

## Monitoring and Troubleshooting Network Performance using DNA Center with Assurance (DNACAM)

---

### Course Summary

#### Description

Monitoring and Troubleshooting Network Performance using Cisco DNA Center with Assurance is a 3-day course that provides students with the skills to implement, monitor, troubleshoot, and remediate network infrastructure, applications, and devices using Cisco DNA Center Assurance tools and techniques.

#### Topics

- Introduction to Cisco DNA Center Assurance
- Assurance System Architecture and Data Analytics
- Monitoring Device, Client, and Application Health
- Analyzing Issues using Cisco DNA Center Assurance
- Troubleshooting using Cisco DNA Center Assurance Tools

#### Audience

This course is designed for students wanting to gain skills to implement, monitor, troubleshoot, and remediate network infrastructure, applications, and devices using Cisco DNA Center Assurance tools and techniques.

#### Prerequisites

The knowledge and skills that a learner must have before attending this course are as follows:

- CCNP Level Routing
- Understanding of Identity Services Engine
- Practical network and LAN or WAN management experience.

#### Duration

Three days

## Monitoring and Troubleshooting Network Performance using DNA Center with Assurance (DNACAM)

---

### Course Outline

#### *I. Introduction to Cisco DNA Center Assurance*

- A. Introduction to DNA Center
- B. System Architecture
- C. Key Features and Use Cases
- D. Getting Started
- E. Navigating the GUI

#### *II. Assurance System Architecture and Data Analytics*

- A. DNAC Assurance Concepts
- B. Assurance Data and Metrics
- C. Assurance Health Scores
- D. Assurance Time Stamps and Data Refresh Concepts

#### *III. Monitoring Device, Client, and Application Health*

- A. Monitoring Network Device Health and Performance
- B. Monitoring Wired and Wireless Client Health and Performance
- C. Monitoring Application Health and Performance

#### *IV. Analyzing Issues using Cisco DNA Center Assurance*

- A. Detecting Issues
- B. View and Mediate Issues

#### *V. Troubleshooting using Cisco DNA Center Assurance Tools*

- A. DNAC Assurance Troubleshooting Tools
- B. Using Sensor Tests
- C. Using Intelligent Capture

#### Hands-On Labs:

- Lab 1: Navigate the Cisco DNA Center GUI
- Lab 2: Integrating ISE with Cisco DNA Center
- Lab 3: DNA Center Network Design, Hierarchy, Discovery and Inventory (Integrate Collectors: SNMP, Syslog and CMX Server)
- Lab 4: Discovering the Catalyst 9500 Seed Switch
- Lab 5: Configuring the Catalyst 9500 Seed Switch for the DNA Center PnP Provisioning Process
- Lab 6: DNA Center Automation: Day0 Network Provisioning using Plug and Play(PnP) Template Editor
- Lab 7: Discover Pod CSR Router in Cisco DNA Center
- Lab 8: Provisioning Devices and Assigning them to Site in Cisco DNA Center
- Lab 9: Configuring DNA Center Assurance Telemetry Profiles
- Lab 10: Configuring DNA Center Assurance Maximum Visibility Telemetry Profile For Application Visibility
- Lab 11: Connecting TFTP Server and TFTP Clients to the Network and Monitoring Application Traffic
- Lab 12: Monitoring and Troubleshooting the Cisco DNA Center Assurance Network Health and Assurance Issues
- Lab 13: DNA Center Assurance: Client Assurance, Health and Application Experience
- Lab 14: DNA Center Assurance: Application Experience and Application Health
- Lab 15: DNA Center Wireless Assurance