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## Cisco® Implementing and Operating Cisco® Collaboration Core Technologies v1.0 (CLCOR)

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### Overview

In this course 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 IOS XE gateway and media resources, Call Control, QoS, and additional Cisco collaboration applications. This course also helps you prepare to take the exam, Implementing Cisco Collaboration Core Technologies (350-801 CLCOR), which is part of the new CCNP Collaboration certification.

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### Prerequisite Comments

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

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### Target Audience

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

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### Course Objectives

After taking this course, you should be able to:

- Describe the Cisco Collaboration solutions architecture.
- Compare the IP Phone signaling protocols of SIP, H323, MGCP and 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 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, the call flows and the 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 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

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### 1 - Course Outlines

DESCRIBING THE CISCO COLLABORATION SOLUTIONS ARCHITECTURE  
EXPLORING CALL SIGNALING OVER IP NETWORKS BULLET  
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

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