FIREFLY

Implementing and Operating Cisco Collaboration Core Technologies

DURATION: 5 DAYS   COURSE CODE: CLCOR   FORMAT: LIVE/VIRTUAL

COURSE DESCRIPTION

The Implementing and Operating Cisco Collaboration Core Technologies (CLCOR) v1.0 course helps you prepare for the Cisco® CCNP® Collaboration and CCIE® Collaboration certifications, and advanced-level roles focused on implementation and operation of Cisco collaboration solutions.

You will gain the knowledge and skills needed to implement and deploy core collaboration and networking technologies, including infrastructure and design, protocols, codecs, and endpoints, Cisco Internetwork Operating System (IOS®) XE gateway and media resources, call control, Quality of Service (QoS), and additional Cisco collaboration applications.

This course also helps you prepare you to take the exam, Implementing Cisco Collaboration Core Technologies (350-801 CLCOR), which is part of the new CCNP Collaboration, CCIE Collaboration, and the Cisco Certified Specialist - Collaboration Core certifications.

This course will help you:

- Integrate and troubleshoot Cisco Unified Communications Manager with Lightweight Directory Access Protocol
- (LDAP) for user synchronization and user authentication
- Implement Cisco Unified Communications Manager provisioning features
- Configure and troubleshoot collaboration endpoints

WHO SHOULD ATTEND

Students preparing to take the CCNP Collaboration certification

Network administrators

Network engineers

Systems engineers

PREREQUISITES

Working knowledge of fundamental terms of computer networking, including LANs, WANs, switching, and routing

Basics of digital interfaces, Public Switched Telephone Networks (PSTNs), and Voice over IP (VoIP)

Fundamental knowledge of converged voice and data networks and Cisco Unified Communications Manager deployment

LEARNING OBJECTIVES

Describe the Cisco Collaboration solutions architecture

Compare the IP Phone signaling protocols of Session Initiation Protocol (SIP), H323, Media Gateway Control Protocol (MGCP), and Skinny Client Control Protocol (SCCP)

Integrate and troubleshoot Cisco Unified Communications Manager with LDAP for user synchronization and user authentication

Implement Cisco Unified Communications Manager provisioning features

Describe the different codecs and how they are used to transform analogue voice into digital streams

Describe a dial plan, and explain call routing in Cisco Unified Communications Manager

Implement Public Switched Telephone Network (PSTN) access using MGCP gateways

Implement a Cisco gateway for PSTN access

Configure calling privileges in Cisco Unified Communications Manager

Implement toll fraud prevention

Implement globalized call routing within a Cisco Unified Communications Manager cluster

Implement and troubleshoot media resources in Cisco Unified Communications Manager

Describe Cisco Instant Messaging and Presence, including call flows and protocols

Describe and configure endpoints and commonly required features

Configure and troubleshoot Cisco Unity Connection integration

Configure and troubleshoot Cisco Unity Connection call handlers

Describe how Mobile Remote Access (MRA) is used to allow endpoints to work from outside the company

Analyze traffic patterns and quality issues in converged IP networks supporting voice, video, and data traffic

Define QoS and its models

Implement classification and marking

Configure classification and marking options on Cisco Catalyst® switches

COURSE OUTLINE

1. Describing the Cisco Collaboration Solutions Architecture
2. Exploring Call Signaling over IP Networks Bullet
3. Integrating Cisco Unified Communications Manager LDAP
4. Implementing Cisco Unified Communications Manager Provisioning Features
5. Exploring Codecs
6. Describing Dial Plans and Endpoint Addressing
7. Implementing MGCP Gateways
8. Implementing Voice Gateways
9. Configuring Calling Privileges in Cisco Unified Communications Manager
10. Implementing Toll Fraud Prevention
11. Implementing Globalized Call Routing
12. Describing Cisco Instant Messaging and Presence
13. Enabling Cisco Jabber®
14. Configuring Cisco Unity Connection Integration
15. Analyzing Quality Issues in Converged Networks
16. Defining QoS and QoS Models
17. Implementing Classification and Marking
18. Configuring Classification and Marking on Cisco Catalyst Switches

DISCOVERY LABS

1. Using Certificates
2. Configure IP Network Protocols
3. Configure and Troubleshoot Collaboration Endpoints
4. Troubleshoot Calling Issues
5. Configure and Troubleshoot LDAP Integration in Cisco Unified Communications Manager
6. Deploy an IP Phone Through Auto and Manual Registration
7. Configure Self-Provisioning
8. Configure Batch Provisioning
9. Explore the Cisco VoIP Bandwidth Calculator
10. Configure Regions and Locations
11. Implement Endpoint Addressing and Call Routing
12. Implement PSTN Calling Using MGCP Gateways
13. Configure and Troubleshoot Integrated Services Digital Network (ISDN) Primary Rate Interface (PRI)
14. Examine Cisco IOS Gateway Inbound and Outbound Dial-Peer Functions
15. Implement and Troubleshoot Digit Manipulation on a Cisco IOS Gateway
16. Configure Calling Privileges
17. Implement Toll Fraud Prevention on Cisco Unified Communications Manager (CUCM)
18. Implement Globalized Call Routing
19. Deploy an On-Premise Cisco Jabber Client for Windows
20. Examine the Integration between Unity Connection and CUCM
21. Manage Unity Connection Users
22. Enterprise Application Integration (EAI): Configure QoS