Course Overview
This five-day, fast-paced course provides comprehensive training on how to install, configure, and manage a VMware NSX-T™ Data Center environment. This course covers key NSX-T Data Center features and functionality offered in the NSX-T Data Center 2.4 release, including the overall infrastructure, logical segments, logical routers, networking and security services, micro-segmentation and firewalls, and so on.

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:

- Describe VMware Virtual Cloud Network and the NSX-T Data Center architecture
- Describe the NSX-T Data Center components and main functions
- Explain the NSX-T Data Center key features and benefits
- Deploy and configure NSX-T Data Center infrastructure
- Configure layer 2 logical segmenting and bridging
- Explain the tiered routing architecture and configure logical routers
- Configure advanced services such as VPN and load balancing
- Explain the NSX-T Data Center security model with micro-segmentation
- Configure distributed and edge firewall to protect east-west and north-south traffic
- Explain advanced security enforcement with partner service insertion
- Gather relevant information and perform basic troubleshooting

Target Audience
- Experienced system administrators or network administrators

Prerequisites
- Good understanding of TCP/IP services
- Working experience of enterprise switching and routing
- Good understanding of network security and working experience with firewalls
- Solid understanding of concepts presented in the following courses:
  - VMware Data Center Virtualization Fundamentals
  - VMware Introduction to Network Virtualization with NSX
  - VMware Network Virtualization Fundamentals

Course Delivery Options
- Classroom
- Live Online
- Onsite

Product Alignment
- NSX-T Data Center 2.4
Course Modules

1 **NSX-T Data Center Introduction**
   - Introductions and course logistics
   - Overview of modules and course objectives

2 **VMware Virtual Cloud Network and NSX-T Data Center Overview**
   - Introduce VMware’s Virtual Cloud Network vision
   - Describe VMware NSX-T Data Center portfolio
   - Describe NSX-T Data Center value proposition and use cases
   - Introduce Software-Defined Networking and VMware vSphere®
   - Describe NSX-T Data Center architecture and components
   - Explain the management, control, data, and consumption planes and functions
   - Introduce Converged Appliance

3 **NSX-T Data Center Infrastructure Deployment**
   - Deploy the Converged Appliance cluster
   - Navigate through the Policy Manager user interface
   - Prepare for the NSX-T Data Center infrastructure deployment
   - Configure N-VDS, Transport Zones, IP pools, and uplink profiles
   - Prepare ESXi and KVM hosts for NSX-T Data Center
   - Verify host deployment status and connectivity

4 **NSX-T Data Center Logical Segment**
   - Introduce logical segment key concepts and terminology
   - Explain N-VDS function and characteristics
   - Configure logical segments using the Policy Manager GUI
   - Attach VMware ESXi™ and KVM hosts to logical segments
   - Verify layer 2 connectivity
   - Describe various types of segment profiles
   - Create segment profiles and apply them to logical segments and ports
   - Explain MAC, ARP, and TEP tables used in layer 2 logical segmentation
   - Demonstrate Layer 2 unicast packet flow
   - Handle layer 2 BUM traffic

5 **NSX-T Data Center Logical Bridging**
   - Explain the function and purpose of logical bridging
   - Describe the components of logical bridging
   - Create logical bridges and bridge profiles

6 **NSX-T Data Center Logical Routing**
   - Introduce the tiered routing architecture
   - Explain the functions of Tier-0 and Tier-1 routers
   - Describe the logical router components: Service Router and Distributed Router
   - Discuss VMware NSX® Edge™ node deployment and sizing options
   - Deploy NSX Edge nodes and Edge Cluster
   - Configure Tier-0 and Tier-1 logical routers
   - Discuss routing topologies and configure services on routers
   - Configure static routing, BGP, and ECMP
   - Describe NSX Edge high availability (HA)
   - Explain HA failure detection and failback modes

7 **NSX-T Data Center Advanced Services**
   - Describe NSX-T Data Center services
   - Explain the Network Address Translation (NAT) service
   - Explain the DNS and DHCP services
   - Explain the load-balancing features and rules
   - Describe the load-balancing benefits
   - Configure L4-7 load balancing
   - Introduce the IPSec VPN and L2 VPN concepts
   - Configure IPSec VPN and L2 VPN using Policy Manager

8 **NSX-T Data Center Security**
   - Introduce the NSX-T Data Center security approach and model
   - Explain the use cases and benefits of micro-segmentation
   - Describe the distributed firewall architecture, components, and functions
   - Create distributed firewall sections and rules
   - Describe the edge firewall architecture and functions
   - Configure edge firewall sections and rules
   - Introduce bridge firewall
   - Describe the service insertion feature
   - Explain the integration of partner security solutions with NSX-T Data Center
   - Configure Endpoint Protection policies
   - Configure Network Introspection policies
9 User and Role Management
- Describe role-based Access Control and VMware Identity Manager™
- Explain the integration of NSX-T Data Center with VMware Identity Manager
- Explain authentication policies
- Identify the various types of permissions
- Describe the VMware Identity Manager built-in roles
- Explain VMware Identity Manager domains and user attributes

10 NSX-T Data Center Basic Troubleshooting
- Troubleshooting methodology for troubleshooting L2, L3, and service issues
- Introduce various troubleshooting tools
- Collect local and remote log files
- Monitor the NSX-T Data Center environment

Contact
If you have questions or need help registering for this course, click here.