

DNAAS (LEVERAGING CISCO INTENT-BASED NETWORKING DNA ASSURANCE) 2.1

Objetivo

After taking this course, you should be able to:

- Explain the benefits of using Cisco DNA Center in a traditional, enterprise network;
- Explain at a detailed level the Cisco DNA Center Assurance system architecture, functional components, features, and data-processing concepts;
- Discuss the health scores, metrics, and strategies that you use for monitoring network devices, clients, and applications with Cisco DNA Assurance;
- Describe how Cisco DNA Center Assurance analyzes the streaming telemetry and collected data, correlates the data, performs root cause analysis, and displays detected issues, insights, and trends;
- Describe the Cisco DNA Center Assurance troubleshooting tools, mechanisms, strategies, and scenarios to proactively detect and resolve wireless network, client, and application issues and pinpoint the root cause;
- Deploy and configure Cisco DNA Center to use Assurance features for monitoring and troubleshooting network devices, clients, and applications.

Público Alvo

This course is designed for network and software engineers who hold the following job roles: Network administrators and Network operators.

Pré-Requisitos

Before taking this course, you should have the following knowledge and skills:

- Internet web browser usability knowledge;
- Working knowledge of TCP/IP networking ;
- Familiarity with network management concepts such as Simple Network Management Protocol (SNMP), Syslog, and NetFlow. The following Cisco courses can help you gain the knowledge you need to prepare for this course:
- Implementing and Administering Cisco Solutions (CCNA®);
- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR).

Carga Horária

24 horas (3 dias).

Conteúdo Programático

Introducing Cisco DNA Center Assurance

- Cisco DNA Center and Intent-Based Network Management Automation
- Cisco DNA Center System Architecture
- Cisco DNA Center Assurance Key Features and Use Cases
- Cisco DNA Center Licensing Options and Device Support
- Cisco DNA Center Assurance Implementation Workflow
- Cisco DNA Center Assurance GUI Navigation

Monitoring Health and Performance with Cisco DNA Center Assurance

Cisco DNA Center Assurance Functional Components
Cisco DNA Center Assurance Data Analytics and Metrics
Understand Assurance Health Scores
Understand Dashboard Time Ranges, Time Stamps, and Data Refresh Concepts
Monitor Network Device Health and Performance
Monitor Wired and Wireless Client Health and Performance
Monitor Application Health and Performance

Troubleshooting Issues, Observing Insights and Trends

Detect Issues, Insights, and Trends in the Network
View and Remediate Issues
Observe Trends, Insights, and Comparative Analysis
Observe Capacity, Security, and Wi-Fi 6 Readiness Insights

Troubleshooting Wireless Issues with Cisco DNA Center Assurance Tools

Review of Assurance Tools for Troubleshooting Wireless Networks
Use Sensor Tests to Troubleshoot Wireless Networks
Understand Intelligent Capture for Troubleshooting Wireless Networks
Use Intelligent Capture for Client-Based Onboarding and Packet Data to Troubleshoot Wireless Issues
Use Intelligent Capture to Collect AP-Based Statistics

Lab outline

Discovery 1: Prepare Cisco DNA Center for Assurance

Task 1: Explore the Cisco DNA Center GUI
Task 2: Verify the Integration of Cisco ISE with Cisco DNA Center
Task 3: Verify the Network Hierarchy Design and Network Settings
Task 4: Verify Discovered and Provisioned Network Devices for Assurance
Task 5: Predict AP Effectiveness with Building Floor Maps
Task 6: Verify Cloud-Based AI Network Analytics and MR from the Cisco Knowledge Base

Discovery 2: Monitor Overall Health and the Health of Network Devices

Simulation Lab
Task 1: Verify Health Score Settings
Task 2: Monitor Overall Health and Performance
Task 3: Monitor Network Health and Performance

Discovery 3: Monitor the Health of Clients and Applications

Simulation Lab
Task 1: Monitor Client Health and Performance
Task 2: Monitor Application Health and Performance

Discovery 4: Troubleshoot Network, Client, and Application Issues

Simulation Lab
Task 1: Run Device Compliance Check
Task 2: Utilize Reports Templates

Task 3: Verify Issue Settings

Task 4: Troubleshoot Network Device Issues

Task 5: Troubleshoot Client Onboarding and Connectivity Issues

Discovery 5: Observe Assurance AI Network Analytics

Simulation Lab

Task 1: Observe AI Network Analytics: Network Insights and Heatmap

Task 2: Observe AI Network Analytics: Peer and Network Comparison

Task 3: Observe AI Network Analytics: Baselines

Discovery 6: Analyze Wireless Allocation, Capabilities, and Threats

Simulation Lab

Task 1: Analyze PoE Allocation and Distribution

Task 2: Analyze Wi-Fi 6 Capability and Readiness

Task 3: Analyze Rogue and aWIPS Threats

Discovery 7: Monitor Wireless Networks with Advanced Assurance Tools

Simulation Lab

Task 1: Monitor Wireless Connectivity Issues with AP Sensors

Task 2: Monitor Client Data on APs with Intelligent Capture