Cisco Collaboration

CLCOR: Implementing and Operating Cisco Collaboration Core Technologies

$4,195.00

- 5 Days

Upcoming Dates

May 19 - May 23
Aug 25 - Aug 29
Nov 03 - Nov 07

Course Description

The Implementing 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 the 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. The exam will be available beginning February 24, 2020.

Course Outline

Day 1:

- Describing the Cisco Collaboration Solutions Architecture
- Lab: Using Certificates
- Lab: Configure IP Network Protocols
- Exploring Call Signaling over IP Networks Bullet
- Lab: Configure and Troubleshoot Collaboration Endpoints

Day 2:

- Integrating Cisco Unified Communications Manager LDAP
- Lab: Configure and Troubleshoot LDAP Integration in Cisco Unified Communications Manager
- Implementing Cisco Unified Communications Manager Provisioning Features
- Lab: Deploy an IP Phone Through Auto and Manual Registration
- Lab: Configure Self-Provisioning
- Lab: Configure Batch Provisioning
- Exploring Codecs
- Lab: Explore the Cisco VoIP Bandwidth Calculator
- Lab: Configure Regions and Locations

Day 3:

- Describing Dial Plans and Endpoint Addressing
- Lab: Implement Endpoint Addressing and Call Routing
- Implementing MGCP Gateways
- Lab: Implement PSTN Calling Using MGCP Gateways
- Implementing Voice Gateways
- Lab: Configure and Troubleshoot Integrated Services Digital Network (ISDN) Primary Rate Interface (PRI)
- Lab: Examine Cisco IOS Gateway Inbound and Outbound Dial-Peer Functions
- Lab: Implement and Troubleshoot Digit Manipulation on a Cisco IOS Gateway

Day 4:

- Configuring Calling Privileges in Cisco Unified Communications Manager
- Lab: Configure Calling Privileges
- Implementing Toll Fraud Prevention
- Lab: Implement Toll Fraud Prevention on Cisco Unified Communications Manager (CUCM)
- Implementing Globalized Call Routing
- Lab: Implement Globalized Call Routing
- Implementing Media Resources in Cisco Unified Communications Manager (Self-Study)

Day 5:

- Describing Cisco Instant Messaging and Presence
- Enabling Cisco Jabber®
- Lab: Deploy an On-Premise Cisco Jabber Client for Windows
- Configuring and Troubleshooting Cisco Unity Connection Integration
- Lab: Examine the Integration between Unity Connection and CUCM
- Lab: Manage Unity Connection Users Self-Study
- Configuring Cisco Unity Connection Call Handlers
- Describing Collaboration Edge Architecture
- Analyzing Quality Issues in Converged Networks
- Defining QoS and QoS Models
- Implementing Classification and Marking
- Lab: Configure QoS
- Configuring Classification and Marking on Cisco Catalyst Switches

Audience

- 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

What You Will Learn

After taking this course, you should be able to:

- 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