

Administering and Troubleshooting Cisco Catalyst Center -Assurance (CATALYST-CENTER)

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This five-day hands-on instructor-led course provides detailed training on Cisco Catalyst Center, encompassing fundamental knowledge, installation, upgrading procedures, system requirements, deployment scenarios, and the initial setup process. It covers the basics of the Catalyst Center, including its licensing, overview, appliance options, virtualization support, telemetry configurations, system updates, upgrades, and the integration of telemetry and security features.

Advanced topics delve into network discovery, onboarding, fabric networking, network topology and hierarchy, wireless mapping, network settings, profiles, and template automation for device configuration changes. The guide also explores compliance management, device provisioning, service provisioning, policy configurations, AIOps innovations, and quality of service (QoS) configurations, rounded off with practical labs for hands-on experience with the Catalyst Center's interface and capabilities.

How you'll benefit

This class will help you:

- Learn Network Troubleshooting and Monitoring with Catalyst Center
- Understand Cisco Catalyst Center Workflow
- Learn Telemetry and Application Health

Why Attend with Current Technologies CLC

- Our Instructors are in the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The primary audience for this course is as follows:

- WAN Administrators
- WAN Engineers
- Security Administrators
- Security Engineers
- Network Administrators
- Network Engineers
- Helpdesk Support Administrators and Engineers
- NOC Support Administrators and Engineers
- IT Staff and Managers

Course Duration

5 days

Course Price

\$4,595.00 or 43 CLCs

Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

OUTLINE

Module 1: Introduction to Cisco Catalyst Center (DNAC)

- Module Topics
 - Topic List
- Lesson 1: Traditional Network Challenges
 - Network Landscape Challenges
 - Business Policy Challenges
 - Network Management Scalability Challenges
 - Challenges with Network Management
- Lesson 2: Intent Based Networking
- Lesson 3: Introduction to Cisco Catalyst Center
- Lesson 4: Cisco Catalyst Center Architecture and Deployment Options
- Lesson 5: Key Features and Use Cases
- Lesson 6: Cisco Catalyst Center Licensing

Module 2: CCC and ISE Integration

- Lesson 1: CCC-ISE Integration Overview
- Lesson 2: CCC- ISE Integration Benefits
- Lesson 3: Integration Process

Module 3: Cisco Catalyst Center Workflow

- Lesson 1: Network Hierarchy
- Lesson 2: Network Settings
- Lesson 3: Image Repository
- Lesson 4: Network Profiles
- Lesson 5: Authentication Template

Module 4: Network Discovery

- Lesson 1: Device Inventory
- Lesson 2: Device Onboarding
- Lesson 3: PnP Device Onboarding
- Lesson 4: Templates
- Lesson 5: Discover and Provision Wireless Devices

Module 5: Telemetry and Application Health

- Lesson 1: Visibility Challenges in Enterprise Networking
- Lesson 2: Application Telemetry
- Lesson 3: Assurance
- Lesson 4: Application Health

Module 6: Application Recognition and Visibility

- Lesson 1: Application Recognition Overview
- Lesson 2: Application Visibility View

Module 7: Cisco Catalyst Center-Umbrella Integration

- Lesson 1: Umbrella Introduction
- Lesson 2: CCC and Umbrella Integration
- Lesson 3: Cisco Umbrella Workflow

Module 8: Network Troubleshooting and Monitoring with Catalyst Center

- Lesson 1: Insights, Issues and Trends in the Network
- Lesson 2: Monitor and Manage CCC Integrations
- Lesson 3: Intelligent Capture Introduction
- Lesson 4: Hardware and Software Compatibility
- Lesson 5: Client-Side Features
- Lesson 6: AP-Side Features

Module 9: Cisco Sensor AP

- Lesson 1: Cisco Aironet Active Sensor
- Lesson 2: Sensor Deployment and Provisioning
- Lesson 3: Sensor Data Flow
- Lesson 4: Sensor Tests

