Mildain Solutions

VMware NSX-T: Install, Configure, Manage [V2.2]

Summary:

- Formats: **Classroom**, **Live Online**, **Onsite**

- Length: 5 Days

Overview:

This five-day course provides comprehensive training on how to administer a VMware NSX-T™ environment. This course covers key VMware NSX® features and functionality offered in the NSX-T 2.2 release operating across layer 2 through layer 7 of the OSI model.

Access to a software-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

Product Alignment
• NSX-T 2.2

Objectives:

By the end of the course, you should be able to meet the following objectives:
• Understand NSX-T key features and functionality
• Understand NSX-T architecture and component subsystems
• Identify the differences between NSX-T and the NSX-V and VMware NSX® Multi-Hypervisor™ platforms
• Deploy and configure overlay layer 2 networks
• Understand logical routing implementation and architecture enhancements
• Understand distributed firewall implementation and policy rules
• Gather relevant information from the NSX platform during troubleshooting scenarios

Intended Audience: • Experienced system or network administrators

Prerequisites:

• Understanding of enterprise switching and routing
• Knowledge of TCP/IP services
• Experience with firewalls and firewall rule sets
• Understanding of concepts presented in the VMware Data Center Virtualization Fundamentals course
• Understanding of concepts presented in the VMware Introduction to Network Virtualization with NSX course

Outline:

1 NSX-T Introduction
• Introductions and course logistics
• Review course objectives

2 Overview, Architecture, and Components of NSX-T Data Center
• Describe NSX-T Data Center™ platform features and advantages

- List the capabilities of NSX-T Data Center platform
- Explain the value proposition of NSX-T Data Center
- Describe NSX-T Data Center Architecture planes
- Describe NSX-T Data Center and Kubernetes integration features
- Describe NSX-T Data Center and Pivotal Cloud Foundry integration features
- Describe NSX-T Data Center and OpenShift integration features
- Describe NSX Cloud™ use cases
- Explain NSX Cloud features and capabilities
- Describe the NSX Cloud components and their roles and responsibilities

3 Deploying NSX-T Data Center
- Define the NSX-T Data Center deployment preparation
- Identify the system requirements to deploy NSX-T Data Center
- Identify ports and protocols
- Identify and describe the NSX-T Data Center installation checklist
- Describe the OVF deployment of NSX-T Data Manager
- Explain how to power on the NSX-T Manager using a Compute Manager (VMware vCenter Server®)
- Describe the process to check the NSX-T Manager status
- Explain the methods to reboot the NSX-T Manager

4 User and Role Management
- Describe role-based Access Control and VMware Identity Manager™
- Explain the integration of NSX-T with VMware Identity Manager
- Explain authentication policies
- Identify the four types of permissions
- Describe the workflows of logical switching (MP, CCP, DP)
- Describe the VMware Identity Manager built-in roles
- Explain VMware Identity Manager Domains and User Attributes

5 Logical Switching Networking Services
- Explain the need for NSX-T Data Center Logical Switching feature
- Describe various logical switching terminology
- List the various types of logical switches available
- Explain N-VDS implementation in ESXi and KVM
- Explain the encapsulation protocol GENEVE implementation
- Explain the Switch Security feature of NSX-T Logical Switching

6 Logical Bridging Networking Services
- Explain the function and purpose of logical bridging
- Describe the scenarios for logical bridging

7 Logical Routing Networking Services
- Explain the function of NSX-T Logical Routing
- Describe NSX-T multitier routing architectures
- Explain north-south and east-west routing
- Differentiate between dynamic and static routing
- Describe the architecture of NSX-T two-tier routing
- Explain the benefits of NSX-T two-tier routing for single- and multi-tenancy
- Describe the form factors of NSX-T Edge nodes
- Explain the purpose of Equal Cost Multipath routing

8 Operational Services

• Describe NSX-T Data Center services
• Describe Source and Destination NAT
• Describe NSX-T DNS and DHCP services
• List the HA Modes available in NSX-T
• Describe the load-balancing service of NSX-T
• Explain Metadata Proxies

9 Security Services

• Describe NSX-T microsegmentation
• Explain microsegmentation use cases
• Explain microsegmentation design objectives
• Describe the architecture of NSX-T firewalls
• Explain the purpose and creation of firewall sections
• Explain the function of NSX-T SpoofGuard

10 NSX-T Data Center Operations

• Describe the configuration, routine maintenance, and management of NSX-T
• Describe the procedure of applying NSX-T authentication certificates
• Explain the need and process to manage IP addresses
• Describe the methods for NSX-T logging
• Explain the types of backups available
• Explain the various native troubleshooting tools available for NSX-T Data Center