

VMware NSX Advanced Load Balancer: ICM plus Troubleshooting and Operations Fast Track



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This five-day, extended hour course introduces you to advanced VMware NSX® Advanced Load Balancer™ (Avi) solutions management skills. In this course, you will learn to install, configure, and manage a VMware NSX® Advanced Load Balancer™ solution. Also, you will learn advanced knowledge, skills, and tools to achieve competence in operating and troubleshooting the NSX Advanced Load Balancer solutions.

This course covers key NSX Advanced Load Balancer features, functionality and troubleshooting tools offered in the NSX Advanced Load Balancer 20.x release. Features include the overall infrastructure, virtual services and application components, global server load balancing, various cloud connectors, application troubleshooting, and solution monitoring.

The course includes troubleshooting hands-on labs, in which you will be presented with various types of technical problems. You will identify, analyze, and solve the technical problems through a systematic process.

Kursinhalt

- Introduction to NSX Advanced Load Balancer
- Virtual Services Configuration Concepts
- Profiles and Policies
- Pools Configuration Concepts
- Modifying Application Behavior
- NSX Advanced Load Balancer Infrastructure Architecture
- Introduction to Cloud Connector
- Install, Configure and Manage NSX Advanced Load Balancer in No-Access Cloud
- Install, Configure and Manage NSX Advanced Load Balancer in VMware Environment: Cloud Configuration
- AWS Cloud Configuration
- DNS Foundations
- Global Server Load Balancing
- Events and Alerts
- Introduction to NSX Advanced Load Balancer Rest API
- Introduction to NSX Advanced Load Balancer Troubleshooting
- Infrastructure Troubleshooting
- Troubleshooting NSX Advanced Load Balancer Service Engines and Advanced Troubleshooting
- Monitoring NSX Advanced Load Balancer

E-Book Sie erhalten englischsprachige Unterlagen von VMware als E-Book.

Zielgruppe

- Experienced system administrators or network administrators
- Network professionals who have experience working with NSX Advanced Load Balancer and are responsible for troubleshooting and operating Application Delivery Controllers solutions

Kursziel

Dieser Kurs wird innerhalb der Zertifizierung VMware Certified Professional - Network Virtualization 2023 als erforderliches Training anerkannt.

Dieser Kurs im Web



Alle tagesaktuellen Informationen und Möglichkeiten zur Bestellung finden Sie unter dem folgenden Link: www.expertech.ch/go/VLIT

Vormerkung

Sie können auf unserer Website einen Platz kostenlos und unverbindlich für 7 Tage reservieren. Dies geht auch telefonisch unter 06074 4868-0.

Garantierte Kurstermine

Für Ihre Planungssicherheit bieten wir stets eine große Auswahl garantierter Kurstermine an.

Ihr Kurs maßgeschneidert

Diesen Kurs können wir für Ihr Projekt exakt an Ihre Anforderungen anpassen.

Training	Preise zzgl. MwSt.
Termine in der Schweiz	5 Tage
Online Training	5 Tage CHF 5.715,-
Termine auf Anfrage	

Stand 27.04.2024



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2 Introduction to NSX Advanced Load Balancer

- Introduce NSX Advanced Load Balancer
- Discuss NSX Advanced Load Balancer use cases and benefits
- Explain NSX Advanced Load Balancer architecture and components
- Explain the management, control, data, and consumption planes and their respective functions

3 Virtual Services Configuration Concepts

- Explain Virtual Service components
- Explain Virtual Service types
- Explain and configure basic Virtual Service components such as Application Profiles, Network Profiles

4 Profiles and Policies

- Explain Advanced Virtual Service creation
- Explain and deep dive on Application Profiles and Types such as L4, DNS, Syslog, and HTTP
- Explain and configure advanced application HTTP Profile options
- Recognize Network Profiles and Types
- Explain and configure SSL Profiles and Certificates
- Explain and Configure HTTP and DNS policies

5 Pools Configuration Concepts

- Explain on Pools configuration options
- Describe available Load Balancing algorithms
- Explain multiple Health Monitor types
- Explain multiple Persistence Profiles
- Explain and configure Pool Groups

6 Modifying Application Behavior

- Design and apply application solutions leveraging application profiles
- Design and apply application solutions leveraging Network and HTTP Policies and DataScripts
- Explain DataScript fundamentals
- Explain and leverage NSX Advanced Load Balancer analytics to understand application behavior
- Describe and configure Client SSL Certificate Validation
- Describe and configure Virtual Service DDoS, Rate Limiting, and Throttling capabilities
- Modify Network Profiles properties such as TCP connection properties
- Design and apply application solutions leveraging Persistence Profiles

