available in NSX-T Data Center to identify and troubleshoot the problems related to NSX-T Data Center environment.

Audience

- Experienced system administrators or network administrators
- Network and Security professionals who work with enterprise and data center networks

Prerequisites

Before taking this course, you should have completed the VMware NSX-T Data Center: Install, Configure, Manage [V2.4] course.

Programme

1 Course Introduction

- Introductions and course logistics
- Overview of modules and course objectives

2 Troubleshooting Methodology

- Recap of NSX-T Data Center architecture and components
- 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

3 NSX Management Cluster
• Describe NSX Management Cluster
• Identify the workflows involved in NSX Management Cluster formation
• Identify, analyze, and troubleshoot the workflows and problems involved in NSX Manger and Control Cluster group formations
• Review the log events for NSX Management Cluster
• Validate and troubleshoot the NSX Management Cluster formation
• Identify the agents running on the NSX-T Data Center and validate the connection status
4 Installation and Upgrade
• Validate Manager Nodes Deployment Workflow and Troubleshooting
• Review Compute Manager (VMware vCenter®) Registration workflow and Troubleshooting
• Explain Host Preparation workflows for VMware ESXi and KVM (VIB/Package installation)
• Explain Transport Node Preparation workflows for ESXi and KVM
• Understand Upgrade Coordinator Architecture
• List upgrade Checklist and Workflows
• Review the upgrade process for NSX-T Data Center Environment
• Review the troubleshooting methodology involved
5 Logical Switching
• Understand the deep-dive architecture for Logical Switching
• List the modules and processes involved
• Explain the importance of N-VDS in Transport Nodes
• Review and troubleshoot the working of GENEVE encapsulation
• Review the advanced architecture and workflows involved with OVS
• Explain the advanced workflows and troubleshooting methodologies involved in Logical Switching
6 Logical Routing and Services
• Review the deep-dive architecture for Logical Routing and Edge nodes
• Explain the advanced workflows involved with Tier-0 and Tier-1 Gateways.
• Explain the HA modes and logical router placements.
• Review and validate various logging methods and logging locations for Logical Routing
• Identify common issues and troubleshooting methodologies involved for Logical Routing
• Identify, validate, and review common issues and troubleshooting techniques involved for NSX-T Load Balancers
7 Security
• Review the deep-dive architecture for Distributed Firewall
• Explain the advanced workflows involved with Distributed Firewall
• Review the deep-dive architecture for Gateway Firewall
• Explain the advanced workflows involved with Gateway Firewall
• Identify common issues and troubleshooting methodologies involved for Distributed and Gateway Firewalls
8 Operations and Tools
• Review and perform the backup and restore of the NSX-T Data Center environment
• Explain and validate the native troubleshooting tools (dashboards, traceflow, port connection tool, port mirroring) involved for troubleshooting the NSX-T Data Center environment
• Configure the syslog, IPFIX, and log collections for NSX-T Data Center Environment
• Explain and validate the certificate management options
• Validate and review several APIs available for most common configurations involved in NSX-T Data Center
9 Datapath Troubleshooting
• Describe the components involved in the NSX-T Data Center Datapath
• Verify and validate the path of the packet on the NSX-T Datapath
• Identify and perform packet captures at various points in Datapath
• Use nsxcli to retrieve several configurations involved in NSX-T Datapath
10 Break-Fix Scenarios
• Identify and isolate NSX-T Data Center related problems available in the SDDC based hands-on lab environment
• Use CLI commands to verify the component configuration and status of several Datapath components in NSX-T Data Center
• Apply an appropriate methodology and procedure to troubleshooting and fix the problems in the lab environment

Session Dates

On request. Please Contact Us

Additional Information

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