VMWA-34 - VMWARE NSX: INSTALL, CONFIGURE, MANAGE [V4.0]

Categoria: **VMware**

INFORMAZIONI SUL CORSO

Durata:	Categoria:	Qualifica Istruttore:	Dedicato a:	Produttore:
5 Giorni	VMware	VMware Certified Instructor	Professionista IT	VMware

OBIETTIVI

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

-Describe the architecture and main components of NSX
-Explain the features and benefits of NSX
-Deploy the NSX Management cluster and VMware NSX® Edge™ nodes
-Prepare VMware ESXi™ hosts to participate in NSX networking
-Create and configure segments for layer 2 forwarding
-Create and configure Tier-0 and Tier-1 gateways for logical routing
-Use distributed and gateway firewall policies to filter east-west and north-south traffic in NSX
-Configure Advanced Threat Prevention features
-Configure network services on NSX Edge nodes
-Use VMware Identity Manager™ and LDAP to manage users and access
-Explain the use cases, importance, and architecture of Federation

PREREQUISITI

-Good understanding of TCP/IP services and protocols
-Knowledge and working experience of computer networking, including switching and routing technologies (L2 through L3) and L2 through L7 firewall
-Knowledge and working experience with VMware vSphere® environments
-Knowledge and working experience with Kubernetes or VMware vSphere® with VMware Tanzu® environments

CONTENUTI

1 Course Introduction

-Introductions and course logistics
-Course objectives

2 VMware Virtual Cloud Network and VMware NSX

-Introduce the VMware Virtual Cloud Network vision
-Describe the NSX product portfolio
-Discuss NSX features, use cases, and benefits

-Explain NSX architecture and components
-Explain the management, control, data, and consumption planes and their functions.

3 Preparing the NSX Infrastructure

-Deploy VMware NSX® ManagerTM nodes on ESXi hypervisors
-Navigate through the NSX UI
-Explain data plane components such as N-VDS/VDS, transport nodes, transport zones, profiles, and more
-Perform transport node preparation and configure the data plane infrastructure
-Verify transport node status and connectivity
-Explain DPU-based acceleration in NSX
-Install NSX using DPUs

4 NSX Logical Switching

-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 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

5 NSX Logical Routing

-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 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 single-tier and multitier packet flows
-Configure static routing and dynamic routing, including BGP and OSPF
-Enable ECMP on a Tier-0 gateway
-Describe NSX Edge HA, failure detection, and failback modes
-Configure VRF Lite

6 NSX Bridging

-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

7 NSX Firewalls

-Describe NSX segmentation
-Identify the steps to enforce Zero-Trust with NSX segmentation
-Describe the Distributed Firewall architecture, components, and function

-Configure Distributed Firewall sections and rules
-Configure the Distributed Firewall on VDS
-Describe the Gateway Firewall architecture, components, and function
-Configure Gateway Firewall sections and rules

8 NSX Advanced Threat Prevention

-Explain NSX IDS/IPS and its use cases
-Configure NSX IDS/IPS
-Deploy NSX Application Platform
-Identify the components and architecture of NSX Malware Prevention
-Configure NSX Malware Prevention for east-west and north-south traffic
-Describe the use cases and architecture of VMware NSX® Intelligence™
-Identify the components and architecture of VMware NSX® Network Detection and Response™
-Use NSX Network Detection and Response to analyze network traffic events.

9 NSX Services

-Explain and configure Network Address Translation (NAT)
-Explain and configure DNS and DHCP services
-Describe VMware NSX® Advanced Load Balancer™ architecture, components, topologies, and use cases.
-Configure NSX Advanced Load Balancer
-Discuss the IPSec VPN and L2 VPN function and use cases
-Configure IPSec VPN and L2 VPN using the NSX UI

10 NSX User and Role Management

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

11 NSX Federation

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

INFO

Esame: 2V0-41.24 - VMware NSX 4.x Professional --- VMware Certified Professional - Network Virtualization (VCP-NV)
Materiale didattico: Materiale didattico ufficiale VMware in formato digitale
Costo materiale didattico: incluso nel prezzo del corso a Calendario
Natura del corso: Operativo (previsti lab su PC)