IADNACA - Implementing and Administering DNA Center for Assurance

Duration: *5 Day(s)*

Course Overview

The need for intent-based networking is growing as more segments of the business depend on reliable, secure digital networks.Cisco DNA Center provides a centralized management dashboard for complete control of this new network.Full automation capabilities for provisioning and change management are enhanced with intelligent analytics that pull telemetry data from everywhere in the network. Applications, services, and users are prioritized based on business goals, within policy parameters and security best practices. Shortcomings in network, application, or device performance are flagged, and instant remediation guidance saves hours of IT troubleshooting. This interconnection of automation and assurance forms a continuous validation-and-verification loop, checking alignment of network operation with business intent.

Cisco DNA Center is an open, extensible platform for streamlining IT workflows and greater business innovation. Cisco DNA Assurance, which is the main component of Cisco DNA Center covered by this training, provides a comprehensive solution to assure better and consistent service levels to meet growing business demands. Assurance addresses not just reactive network monitoring and troubleshooting, but also the proactive and predictive aspects of running the network, ensuring client, application, and service performance. Assurance is a multipurpose, real-time, network data collection and analytics engine that can significantly increase the business potential of network data.

Review this course online at https://www.alta3.com/courses/IADNACA

Objectives

- Understand Cisco DNA Center concepts and operational features.
- Implement assurance practices to optimize network performance.
- Integrate network tools and services with Cisco DNA Center.
- Deploy AI and analytics for advanced network insights.

Who Should Attend

- IT Solution Architects
- Network Security Architects
- Networking Admin and Operations
- Networking Field Engineers

Prerequisites

- Practical network and LAN or WAN management experience
- Cisco Inter-network Operating System (IOS) concepts

Course Outline

Module 1: Introduction to Cisco DNA Center Assurance

1. Introduction to DNA Center
2. System Architecture
3. Key Features and Use Cases
4. Introduction to Cisco ISE and DNAC-ISE integration

Module 2: Design

5. Network design options
6. Sites
7. Creating Enterprise and Sites Hierarchy
8. Configuring General Network Settings
9. Loading maps into the GUI
10. IP Address Management
11. Software Image Management – Lab on Day 5
12. Network Device Profiles
13. AAA
14. SNMP
15. Syslog
16. IP address pools
17. Creating Enterprise and Guest SSIDs – Lab on Day 2
    1. Creating the wireless RF Profile
    2. Creating the Guest Portal for the Guest SSIDs
18. Network profiles – Lab on Day 2
19. Authentication templates

Module 3: Discovery and Provision

20. Device Discovery and Protocols
21. Devices Onboarding
    1. Assigning Devices to a site
    2. Provisioning device with profiles
22. Plug and Play
23. Templates
24. Templates for Day-0
25. Templates for Day-N operations

Module 4: Monitoring Device, Client, and Application Health

26. DNAC Telemetry
27. Monitoring Network Device Health and Performance
28. Monitoring Wired and Wireless Client Health and Performance
29. Monitoring Application Health and Performance

Module 5: Application Visibility and DNAC Integration with Umbrella

30. Monitoring Application Visibility in DNA Center
31. Umbrella Introduction
32. DNA Center Umbrella Integration and Use Cases

Module 6: Troubleshooting Issues, Observing Insights and Trends

33. Detect Issues, Insights, and Trends in the Network
34. DNA Center Integration with other tools for Monitoring and Management

Module 7: Troubleshooting using Cisco DNA Center Assurance Tools

35. DNAC Assurance Troubleshooting Tools
36. Using Sensor Tests
37. Using Intelligent Capture
38. Spectrum Analysis

Module 8: DNAC and Thousand Eyes

39. Introduction to ThousandEyes
40. ThousandEyes Use Cases
41. DNA Center and ThousandEyes Integration

Module 9: AI Analytics and Machine Learning in DNA Center

42. Overview of AI Analytics and ML (Machine Learning)
43. DNA Center AI and ML Use Cases

Module 10: DNA Center Maintenance

44. DNA Center Reports
45. DNA Center Backup and Restore