

# VMware NSX-T: Install, Configure, Manage

## 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.

## 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

## Target Audience

- 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 concepts presented in the [VMware Introduction to Network Virtualization with NSX](#) course

## Course Delivery Options

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

## Product Alignment

- NSX-T 2.2

## Course Modules

- 1 NSX-T Introduction
  - Introductions and course logistics
  - Review course objectives
- 2 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
- 3 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
- 4 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
- 5 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
- 5 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
- 6 Logical Bridging Networking Services
  - Explain the function and purpose of logical bridging
  - Describe the scenarios for logical bridging
- 7 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
- 8 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
- 9 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

## VMware NSX-T: Install, Configure, Manage

- Explain the function of NSX-T SpoofGuard

## 10 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

## Contact

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



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 [www.vmware.com](http://www.vmware.com)  
© 2018 VMware, Inc. All rights reserved. The product or workshop materials is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at <http://www.vmware.com/download/patents.html>. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM. VMWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO CUSTOMER. All materials provided in this workshop are copyrighted by VMware ("Workshop Materials"). VMware grants the customer of this workshop a license to use and make reasonable copies of any Workshop Materials strictly for the purpose of facilitating such company's internal understanding, utilization and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If you are located in the United States, the VMware contracting entity for the service will be VMware, Inc., and if outside of the United States, the VMware contracting entity will be VMware International Limited.