



## TRAINING OFFERING

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<b>CODE:</b>	<b>LENGTH:</b>	<b>PRICE:</b>
VMW_NSXTD3	40 Hours (5 days)	£3,520.00

## Description

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 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.

## 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 alternative design choices for risk mitigation
- Understand the design and support for NSX-T Data Center infrastructure in a multi data center infrastructure

## Audience

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

## Prerequisites

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

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

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)
- Knowledge and working experience with VMware vSphere environments and KVM-based environments

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

## Programme

1 Course Introduction

- • Introductions and course logistics
- • Course objectives

## 2 Basic Design Concepts

- • Describe the principles of design
- • Describe the design process and frameworks
- • Explain VMware Validated Design 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 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

## 8 NSX-T Data Center Advanced Routing Design

- • Explain High Availability and Router Placement
- • L3 Multicast design considerations
- • Describe VRF Lite and EVPN

## 9 NSX-T Data Center Network Design

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

## 10 NSX-T Data Center Security Design

- • Explain the Distributed Firewall design concepts
- • Explain the Identity Firewall design concepts
- • Explain the Gateway Firewall design concepts
- • Describe the security policy methodology

## 11 NSX-T Data Center Federation Design

- • Explain the Federation functionality
- • Explain the design concepts for Federation components
- • Describe the design involved for Federation networking
- • Review Federation design considerations

## 12 NSX-T Data Center and Containers

- • Understand the integration between NSX-T Data Center and vSphere with VMware Tanzu

™

- • Describe how NSX-T Data Center provides networking, load balancing, and security in vSphere for VMware Tanzu
- • Describe VMware Tanzu  
™ Kubernetes Grid™ Service
- • Understand Tanzu Kubernetes Grid  
™ cluster networking and load balancing capabilities

## Session Dates

On request. Please [Contact Us](#)

## Additional Information

[This training is also available as onsite training. Please contact us to find out more.](#)