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Learning Style: Virtual Classroom

Technology: Cisco

Difficulty: Intermediate

Course Duration: 5 Days

Implementing Cisco Collaboration Core Technologies (CLCOR)

About this course:

Implementing and Operating Cisco Collaboration Core Technologies (CLCOR) v1.0 is a five-day course where 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.

Course Objective:

Upon completing this course, the learner will be able to meet these overall 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 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

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

Audience:

The primary target audience for the course is as follows:

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

Prerequisite:

The knowledge and skills that the learner should have before attending this course are as follows:

- 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:

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

Lab Outline:

- Using Certificates
- Configure IP Network Protocols
- Configure and Troubleshoot Collaboration Endpoints
- Troubleshoot Calling Issues
- Configure and Troubleshoot LDAP Integration in Cisco Unified Communications Manager
- Deploy an IP Phone Through Auto and Manual Registration
- Configure Self-Provisioning
- Configure Batch Provisioning
- Explore the Cisco VoIP Bandwidth Calculator
- Configure Regions and Locations
- Implement Endpoint Addressing and Call Routing
- Implement PSTN Calling Using MGCP Gateways
- Configure 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
- Configure Calling Privileges
- Implement Toll Fraud Prevention on Cisco Unified Communications Manager (CUCM)
- Implement Globalized Call Routing
- Deploy an On-Premise Cisco Jabber Client for Windows
- Examine the Integration between Unity Connection and CUCM
- Manage Unity Connection Users
- Enterprise Application Integration (EAI): Configure QoS

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