5 Days

VMware NSX for Internetworking Experts Fast Track [V6.1]

The wide-ranging VMware NSX for Internetworking Experts Fast Track program provides fundamental knowledge to Network Administrators of deploying VMware NSX network Virtualization and Security platform.

This course covers the implementation, use cases, features and functionality at Layer 2 to Layer 7 of the OSI model that become a part of the software-defined data center.The training provides Demonstration of NSX intersections and Virtualizations that take place on a Cisco-based infrastructure in spine-leaf and traditional core-aggregate-access architectures.

Through lectures and hands-on lab experiences, the training will provide fundamental understanding of the various features and functionalities of NSX that are essential for management control

Course Details
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Course Outline

1. Course Introduction

- Introduction to course logistics
- Course objectives

2. Software-Defined Data Center

- Describing the software-defined data center concepts
- Defining the evolution of the software-defined data center
- Describing VMware vSphere® virtualization
- Describing network virtualization

3. vSphere Networking Fundamentals

- Describing vSphere virtual networking
- Describing vSphere distributed switches

4. Management and Control Planes

- Describing the role of VMware NSX Manager™ and VMware NSX Controller™
- Identifying NSX Controller clustering best practices
- Deployment of NSX Manager instance and the NSX Controller cluster

5. Logical Switch Networks

- Describing VXLAN protocol
- Identifying VTEP functions
- Discussing how NSX logical switches process Broadcast, Unknown unicast, and Multicast traffic
- Defining ARP suppression
- Compare unicast, multicast, and hybrid controller replication modes

6. Nexus and UCS Architecture

- Describing a Cisco Nexus switching architecture
- Identifying a Cisco UCS connectivity architecture
- Describing Cisco UCS profiles

7. Distributed Logical Router

- Discussing the role of the NSX logical router and NSX Edge gateway
- Diagram East-West and North-South traffic flows
- Discussing the distributed logical router
- Describe the distributed logical router control virtual machine

8. NSX Edge Routing and High Availability

- Define the features of the NSX Edge services gateway
- Determine NSX Edge network address translation operation
- Determine NSX Edge one-arm and inline load balancing
- Configure static and dynamic routing on NSX Edge
- Contrast NSX Edge high availability modes
- Scale and place NSX Edge appliances

9. Virtual Private Networks

- Identifying NSX VPN use cases
- Configuring site-to-site IPsec VPNs
- Configuring SSL VPNs for remote access
- Configuring Layer 2 VPN

10. Layer 2 Bridging

- Describe Layer 2 bridging between VXLAN and VLAN
- Describe the traffic flow between VXLAN and VLAN

11. NSX Security

- Describing micro-segmentation
- Contrast NSX Edge and NSX Distributed Firewalls to traditional firewalls
- Managing NSX firewall policies
- Extending the functionality of NSX with Service Composer
- Configure security groups and security policies with Service Composer

12. Operations

- Implementing NSX role-based access control
- Analyzing NSX flow monitoring data
- Create or modify firewall rules from NSX flow monitoring data

13. Automation

- Describing VMware vRealize™ Orchestrator™
- Describing the vRealize Automation capabilities
- Describing how vRealize Automation and NSX interact

14. Extensibility and Design

- Describe VMware NSX API™
- Identifying the NSX and Cisco design options

Who Should Attend

The Vmware NSX for Internetworking Experts Fast Track [V6.1] training course is ideal for those working with the profiles of:

- Experienced system administrators that specialize in networking.

Pre Requisite

Required prerequisites include completion of one of the following:

- System administration experience on Microsoft Windows or Linux operating systems.
- A solid background in a Cisco-based infrastructure or NSX: Install, Configure, Manage [V6.1]
- Understanding of concepts presented in the VMware Data Center Virtualization Fundamentals course for VCA-DCV certification.

Exams

VMware Certified Professional (VCP) [VCP6-NV]

Date - Apr 26, 2024