

# VMware NSX-T Data Center: Design

## Course Overview

This five-day 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 NSX-T Data Center design offered in the NSX-T Data Center 2.4 release, including design principles, processes, and frameworks. The student gains a deeper understanding of NSX-T Data Center architecture and how this can be leveraged to create solutions to address the customer's business needs.

## Course 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 cloud implementation

## Target Audience

- Experienced system administrators or network administrators

## Prerequisites

- Good understanding of TCP/IP services
- Working experience with enterprise switching and routing
- Good understanding of network security and working experience with firewalls

It is recommended that you attend the following course:

- [VMware NSX-T Data Center: Install, Configure, Manage](#)

## Course Delivery Options

- Classroom
- Live Online
- [Onsite](#)

## Product Alignment

- NSX-T Data Center 2.4

## Course Modules

### 1 Course Introduction

- Introductions and logistics
- Review course objectives

### 2 Basic Design Concepts

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

### 3 NSX-T Data Center Architecture and Components

- NSX-T Data Center introduction and architecture
- NSX-T Management Cluster
- NSX-T use cases

### 4 NSX-T Data Center Design Considerations

- Physical infrastructure design
- Virtual infrastructure design
- Collapsed management and Edge resources design
- Dedicated management and Edge resources design
- Bridge design considerations

### 5 Logical Switching Design

- NSX-T logical switching
- Traffic flooding

### 6 NSX-T Data Center Edge Design

- Edge VM design
- Edge BareMetal design
- Edge cluster design

### 7 Logical Routing Design

- Logical router components
- Multi-tier routing
- IPv6 addressing and routing

- Multicompute workload domain design consideration
- High availability and router placement

### 8 NSX-T Data Center Network Services

- NAT, Proxy ARP, DHCP, and metadata proxy
- Load balancer
- VPN

### 9 NSX-T Data Center Security Design

- NSX-T Data Center distributed firewall
- NSX-T Data Center distributed firewall
- NSX-T Data Center gateway firewall
- Security policy methodology

### 10 NSX-T Data Center Multisite Design

- Multisite capabilities
- Deployment for Multisite Lite
- Multisite Lite failover procedure
- Multisite Lite DR requirements
- HCX
- Integration with Cloud Provider

### 11 NSX-T Data Center and Containers

- NSX-T Design with PKS and PAS introduction
- NSX-T Design with VCF and containers

## Contact

If you have questions or need help registering for this course, click [here](#).



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