

CLCOR

Implementing and Operating Cisco Collaboration Core Technologies

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 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.

Students will 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

Course requirements:

- 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

This course is intended for:

- Students preparing to take the CCNP Collaboration certification
- Network administrators
- Network engineers
- Systems engineers

Literature:

<p>All participants will get original Cisco student and lab guides.</p>

Hardware:

<p>Labs are practised on Cisco delivered Virtual lab environment. Classrooms are equipped with high-performance computers with Internet access and the possibility of wireless connection.</p>

Syllabus:

- Describing the Cisco Collaboration Solutions Architecture
- Exploring Call Signaling over IP Networks
- Integrating Cisco Unified Communications Manager LDAP
- Implementing Cisco Unified Communications Manager Provisioning Features
- Exploring Codecs
- Describing Dial Plans and Endpoint Addressing
- Implementing MGCP Gateways
- Implementing Voice Gateways
- Configuring Calling Privileges in Cisco Unified Communications Manager
- Implementing Toll Fraud Prevention
- Implementing Globalized Call Routing
- Describing Cisco Instant Messaging and Presence
- Enabling Cisco Jabber®
- Configuring Cisco Unity Connection Integration
- Analyzing Quality Issues in Converged Networks
- Defining QoS and QoS Models
- Implementing Classification and Marking
- Configuring Classification and Marking on Cisco Catalyst Switches