Module 10: CCC-Thousand Eyes Integration

- Lesson 1: Thousand Eyes Introduction
- Lesson 2: Cisco Thousand Eyes Tests
- Lesson 3: Thousand Eyes Use Cases
- Lesson 4: Thousand Eyes Deployment
- Lesson 5: CCC and Thousand Eyes Integration

Module 11: AI Endpoint Analytics

- Lesson 1: Current Network Challenges
- Lesson 2: Endpoint Analytics
- Lesson 3: Endpoint Profiling
- Lesson 4: Trust Analytics

Module 12: Cisco Catalyst Center Reporting

- Lesson 1: Reports Introduction
- Lesson 2: Reporting Categories and Templates
- Lesson 3: Generate and View Reports

Module 13: Cisco Catalyst Center Compliance

- Lesson 1: Compliance Overview
- Lesson 2: CCC Configuration Compliance Workflow

Module 14: RBAC and Backup-Restore

- Lesson 1: Role Based Access (RBAC)
- Lesson 2: Backup and Restore Introduction
- Lesson 3: Backup Server Requirements
- Lesson 4: Backup Storage Requirements

Module 15: Rogue Management

- Lesson 1: Rogue AP Introduction
- Lesson 2: Rogue AP Management
- Lesson 3: Rogue AP Containment
- Lesson 4: Advanced Wireless Intrusion Prevention System

Module 16: Software Image Management (SWIM)

- Lesson 1: Software Image Management
- Lesson 2: Software Maintenance Update
- Lesson 3: ITSM Integration – Change Management

Module 17: CCC Programmability

- Lesson 1: Cisco Catalyst Center Programmability

Module 18: Prime to CCC Migration

- Lesson 1: Cisco Catalyst Center Readiness
- Lesson 2: Migration Strategy Overview
- Lesson 3: Migration Preparation
- Lesson 4: Performing the Migration
- Lesson 5: Parallel Run
- Lesson 6: Post-Migration and Best Practices

LAB OUTLINE

Lab 1: Installation of Catalyst Center from Scratch

Lab 2: Catalyst Center Cluster Configuration

Lab 3: Navigate the Catalyst Center GUI

Lab 4: Integrate Cisco ISE with Catalyst Center

Lab 5: Design the Network Hierarchy and Configure Network Settings

Lab 6: Discover Wired Device Manually in the Inventory, Assign to Site, and Provision

Lab 7: Discover Wired Device Using Plug and Play (PnP) Using Template Editor

Lab 8: Discover and Provision C9800 WLC, Configure Wireless SSIDs and Network Profiles

Lab 9: Configure C9800 WLC Using Template Editor

Lab 10: Configure Cisco Catalyst Center Assurance Telemetry Profiles and Apply to Devices

Lab 11: Generate and Monitor Application Traffic on Catalyst Center for Clients

Lab 12: Application Visibility and Generate Client Traffic to Monitor Top Applications on Catalyst Center

Lab 13: Catalyst Center Umbrella Integration for DNS or SIG (Secure Internet Gateway)

Lab 14: Assurance Dashboards – Health, Issues, and WiFi 6 on Catalyst Center

Lab 15: Intelligent Packet Capture and Spectrum Analysis

Lab 16: 1800s AP as Sensor

Lab 17: Application Visibility with Thousand Eyes and Catalyst Center

Lab 18: AI Endpoint Analytics on Catalyst Center

Lab 19: Rogue Detection Lab

Lab 20: Reporting on Cisco Catalyst Center

Lab 21: Catalyst Center Configuration Backup on External Server

Lab 24: IOS-XE Device Upgrade/Downgrade Using SWIM via Catalyst Center

Lab 25: Configure User, User Profile, and Roles

Lab 26: Configure RBAC to Manage Cisco Catalyst Center

Lab 27: Prime to Cisco Catalyst Center Migration