VMWare[®] LEARNING

VMware NSX Advanced Load Balancer: Troubleshooting and Operations

Course Overview

This 3-day, hands-on training course provides you with the advanced knowledge, skills, and tools to achieve competence in operating and troubleshooting the VMware NSX[®] Advanced Load Balancer™ (Avi) solutions. In this course, you are introduced to several operational, management, and troubleshooting tools. You will be presented with various types of technical problems, which you will identify, analyze, and solve through a systematic process.

Course Objectives

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

- Become familiar with NSX Advanced Load Balancer (Avi) troubleshooting tools and steps to solve the problems.
- Establish and apply a structured troubleshooting approach and methodology
- Understand built-in mechanisms available for NSX Advanced Load Balancer (Avi) monitoring
- Identify, analyze, and troubleshoot problems related to the NSX Advanced Load Balancer infrastructure, including control and data plane components
- Identify, analyze, and troubleshoot problems related to application components such as Virtual Services, Pools, and related components

Target Audience

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

Prerequisites

This class requires completion of the following courses:

• VMware NSX Advanced Load Balancer: Install, Configure, Manage

Course Delivery Options

- Classroom
- Live Online
- Private Training

Product Alignment

• NSX Advanced Load Balancer 20.X



Course Modules

Course Introduction 1

- 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 **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

4 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

5 Infrastructure Troubleshooting

- Describe and perform general VMware Cloud Connector troubleshooting
- Describe and analyze VMware Cloud Connector state
- Leverage case studies to troubleshoot VMware **Cloud Connector**

- Describe and troubleshoot NSX-T Cloud Connector integration
- Leverage case studies to troubleshoot NSX-T 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
- 6 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

Monitoring NSX Advanced Load Balancer 7

- 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

Contact

If you have questions or need help registering for this course, click here.

mware[®]

VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com www.vmware.com www.vmware.com www.vmware.com www.vmware.com www.vmware.com at <u>http://www.vmware.com/download/patents.html</u>. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM. UNWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO CUSTOMER. All materials provided in this workshop are copyrighted by VMware ("Workshop Materials"). VMware grants the customer of this workshop alicense to use and make reasonable copies of any Workshop Materials"). The purpose of facilitating such company's internal understanding, utilization and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If you are located in the United States, the VMware contracting entity for the service will be VMware, Inc., and if outside of the United States, the VMware contracting entity will be VMware. be VMware International Limited.