CCFND Cisco Catalyst Center Foundations

Course Description (full version)

The **Cisco Catalyst Center Foundations (CCFND)** training is designed to expand your knowledge of Cisco Catalyst Center, including its basics, deployment and scalability options, initial configurations, best practices, and integration with Cisco Identity Services Engine (ISE). The training will focus on network automation, network assurance, network security, and network programmability using Cisco Catalyst Center.

Though this training is not related to a specific exam, it is highly encouraged to take this training as an introduction to topics found in the Implementing and Operating Cisco Enterprise Network Core Technologies (350-401 ENCOR) v1.1 exam. This training also earns you 44 Continuing Education (CE) credits toward recertification.

How You'll Benefit

This training will help you:

- Expand your knowledge of Cisco Catalyst Center and networking principles
- Qualify for professional-level networking job roles
- Earn 44 CE credits toward recertification

Who Should Enroll

- Network Engineers
- Network Analysts
- Security Engineers

- IT Professionals
- Pre-Sales Engineers

Course Objectives

- Learn about Cisco Catalyst Center product, intent-based networking, system architecture, and key features and use cases of Cisco Catalyst Center
- Use Cisco Catalyst Center automation (NetOps and SecOps), assurance (AIOps), and platform integration with DevOps in your enterprise network
- Deploy Cisco Catalyst Center based on pre-deployment requirements, and perform first-time setup procedures
- Describe high availability and scalability options for Cisco Catalyst Center, including clustering, link redundancy, and disaster recovery
- Explain Cisco Catalyst Center system settings, basic and advanced automation, device provisioning, and compliance audit procedures
- Configure Cisco Catalyst Center to onboard devices, integrate with ISE, automate device configurations, troubleshoot health of network devices, and track clients
- Describe Cisco SD-Access architecture, including fabric networking, underlay and overlay routing, and fabric node roles, and implement policy-based segmentation with group-based, IP-based, and application policies

Course Prerequisites

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

Basic understanding of network fundamentals

- Basic familiarity with Cisco ISE
- Basic familiarity with network automation and programmability

These skills can be found in the following Cisco Learning Offerings:

- Implementing and Administering Cisco Solutions (CCNA)
- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)
- Implementing and Configuring Cisco Identity Services Engine (SISE)
- Developing Applications and Automating Workflows using Cisco Core Platforms (DEVASC)

Course Outline

- 1. Cisco Catalyst Center Overview
- 2. Cisco Catalyst Center Deployment
- 3. Cisco Catalyst Center High Availability and Scalability
- 4. Cisco Catalyst Center System Settings and Operations
- Cisco Catalyst Center Inventory, Discovery, and Device Manageability
- 6. Cisco Catalyst Center Basic Automation and Provisioning
- 7. Cisco Catalyst Center Advanced Automation and Day-0 Onboarding
- 8. Cisco Prime Infrastructure to Cisco Catalyst Center Migration
- 9. Cisco Catalyst Center Health and Performance Monitoring
- Cisco Catalyst Center Assurance Device, Client, and Application Health
- 11. Cisco Catalyst Center Issues, Insights, and Trends Monitoring
- Cisco Catalyst Center Wireless Networks Monitoring and Troubleshooting

- 13. Cisco SD-Access Overview
- 14. Cisco Catalyst Center Policies
- 15. Cisco Catalyst Center Endpoint Visibility
- 16. Cisco Catalyst Center Platform Overview
- 17. Cisco Catalyst Center Network and Assurance Automation

Lab Outline

- 1. Integrate Cisco ISE and Cisco Catalyst Center
- 2. Add Network Devices to Cisco Catalyst Center
- 3. Automate Basic Device Configuration Using Cisco Catalyst Center
- 4. Upgrade Network Device using Cisco Catalyst Center
- 5. Automate Network Device Configuration Using a Template
- 6. Onboard a Device Using PnP
- 7. Troubleshoot the Health of Network Devices
- 8. Monitor the Health of Clients and Applications
- 9. Observe Assurance Al Network Analytics
- Monitor Wireless Networks with Advanced Assurance Tools
- 11. Explore Cisco SD-Access Networks
- 12. Deploy SD-Access Group-Based Access Control Policy
- 13. Examine Cisco Catalyst Center APIs
- 14. Examine Cisco Catalyst Center Webhooks
- 15. Deploy IaaC Using Cisco Catalyst Center and Terraform
- 16. Automate Cisco Catalyst Center Assurance Using Ansible