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Training overview

Implementing and Operating Cisco Collaboration Core Technologies (CLCOR)

Description

The Implementing and Operating Cisco Collaboration Core Technologies (CLCOR) training provides you with a comprehensive foundation in designing, deploying, managing, and troubleshooting Cisco collaboration environments across on-premises, cloud, and hybrid architectures. Throughout this training, you will progress through a structured set of tracks that build pro□ciency in core Uni□ed Communications technologies, cloud collaboration services, media resources, calling architectures, and Quality of Service (QoS). Each track focuses on a critical skill area, allowing you to develop deep expertise step-by-step while maintaining a cohesive view of the overall Cisco Collaboration solution. Across the eight tracks, you will gain practical experience with user and device provisioning, dial plans, call routing, collaboration edge services, cloud and hybrid deployments, cloud calling models, media processing, and QoS strategies. Whether you administer enterprise collaboration systems, support hybrid transformation initiatives, or manage cloud-connected calling services, this learning path prepares you to build scalable, secure, and resilient communication environments that meet the needs of modern organizations.

This training prepares you for the 350-801 CLCOR v2.0 exam. If passed, you earn the Cisco Certi□ed Specialist – Collaboration Core certi□cation and satisfy the core exam requirements for the Cisco Certi□ed Network Professional (CCNP) Collaboration and Cisco Certi□ed Internetwork Expert (CCIE) Collaboration certi□cations. This training also earns you 64 Continuing Education (CE) credits toward recertication.

How you'll benefit

This training will help you:

- Integrate and troubleshoot Cisco Uni□ed Communications Manager with Lightweight Directory Access Protocol (LDAP) for user synchronization and user authentication
- Implement Cisco Uni□ed Communications Manager provisioning features
- Con□gure and troubleshoot collaboration endpoints
- Prepare for the 350-801 CLCOR v2.0 exam
- Earn 64 CE credits toward recerti□cation

Who should enroll

- Students preparing to take the CCNP Collaboration certi□cation
- Network Administrators
- Network Engineers
- Systems Engineers

Technology areas

- Collaboration

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 Uni□ed Communications Manager with LDAP for user synchronization and user authentication
- Implement Cisco Uni□ed Communications Manager provisioning features
- Describe the di□erent codecs and how they are used to transform analogue voice into digital streams
- Describe a dial plan, and explain call routing in Cisco Uni□ed Communications Manager
- Implement Public Switched Telephone Network (PSTN) access using MGCP gateways
- Implement a Cisco gateway for PSTN access
- Con□gure calling privileges in Cisco Uni□ed Communications Manager
- Implement toll fraud prevention
- Implement globalized call routing within a Cisco Uni□ed Communications Manager cluster
- Implement and troubleshoot media resources in Cisco Uni□ed Communications Manager
- Describe Cisco Instant Messaging and Presence, including call □ows and protocols
- Describe and con□gure endpoints and commonly required features
- Con□gure and troubleshoot Cisco Unity Connection integration
- Con□gure 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 tra□c patterns and quality issues in converged IP networks supporting voice, video, and data tra□c

- De□ne QoS and its models
- Implement classi□cation and marking
- Con□gure classi□cation and marking options on Cisco Catalyst® switches

Prerequisites

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

- 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 Uni□ed Communications Manager deployment

These skills can be found in the following Cisco Learning O□ering:

- Understanding Cisco Collaboration Foundations (CLFNDU)

Outline

- Describing the Cisco Collaboration Solutions Architecture
- Exploring Call Signaling over IP Networks
- Integrating Cisco Uni□ed Communications Manager LDAP
- Implementing Cisco Uni□ed Communications Manager Provisioning Features
- Exploring Codecs
- Describing Dial Plans and Endpoint Addressing
- Implementing MGCP Gateways
- Implementing Voice Gateways
- Con□guring Calling Privileges in Cisco Uni□ed Communications Manager
- Implementing Toll Fraud Prevention
- Implementing Globalized Call Routing
- Implementing and Troubleshooting Media Resources in Cisco Uni□ed Communications Manager
- Describing Cisco Instant Messaging and Presence
- Enabling Cisco Jabber®
- Con□guring Cisco Unity Connection Integration
- Con□guring Cisco Unity Connection Call Handlers
- Describing Collaboration Edge Architecture
- Analyzing Quality Issues in Converged Networks
- De□ning QoS and QoS Models
- Implementing Classi□cation and Marking
- Con□guring Classi□cation and Marking on Cisco Catalyst Switches

Lab Outline

- Using Certi□cates

- Con□gure IP Network Protocols
- Con□gure and Troubleshoot Collaboration Endpoints
- Troubleshoot Calling Issues
- Con□gure and Troubleshoot LDAP Integration in Cisco Uni□ed Communications Manager
- Deploy an IP Phone Through Auto and Manual Registration
- Con□gure Self-Provisioning
- Con□gure Batch Provisioning
- Explore the Cisco VoIP Bandwidth Calculator
- Con□gure Regions and Locations
- Implement Endpoint Addressing and Call Routing
- Implement PSTN Calling Using MGCP Gateways
- Con□gure and Troubleshoot Integrated Services Digital Network (ISDN) Primary Rate Interface (PRI)
- Examine Cisco IOS Gateway Inbound and Outbound Dial-Peer Functions
- Implement and Troubleshoot Digit Manipulation on a Cisco IOS Gateway
- Con□gure Calling Privileges
- Implement Toll Fraud Prevention on Cisco Uni□ed Communications Manager
- Implement Globalized Call Routing
- Deploy an On-Premise Cisco Jabber Client for Windows
- Con□gure the Integration Between Unity Connection and Cisco UCM
- Manage Unity Connection Users
- EAI: Con□gure QOS

What to expect on the exam

Implementing Cisco Collaboration Core Technologies (350-801 CLCOR) v2.0 is a 120-minute exam associated with the Cisco Certi□ed Specialist – Collaboration Core certi□cation and satis□es the core exam requirements for the CCNP Collaboration and CCIE Collaboration certi□cations.

This exam tests your knowledge of implementing core collaboration technologies, including:

- Infrastructure and design
- Protocols and endpoints
- Cisco IOS XE gateway and media resources
- Call Control
- QoS
- Collaboration applications

Links

- Cisco U. Learning Path
- Cisco Learning Network Store
- Cisco Learning Locator

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