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Learning Style: Virtual Classroom

Technology: Cisco

Difficulty: Intermediate

Course Duration: 3 Days

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

About this course:

Monitoring and Troubleshooting Network Performance using Cisco DNA Center

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

Course Objective:

- Explain the role of Cisco DNA Center Assurance, its key features, use cases, and how it supports intent-based networking
- Configure Cisco DNA Center Assurance to collect network telemetry data and monitor the network devices, clients, and applications
- Interpret health scores of network devices, clients, and applications and plan remediation actions
- Use Cisco DNA Center Assurance to explore common troubleshooting issues of client onboarding and application QoS concerns

Audience:

The primary audience for this course is as follows:

- Network Administrators
- Network Engineers
- Channel Partners/Resellers, Customers, Employees
- System Engineers.

Prerequisite:

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.

Course Outline:

Module 1: Introduction to Cisco DNA Center Assurance

- Introduction to DNA Center
- System Architecture
- Key Features and Use Cases
- Getting Started
- Navigating the GUI

Module 2: Assurance System Architecture and Data Analytics

- DNAC Assurance Concepts
- Assurance Data and Metrics
- Assurance Health Scores
- Assurance Time Stamps and Data Refresh Concepts

Module 3: Monitoring Device, Client, and Application Health

- Monitoring Network Device Health and Performance
- Monitoring Wired and Wireless Client Health and Performance
- Monitoring Application Health and Performance

Module 4: Analyzing Issues using Cisco DNA Center Assurance

- Detecting Issues
- View and Mediate Issues

Module 5: Troubleshooting using Cisco DNA Center Assurance Tools

- DNAC Assurance Troubleshooting Tools
- Using Sensor Tests
- Using Intelligent Capture

Lab Outline:

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