



## VMware NSX-T: Install, Configure, Manage (NSXTICM)

**ID** NSXTICM **Price** 3,440.— €(excl. tax) **Duration** 5 days

This Advanced course is delivered directly by VMware.

### Course Overview

This five-day course provides comprehensive training on how to administer a VMware NSX-T™ environment. This course covers key VMware NSX® features and functionality offered in the NSX-T 2.2 release operating across layer 2 through layer 7 of the OSI model.

Access to a software-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

### Product Alignment

- NSX-T 2.2

### Who should attend

Experienced system or network administrators

### Prerequisites

- Understanding of enterprise switching and routing
- Knowledge of TCP/IP services
- Experience with firewalls and firewall rule sets
- Understanding of concepts presented in the VMware Data Center Virtualization Fundamentals course
- Understanding of the concepts presented in the VMware Introduction to Network Virtualization with NSX course

### Course Objectives

By the end of the course, you should be able to meet the following objectives:

- Understand NSX-T key features and functionality
- Understand NSX-T architecture and component subsystems

- Identify the differences between NSX-T and the NSX-V and VMware NSX® Multi-Hypervisor™ platforms
- Deploy and configure overlay layer 2 networks
- Understand logical routing implementation and architecture enhancements
- Understand distributed firewall implementation and policy rules
- Gather relevant information from the NSX platform during troubleshooting scenarios

### Course Content

- NSX-T Introduction
- Overview, Architecture, and Components of NSX-T Data Center
- Deploying NSX-T Data Center
- User and Role Management
- Logical Switching Networking Services
- Logical Bridging Networking Services
- Logical Routing Networking Services
- Operational Services
- Security Services
- NSX-T Data Center Operations

### Detailed Course Outline

#### NSX-T Introduction

- Introductions and course logistics
- Review course objectives

#### Overview, Architecture, and Components of NSX-T Data Center

- Describe NSX-T Data Center™ platform features and advantages
- List the capabilities of NSX-T Data Center platform
- Explain the value proposition of NSX-T Data Center
- Describe NSX-T Data Center Architecture planes
- Describe NSX-T Data Center and Kubernetes integration features
- Describe NSX-T Data Center and Pivotal Cloud Foundry integration features
- Describe NSX-T Data Center and OpenShift integration features



- Describe NSX Cloud™ use cases
- Explain NSX Cloud features and capabilities
- Describe the NSX Cloud components and their roles and responsibilities

## Deploying NSX-T Data Center

- Define the NSX-T Data Center deployment preparation
- Identify the system requirements to deploy NSX-T Data Center
- Identify ports and protocols
- Identify and describe the NSX-T Data Center installation checklist
- Describe the OVF deployment of NSX-T Data Manager
- Explain how to power on the NSX-T Manager using a Compute Manager (VMware vCenter Server®)
- Describe the process to check the NSX-T Manager status
- Explain the methods to reboot the NSX-T Manager

## User and Role Management

- Describe role-based Access Control and VMware Identity Manager™
- Explain the integration of NSX-T with VMware Identity Manager
- Explain authentication policies
- Identify the four types of permissions
- Describe the workflows of logical switching (MP, CCP, DP)
- Describe the VMware Identity Manager built-in roles
- Explain VMware Identity Manager Domains and User Attributes

## Logical Switching Networking Services

- Explain the need for NSX-T Data Center Logical Switching feature
- Describe various logical switching terminology
- List the various types of logical switches available
- Explain N-VDS implementation in ESXi and KVM
- Explain the encapsulation protocol GENEVE implementation
- Explain the Switch Security feature of NSX-T Logical Switching

## Logical Bridging Networking Services

- Explain the function and purpose of logical bridging
- Describe the scenarios for logical bridging

## Logical Routing Networking Services

- Explain the function of NSX-T Logical Routing
- Describe NSX-T multitier routing architectures
- Explain north-south and east-west routing

- Differentiate between dynamic and static routing
- Describe the architecture of NSX-T two-tier routing
- Explain the benefits of NSX-T two-tier routing for single- and multi-tenancy
- Describe the form factors of NSX-T Edge nodes
- Explain the purpose of Equal Cost Multipath routing

## Operational Services

- Describe NSX-T Data Center services
- Describe Source and Destination NAT
- Describe NSX-T DNS and DHCP services
- List the HA Modes available in NSX-T
- Describe the load-balancing service of NSX-T
- Explain Metadata Proxies

## Security Services

- Describe NSX-T microsegmentation
- Explain microsegmentation use cases
- Explain microsegmentation design objectives
- Describe the architecture of NSX-T firewalls
- Explain the purpose and creation of firewall sections
- Explain the function of NSX-T SpoofGuard

## NSX-T Data Center Operations

- Describe the configuration, routine maintenance, and management of NSX-T
- Describe the procedure of applying NSX-T authentication certificates
- Explain the need and process to manage IP addresses
- Describe the methods for NSX-T logging
- Explain the types of backups available
- Explain the various native troubleshooting tools available for NSX-T Data Center

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