CLCOR

The Implementing and Operating Cisco Collaboration Core Technologies (CLCOR) training provides you with the knowledge and skills to deploy, configure and troubleshoot core collaboration and networking technologies. Topics include infrastructure design protocols, codecs, and endpoints, Cisco Internetwork Operating System (IOS®) XE gateway and media resources, call control, and Quality of Service (QoS). This training also earns you 64 Continuing Education (CE) credits towards recertification.

This training helps prepare you to take the exam:

- 350-801 Implementing Cisco Collaboration Core Technologies (CLCOR)

How You'll Benefit

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

- Earn 64 credits toward recertification

Who Should Enroll

- Students preparing to take the CCNP Collaboration certification

- Network administrators

- Network engineers

- Systems engineers

Course 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 analog voice into digital streams

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

- Describe cloud calling using the on-premises local gateway option through Webex by Cisco

- 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

- Implement and troubleshoot Webex Calling dial plan features in a hybrid environment

- Deploy the Webex app in a Cisco Unified Communications Manager environment and migrate from Cisco Jabber to Webex app

- 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 Prerequisites

Before taking this offering, you should have:

- 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

Course Outline

- Module 1: Cisco Collaboration Solutions Architecture

- Module 2: Call Signaling over IP Networks

- Module 3: Cisco Unified Communications Manager LDAP

- Module 4: Cisco Unified Communications Manager Provisioning Features

- Module 5: Exploring Codecs

- Module 6: Dial Plans and Endpoint Addressing

- Module 7: Cloud Calling Hybrid Local Gateway

- Module 8: Calling Privileges in Cisco Unified Communications Manager

- Module 9: Toll Fraud Prevention

- Module 10: Globalized Call Routing

- Module 11: Media Resources in Cisco Unified Communications Manager

- Module 12: Webex Calling Dial Plan Features

- Module 13: Webex App

- Module 14: Cisco Unity Connection Integration

- Module 15: Cisco Unity Connection Call Handlers

- Module 16: Collaboration Edge Architecture

- Module 17: Quality Issues in Converged Networks

- Module 18: QoS and QoS Models

- Module 19: Classification and Marking

- Module 20: Classification and Marking on Cisco Catalyst Switches

Lab Outline

- Discovery 1: Use Certificates

- Discovery 2: Configure IP Network Protocols

- Discovery 3: Configure and Troubleshoot Collaboration Endpoints

- Discovery 4: Troubleshoot Calling Issues

- Discovery 5: Configure and Troubleshoot LDAP Integration in Cisco Unified Communications Manager

- Discovery 6: Deploy an IP Phone Through Auto and Manual Registration

- Discovery 7: Configure Self-Provisioning

- Discovery 8: Configure Batch Provisioning

- Discovery 9: Configure Regions and Locations

- Discovery 10: Implement Endpoint Addressing and Call Routing

- Discovery 11: Configure Calling Privileges

- Discovery 12: Implement Toll Fraud Prevention on Cisco Unified Communications Manager

- Discovery 13: Implement Globalized Call Routing

- Discovery 14: Configure the Integration Between Unity Connection and Cisco Unified CM

- Discovery 15: Manage Unity Connection Users

- Discovery 16: Configure QoS