

VMware NSX Advanced Load Balancer: Global Server Load Balancing Design and Deploy

Course Overview

This 3-day course prepares you to lead VMware NSX Advanced Load Balancer (Avi Networks) Global Server Load Balancing design and deployment projects by providing an understanding of general design processes, frameworks and configurations. You look at the design and deployment considerations for Global Server Load Balancing as part of an overall software-defined data center design. This course covers key NSX Advanced Load Balancer (Avi Networks) Global Server Load Balancing features and functionalities offered in the NSX Advanced Load Balancer 18.2 release. Access to a software-defined data center environment is provided through hands-on labs to reinforce the skills and concepts presented in the course.

Course Objectives

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

- Describe the NSX Advanced Load Balancer components and main functions
- Describe NSX Advanced Load Balancer Global Server Load Balancing architecture
- Explain NSX Advanced Load Balancer key features and benefits
- Understand and apply a Global Server Load Balancing design framework
- Deploy and configure NSX Advanced Load Balancer Global Server Load Balancing infrastructure
- Explain and Configure Global Server Load Balancing Application components such as Global Server Load Balancing Service, Global Server Load Balancing Pools and Health Monitors with related components
- Gather relevant information and perform basic troubleshooting of Global Server Load Balancing applications leveraging built-in NSX Advanced Load Balancer tooling
- Describe and Configure NSX Advanced Load Balancer application and infrastructure monitoring

Target Audience

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

Course Modules

1 Course Introduction

- Introductions and course logistics
- Course objectives

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 functions

3 Virtual Services Configuration Concepts

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

4 DNS Foundations

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

5 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

6 Global Server Load Balancing Advanced Topics

- Explain and configure advanced GSLB service properties such as different type of pool members, Host Header and TLS SNI extensions handling within GSLB Health Monitors
- Describe EDNS Client Subnet
- Describe Geo-aware Global Server Load Balancing
- Design and configure Geo-aware Global Server Load Balancing
- Describe and leverage DNS Policies to customize client experience
- Explain and configure Topology-aware Global Server Load Balancing
- Explain and configure GSLB 3rd party sites
- Describe GSLB Health Monitor sharding
- Describe GSLB Service Engine sizing implications

7 Troubleshooting NSX Advanced Load Balancer GSLB Solution

- Introduce Infrastructure and Application troubleshooting Concepts
- Describe Control Plane and Data Plane-based troubleshooting
- Describe GSLB Infrastructure troubleshooting
- Describe GSLB Services troubleshooting
- Explain Health Monitors troubleshooting
- Describe Geo-aware and Topology-based GSLB Services troubleshooting
- Explain Application Analytics and Logs
- Describe Client Logs analysis
- Leverage CLI for advanced data plane troubleshooting

8 Monitoring NSX Advanced Load Balancer Solution

- 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