

VMWARE NSX-T DATA CENTER: INSTALL, CONFIGURE, MANAGE [V3.0]

Course Level:

Professional

Course Duration:

5 Days

Course Overview:

This five-day VMware NSX-T Data Center: Install, Configure, Manage [V3.0] training course from CT offers comprehensive training to candidates on how to install, configure, and manage a VMware NSX-T Data Center environment. Candidates taking up this course also learn the key features of NSX-T Data Center and its functionalities offered in the NSX-T Data Center 3.0 release, which includes the logical switching, overall infrastructure, logical routing, micro-segmentation and firewalls networking and security services, and more.

By enrolling in our VMware NSX-T Data Center: Install, Configure, Manage [V3.0] training program, learners will acquire the necessary skills and knowledge required to clear the final exam successfully. Candidates attending our training get access to the authored curriculum and can learn through engaging and interactive sessions delivered by VMware certified in-house trainers.



Product Alignment

- NSX-T Data Center 3.0

Prerequisites

Good understanding of TCP/IP services and network security and working experience with firewalls













- Working experience of enterprise switching and routing

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

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 switching and bridging
-  Explain the tiered routing architecture and configure gateways
-  Configure advanced services such as VPN and load balancing
-  Describe the NSX-T Data Center security model with micro-segmentation
-  Configure Distributed Firewall and Gateway Firewall to protect east-west and north-south traffic
-  Explain advanced security enforcement with URL analysis, IDS, and partner service insertion
-  Integrate VMware Identity Manager or LDAP with NSX-T Data Center and configure role-based access control
-  Describe NSX-T Data Center Federation use-cases and architecture for switching, routing, and security.

Want to make a career in virtualization? Move up the corporate ladder with a list of VMware cloud certifications from CloudThat. Grab up to **30% discount** on any of our 45+ VMware certification courses.

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Course Outline

Module 1: Course Introduction

Topics

- ... Introductions and course logistics
- Course objectives

Module 2: VMware Virtual Cloud Network and NSX-T Data Center

Topics

- Introduce VMware's Virtual Cloud Network vision
- Discuss NSX-T Data Center solutions, use cases, and benefits
- Explain NSX-T Data Center architecture and components
- Describe VMware NSX product portfolio and features
- Explain the management, control, data, and consumption planes and function

Course Outline

Module 3: Deployment Preparing the NSX-T Data Center Infrastructure

Topics

- Describe NSX Management Cluster
- Deploy VMware NSX Manager nodes on VMware ESXi and KVM hypervisors
- Navigate through the NSX Manager UI
- Explain data-plane components such as N-VDS, transport nodes, transport zones, profiles, and more
- Perform transport node preparation and establish the data center infrastructure
- Verify transport node status and connectivity

Module 4: NSX-T Data Center Logical Switching

Topics

- Introduce key components and terminology in logical switching
- Describe the function and types of L2 segments
- Explain tunneling and the GENEVE encapsulation
- Configure logical segments and attach hosts using NSX Manager UI
- Describe the function and types of segment profiles
- Create segment profiles and apply them to segments and ports
- Explain the function of MAC, ARP, and TEP tables used in packet forwarding
- Demonstrate L2 unicast packet flow
- Explain ARP suppression and BUM traffic handling

Module 5: NSX-T Data Center Logical Routing

Topics

- Describe the logical routing function and use cases
- Introduce the two-tier routing architecture, topologies, and components
- Explain the Tier-0 and Tier-1 Gateway functions
- Describe the logical router components: Service Router and Distributed Router
- Discuss the architecture and function of VMware NSX Edge nodes
- Discuss deployment options of NSX Edge nodes
- Configure NSX Edge nodes and create NSX Edge clusters
- Configure Tier-0 and Tier-1 Gateways
- Examine the single-tier and multitier packet flow
- Configure static routing and dynamic routing
- Enable ECMP on Tier-0 Gateway
- Describe NSX Edge HA, failure detection, and failback modes

Module 6: NSX-T Data Center Bridging

Topics

- Describe the function of logical bridging
- Discuss the logical bridging use cases
- Compare routing and bridging solutions
- Explain the components of logical bridging
- Create bridge clusters and bridge profiles

Course Outline

Module 7: NSX-T Data Center Security

Topics

- Introduce the NSX-T Data Center security approach and model
- Describe the micro-segmentation benefits and use cases
- Describe the Distributed Firewall architecture, components, and function
- Configure Distributed Firewall sections and rules
- Describe the Gateway Firewall architecture, components, and function
- Configure Gateway Firewall sections and rules
- Describe URL analysis and distributed intrusion system importance and use-cases.
- Describe the service insertion functionality for east-west and north-south security
- Discuss the integration and benefits of partner security solutions with NSX-T Data Center

Module 8: Building Protection Groups

Topics

- Describe NSX-T Data Center services
- Explain and configure Network Address Translation (NAT) and NAT 64
- Explain and configure DNS and DHCP services
- Describe the load-balancing function, topologies, components, and use cases
- Configure L4-L7 load balancing
- Discuss the IPSec VPN and L2 VPN function and use cases
- Configure IPSec VPN and L2 VPN using NSX Manager UI

Module 9: NSX-T Data Center Monitoring

Topics

- Explain the importance and functionality of VMware NSX® Intelligence
- Navigate through the NSX Topology UI and identify the various key elements in the UI
- Discuss the importance and use-cases of alarms and events

Module 10: NSX-T Data Center User and Role Management

Topics

- Describe the function and benefits of VMware Identity Manager in NSX-T Data Center
- Integrate VMware Identity Manager with NSX-T Data Center
- Integrate LDAP with NSX-T Data Center
- Identify the various types of users, authentication policies, and permissions
- Use role-based access control to restrict user access
- Explain the built-in roles in VMware Identity Manager and role assignment to users

Module 11: NSX-T Data Center Federation

Topics

- Introduce the NSX-T Data Center Federation key concepts, terminology, and use-cases.
- Explain the onboarding process of NSX-T Data Center Federation
- Describe the NSX-T Data Center Federation switching and routing functions.

Who Should Enroll for this Course?

Experienced system administrators or network administrators

About CloudThat

CloudThat is the first company in India to offer Cloud Training & Consulting services for mid-market & enterprise clients from across the globe. Since our inception in 2012, we have trained over 500K+ IT professionals from fortune 500 companies on technologies such cloud, Artificial Intelligence, Machine Learning, IoT, OpenStack, OpenShift, DevOps, MongoDB, Big Data and more.

Through sheer dedication and excellence in the field of cloud training, CloudThat has recently being recognized as **VMware Authorized Training Reseller**. In addition, CloudThat is a proud Microsoft Gold Partner, AWS Advanced Consulting Partner, Google Cloud Platform Partner, and Databricks Partner. Recently, we have won the Microsoft Asia Superstar Campaign for India-2021 for being a global leader in providing cloud training and consultancy services with exemplary track record.

Our Success Track

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of Experience

100+
Corporates served

28+
countries catered

500K+
Professionals trained

200+
Projects delivered

350+
Cloud certifications

To know more about our VMware certification training, email at sales@cloudthat.com or call us at **+918880002200**.