7 NSX Advanced Load Balancer Infrastructure Architecture

- Deep dive on the management, control, data, and consumption planes and functions
- Describe Control Plane Clustering and High Availability
- Describe Controller Process Sharing
- Describe Controller Sizing
- Describe Service Engine CPU and NIC Architecture
- Explain Tenants

- Recognize the configure properties of Service Engine Groups
- Explain Service Engine Group High Availability Modes
- Describe and configure Active/Standby High Availability Mode
- Describe and configure Elastic HA High Availability Mode (Active/Active, N+M)
- Explain Service Engine Failure Detection and Self-Healing
- Describe Service Engine as a Router
- Identify Virtual Service scale out options, such as Layer 2 (Native), Layer 3 (BGP), and DNS-based

8 Introduction to Cloud Connector

- Introduce VMware vCloud Connector®
- Review vCloud Connector integration modes
- Introduce vCloud Connector types

9 Install, Configure and Manage NSX Advanced Load Balancer in No-Access Cloud

- Explain No Access Cloud concepts
- Configure No Access Cloud integration
- Explain and Configure Linux Server Cloud
- Describe the Advanced Configuration options available in Bare-Metal (Linux Server Cloud)

10 Install, Configure and Manage NSX Advanced Load Balancer in VMware Environment: Cloud Configuration

- Introduce VMware integration options
- Explain and configure VMware No Access Cloud Connector
- Explain and configure VMware Write Access Cloud Connector
- Describe VMware Write with NSX Access Cloud Connector
- Describe VMware NSX integration

11 AWS Cloud Configuration

- Describe NSX Advanced Load Balancer Public Cloud integrations
- Explain and demonstrate AWS Public Cloud Integration

12 DNS Foundations

- Review, discuss, and explain DNS fundamentals
- Describe NSX Advanced Load Balancer DNS and IPAM providers

13 Global Server Load Balancing

- Introduce Global Server Load Balancing Concepts and Benefits
- Explain and configure NSX Advanced Load Balancer infrastructure
- Explain and configure DNS Virtual Service components
- Explain and configure GSLB Service Engine Group
- Describe and configure GSLB Sites
- Explain and configure basic GSLB Services to include pools and health monitors
- Describe GSLB Service Load Balancing algorithms
- Explain and configure Data and Control Plane-based Health Monitors
- Describe GSLB Health Monitor Proxy

14 Events and Alerts

- Describe NSX Advanced Load Balancer Events
- Describe and configure NSX Advanced Load Balancer Alerts
- Describe NSX Advanced Load Balancer monitoring capabilities, leveraging SNMP, Syslog, and Email

15 Introduction to NSX Advanced Load Balancer Rest API

- Introduce NSX Advanced Load Balancer REST API interface
- Describe REST API Object Schema
- Explain and interact with REST API interface, leveraging browser and command line utility
- Explain Swagger-based API documentation

16 Introduction to NSX Advanced Load Balancer Troubleshooting

- Explain NSX Advanced Load Balancer troubleshooting concepts
- Describe and leverage Virtual Service Traffic Logs
- Describe and leverage Virtual Service Security Insights
- Understand and utilize Health Score concepts
- Explain and leverage application metrics and analytics
- Explain and leverage packet capture and CLI utilities for application troubleshooting
- Leverage UI, CLI, and useful log files to perform control plane troubleshooting

17 Infrastructure Troubleshooting

- Describe and perform general vCloud Connector troubleshooting
- Describe and analyze vCloud Connector state
- Leverage case studies to troubleshoot vCloud Connector
- Describe and troubleshoot NSX Cloud Connector integration
- Leverage case studies to troubleshoot NSX Cloud Connector
- Describe and troubleshoot Linux Server Cloud Connector integration
- Describe and troubleshoot OpenStack Cloud Connector integration
- Leverage case studies to troubleshoot OpenStack Cloud Connector
- Describe and troubleshoot AWS and Azure Cloud Connector integrations

18 Troubleshooting NSX Advanced Load Balancer Service Engines and Advanced Troubleshooting

- Explain general Service Engine infrastructure
- Explain and leverage analytics, health score, and metrics for Service Engine troubleshooting
- Explain and leverage Events and Alerts for Service Engine troubleshooting
- Leverage CLI for accessing Service Engine
- Analyze Service Engine logs offline with Tech Support utility and collecting core dumps
- Leverage CLI and useful log files for Service Engine Data Plane troubleshooting
- Leverage CLI to capture packets for advanced datapath analysis

19 Monitoring NSX Advanced Load Balancer

- Explain and configure SNMP-based monitoring
- Explain and configure REST API-based monitoring
- Describe and leverage 3rd-party integration with monitoring tools like Splunk
- Leverage 3rd-party REST API monitoring extensions like Prometheus
- Describe and leverage VMware integrations like VMware vRealize® Network Insight™ for monitoring

