![cloudthat | vmware logos]

VMWARE NSX ADVANCED LOAD BALANCER: INSTALL, CONFIGURE, MANAGE

Course Level:

Professional

Course Duration:

5 Days

Course Overview:

This five-day VMware NSX Advanced Load Balancer: Install, Configure, Manage training course from CloudThat teaches candidates how to install, manage, and configure a VMware NSX Advanced Load Balancer (Avi Networks) solution. Candidates taking up this course can gain a deeper understanding of key NSX Advanced Load Balancer (Avi Networks) features and functionality that are offered in the NSX Advanced Load Balancer 18.2 release.

By enrolling in our VMware NSX Advanced Load Balancer: Install, Configure, Manage training program, candidates acquire the necessary knowledge and skills 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 Advanced Load Balancer 18.2

Objectives

- Describe NSX Advanced Load Balancer architecture

- Describe the NSX Advanced Load Balancer components and main functions

- Explain the NSX Advanced Load Balancer key features and benefits

- Deploy and configure NSX Advanced Load Balancer infrastructure within Private or Public Clouds leveraging Write and No Access Cloud Connectors

- Explain, deploy, and configure Service Engines

- Explain and configure Local Load Balancing constructors such as Virtual Services, Pools, Health Monitors, and related components

- Understand and modify application behavior leveraging Profiles, Policies, and DataScripts

- Configure advanced services such as Global Server Load Balancing

- Describe and leverage NSX Advanced Load Balancer REST API interfaces and related automation capabilities

- Describe and configure NSX Advanced Load Balancer application and infrastructure monitoring

- Gather relevant information and perform basic troubleshooting of applications leveraging built-in NSX Advanced Load Balancer tooling

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.

Enroll Today!

Course Outline

Module 1: Course Introduction

Topics — Introductions and course logistics
Course objectives

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Module 2: Introduction to NSX Advanced Load Balancer

Topics

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

Course Outline

Module 3: Virtual Services Configuration Concepts

Topics

Explain Virtual Service components

Explain Virtual Service types

Explain and configure basic Virtual Service components such as Application Profiles, Network Profiles, Pools, and Health Monitors

Module 4: Profiles and Policies

Topics

Explain and deep dive on 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

Deep dive on Network Profiles and Types

Explain and configure SSL Profiles and Certificates

Explain and Configure HTTP and DNS policies

Module 5: Pools Configuration Concepts

Topics

Explain and deep dive on Pools configuration options

Describe available Load Balancing algorithms

Explain multiple Health Monitor types

Explain multiple Persistence Profiles

Explain and configure Pool Groups

Module 6: Modifying Application Behavior

Topics

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

Course Outline

Module 7: NSX Advanced Load Balancer Infrastructure Architecture

Topics

- Deep dive on the management, control, data, and consumption planes and functions
- Describe Control Plane Clustering and High Availability
- Describe Controller Process Sharding
- Describe Controller Sizing
- Describe Service Engine CPU and NIC Architecture
- Explain Tenants
- Deep dive and 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
- Deep dive on Virtual Service scale out options, such as Layer 2 (Native), Layer 3 (BGP), and DNS-based
- Explain Infrastructure Upgrade process

Module 8: I Introduction to Cloud Connectors

Topics

- Introduce Cloud Connectors
- Review Cloud Connector integration modes
- Introduce Cloud Connector types

Module 9: Install, Configure, and Manage NSX ALB in No Access Clouds

Topics

- 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)

Module 10: Install, Configure, and Manage NSX ALB in VMware environments

Topics

- 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-V Access Cloud Connector
- Describe VMware NSX-T integration

Module 11: Install, Configure, and Manage NSX ALB in Public Clouds (AWS)

Topics

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

Module 12: DNS Foundations

Topics

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

Course Outline

Module 13: Global Server Load Balancing

Topics

- 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

Module 14: Troubleshooting

Topics

- Introduce Infrastructure and Application Troubleshooting Concepts
- Describe Control Plane and Data Plane-based Troubleshooting
- Explain Application Analytics and Logs
- Describe client logs analysis
- Explain Headers troubleshooting and Packet Capture mechanism
- Leverage CLI for detailed data plane troubleshooting
- Explain Service Engine Logs
- Explain Health Monitors troubleshooting
- Explain BGP session troubleshooting
- Describe Control Plane Troubleshooting, Clustering, and Cloud Connector issues

Module 15: Monitoring NSX Advanced Load Balancer Solution

Topics

- 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

Module 16: Introduction to NSX ALB Programmability and Automation

Topics

- 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
- Review 3rd-party automation integrations

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

10+ Years 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.**