
VMware NSX-T Data Center: Design

Duration: 5 Days Course Code: VMNSX-TDCD Version: 3.0

Overview:

This five-day VMware NSX-T Data Center course provides comprehensive training on considerations and practices to design a VMware NSX-T™ Data Center environment as part of a software-defined data center strategy. This course prepares the student with the skills to lead the design of NSX-T Data Center offered in the NSX-T Data Center 3.0 release, including design principles, processes, and frameworks. The student gains a deeper understanding of NSX-T Data Center architecture and how it can be leveraged to create solutions to address the customer's business needs.

Product Alignment: NSX-T Data Center 3.0

Target Audience:

Network and security architects and consultants who design the enterprise and data center networks and NSX environments

Objectives:

- By the end of the course, you should be able to meet the following objectives:
 - Understand and apply a design framework
 - Apply a design process for gathering requirements, constraints, assumptions, and risks
 - Analyze existing physical networking and security components, processes, and operations
 - Design a VMware vSphere virtual data center to support NSX-T Data Center requirements
 - Design a physical network to support network virtualization in a software-defined data center
 - Design logical network services
 - Design logical security services
 - Design a data center rack solution to support scalability and high availability
 - Analyze the operational readiness of an organization and perform a skills gap analysis
 - Analyze alternative design choices for risk mitigation
 - Understand the design and support for NSX-T Data Center infrastructure in a multi data center infrastructure
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Prerequisites:

Before taking this course, you should have completed the following course:

- VMware NSX-T Data Center: Install, Configure, Manage [V3.0] (VMNSX-TSCICM)

You should also have the understanding or knowledge of these technologies:

- Good understanding of TCP/IP services and protocols
 - Knowledge and working experience of computer networking, including:
 - Switching and routing technologies (L2-L3)
 - Network and application delivery services (L4-L7)
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- Knowledge and working experience of VMware vSphere® environments and KVM-based environments

The VMware Certified Professional – Network Virtualization (2020) certification is recommended

Content:

1 Course Introduction

- Introductions and course logistics
- Course objectives

2 Basic Design Concepts

- Process and principles of design
- Describe the design process and frameworks
- Explain VVD and its importance

3 NSX-T Data Center Architecture and Components

- Explain the NSX-T Data Center and Virtual Cloud Network
- Describe the NSX-T Data Center architecture and use cases
- List the NSX-T Management cluster design considerations

4 NSX-T Data Center Design Considerations

- Explain physical infrastructure design considerations
- Explain virtual infrastructure design considerations
- List the collapsed management and VMware NSX® Edge™ resources design considerations
- Explain dedicated management and NSX Edge resources design

5 Logical Switching Design

- Explain the VMware NSX-T™ logical switching design concepts
- Describe the traffic flooding concepts

6 NSX-T Data Center Edge Design

- List the NSX Edge VM design considerations
- Explain NSX Edge BareMetal design considerations
- Describe NSX Edge cluster design
- Explain Bridge design considerations

7 Logical Routing Design

- Explain logical router components
- Describe multitier routing
- Explain IPv6 addressing and routing design concepts
- Multi-compute workload domain design considerations
- High availability and router placement

8 NSX-T Data Center Network Services

- Explain the functionality of NAT, Proxy ARP, DHCP, and metadata proxy and design considerations
- Describe the load balancer considerations
- Explain the VPN design considerations

9 NSX-T Data Center Security Design

- Explain the distributed firewall design concepts
- Explain the Gateway firewall design concepts
- Describe the security policy methodology

10 NSX-T Data Center Federation Design

- Explain the Federation functionality
- Explain the design concepts for Federation components
- Describe the design involved for Federation networking
- Describe the design involved for Federation security

11 NSX-T Data Center and Containers

- Understand VMware Tanzu™
- Understand NSX-T Data Center for Kubernetes
- Understand IPv6 for Kubernetes PODs
- Understand NSX-T Data Center design options for VMware Tanzu
- Describe NSX-T Data Center design recommendations for VMware Tanzu

Further Information:

For More information, or to book your course, please call us on 0800/84.009

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