

VMware NSX: Install, Configure, Manage v6.4

Course Details

Course Outline

1. Course Introduction

- Introductions and course logistics
- Review course objectives

2. Introduction to vSphere Networking

- Describe VMware vSphere® networking components
- Describe vSphere standard switches
- Describe vSphere distributed switches

3. Introduction to NSX

- Describe the benefits of NSX
- Identify NSX key use cases

4. NSX Architecture

- Describe the NSX architecture
- Describe the cloud management, management, control, and data planes of NSX
- Identify the component interactions
- Describe the VMware NSX® Controller™ cluster and its functions
- Explain the NSX Controller workload distribution

5. NSX Infrastructure Preparation

- Explain the steps required for an NSX installation
- Describe what is involved in planning an NSX deployment
- Describe the NSX Controller cluster and deployment
- Describe NSX Controller cluster high availability and load distribution
- Explain how to deploy and configure the NSX Controller cluster
- Explain the workflow involved in host preparation

6. NSX Logical Switch Networks

- Explain transport zones, VXLANs, and VXLAN tunnel end points (VTEPs)
- Describe the procedure for preparing the infrastructure for virtual networking
- Describe the configuration of vSphere distributed switches for VXLAN

- Identify the components involved in NSX logical switching
- Define VLANs for VXLAN

7. NSX Logical Routing

- Explain the east-west and north-south routing concepts
- Define the NSX distributed logical router
- Explain the logical router, interfaces, and interface addresses
- Describe the management and control plane interaction
- Describe logical router deployment models and two-tier routing for east-west traffic
- Explain the common topologies of an NSX Edge services gateway

8. Advanced NSX Logical Routing

- Describe how routers connect remote networks
- Explain route redistribution methods
- Describe less-than-or-equal (LE) and greater-than-or-equal (GE) configurations
- Describe routing event notification enhancements
- Configure equal-cost multipath (ECMP) routing
- Describe high availability for NSX Edge service gateways

9. NSX L2 Bridging

- Explain L2 bridging use cases
- Describe software and hardware L2 bridging between VXLAN and VLANs
- Discuss L2 bridging packet flows

10. NSX Edge Services

- Describe the NSX Edge Services
- Explain how Network Address Translation (NAT) works
- Explain NAT64
- Explain the function of load balancing
- Explain one-armed and inline load-balancing architectures
- Explain the DHCP and DNS services for NSX Edge

11. NSX Edge VPN Services

- Describe the NSX Edge VPN services
- Describe the VPN use cases
- Configure a L2 VPN on an NSX Edge instance
- Configure an NSX Edge instance for IPsec VPN services
- Explain NSX Edge SSL VPN-Plus services

- Configure NSX Edge SSL VPN-Plus server settings

12. NSX Security Services

- Describe the policy enforcement of the distributed firewall
- Describe virtualization context-awareness
- Explain custom network and security containers
- Describe the architecture of an NSX Edge firewall
- Explain DHCP snooping
- Explain ARP snooping

13. NSX Advanced Security Services

- Describe NSX SpoofGuard
- Identify how tags enable dynamic security service chains
- Explain Service Composer groups, policies, and tags
- Describe the Identity Firewall architecture
- Explain Application Rule Manager
- Explain how to create a monitoring session

14. NSX Introspection Services

- Describe the types of introspection services
- Describe the installation and configuration of Guest and Network Introspection
- Summarize Guest and Network Introspection alarms, events, and audit messages

15. Cross-vCenter NSX

- Describe cross-vCenter features and use cases
- Identify VMware NSX® Manager™ roles and NSX Controller cluster placement
- Deploy universal logical networks
- Explain the design considerations for cross-vCenter NSX