Updated 10/10/2024

Sign up

VMware NSX-T Training: Installation, Configuration and Administration

5 days (35 hours)

Presentation

VMware NSX-T is an agile software-defined networking (SDN) solution. NSX-T helps companies solve complex networking problems in the data center environment.

NSX-T Data Center enables companies to act quickly to deploy and add network designs, as well as automate networks in code.

The main advantage of NSX-T is the integration of different visualization platforms such as OpenStack or KVM. It also enables better containerization management with Docker or Kubernetes technologies.

Our VMware NSX-T training course will first introduce you to the key components of NSX-T data center and its architecture. You'll learn how to deploy and implement NSX-T and configure Service Composer policies. This course will also teach you how to configure the firewall and logical touring.

On completion of this course, you'll be able to install and administer a virtual network infrastructure using the VMware NX-T Data Center solution.

Objectives

- Installing and configuring NSX-T datacenter
- Master the key concepts of NSX-T datacenter
- Understanding NSX-T architecture
- Automate security policy with Service Composer
- Configure an identity firewall
- Explain and apply advanced safety rules

Target audience

- Directors
- Experienced systems or network architects

Prerequisites

- A good understanding of TCP/IP services and network security,
- Experience in firewalls, switching and routing
- Master the "VMware Data Center Virtualization Fundamentals" concepts

Note: This course is designed to provide the knowledge and skills required for the official course on implementing and managing a VMware network infrastructure ("VMware NSX-T: Installation, Configuration and Administration" or equivalent in the event of changes decided by the publisher).

This course is part of the certification program offered by the publisher, but taking the exam is not included in this consultation. Ambient IT is not the owner of the technology, VMware NSX® is a registered trademark of VMware Inc.

VMware NSX-T Training Program: Installation, Configuration and Administration

Introduction

- Introducing the VMware concept
- Benefits of NSX-T Data Center
- Application cases
- NSX-T installation
- Configuring and managing NSX-T network services
- NSX-T integration with other software
- The fundamentals

NSX-T architecture

- Making networks more agile and flexible
- Data center ecosystem
- Integration of NSX-T into the VMware SDDC ecosystem
- Creating virtual networks
- Automate the creation of two-level virtual networks

NSX-T essential components

- Describing management clusters
- NSX-T manager

- NSX-T Edge Transport Nodes
- NSX-T Host Transport Nodes
- Node deployment on VMware ESXi and KVM

Logical routing NSX-T Data Center

- Logical routing terminology
- Introduction to two-level routing architecture
- Topology and routing components
  - Service Router
  - Distributed Router
- Gateway operation
- Static and dynamic routing configuration
- Describe the function and types of L2 segments
- Tunneling and encapsulation GENEVA
- Configuring logic segments
- Attach hosts using the NSX Manager user interface
- Create segment profiles and apply them to segments and ports
- Explain the function of the MAC, ARP and TEP tables used in packet transfer
- L2 unicast packet flow demonstration
- Delete ARP
- BUM traffic management

Data center bridging

- Logic bypass function overview
- Use cases
- Basic components of logic bridging
- Comparison of routing and bridging solutions
- Creating clusters and bridge profiles

NSX-T security

- Overview of how data center security works
- Different safety models
- Advantages and applications of micro-segmentation
- Distributed firewall architecture, components and functions
- Configuring firewall rules sections
- Gateway Firewall architecture, components and functions
- Configuring Gateway Firewall sections and rules
- URL and distributed intrusion system analysis

NSX-T Data Center Services

- Network address configuration Network Address Translation NAT and NAT 64
- Configuring DNS and DHCP services
- Load balancing functions, topologies, components, use cases
- L4-L7 load balancing configuration
- IPSec VPN and L2 VPN use cases

- Configuring IPSec VPN and L2 VPN in the NSX Manager user interface
- Monitoring the NSX-T datacenter
- Navigating the NSX Topology user interface
- Identify the various key elements of the user interface
- Alarm and event use cases

User management in NSX-T Data Center

- Manage users and roles
  - Different types of user
  - Authentication policies
  - Permissions
- Functions and benefits of VMware Identity Manager in NSX-T Data Center
- Integrating VMware Identity Manager with NSX-T Data Center
- LDAP integration in NSX-T Data Center
- Limit user access with role-based access control
- Integrated roles in VMware Identity Manager
- Assigning roles to users

NSX-T Federation

- Overview of NSX-T Data Center Federation key concepts and terminology
- Use cases
- Integration process
- NSX-T Data Center Federation switching and routing functions
- Security concepts and routing functions

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.