Implementing and Operating Cisco Collaboration Core Technologies v1.0

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Course#:CLCOR
Duration:5 Days
Price:0.00
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Course Description

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.

Objectives

After taking this course, you should 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

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

Students preparing to take the CCNP Collaboration certification

Network administrators

Network engineers

Systems engineers

Prerequisites

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

CCNA-Implementing and Administering Cisco Solutions v1.0 Boot Camp

CLFNDU - Understanding Cisco Collaboration Foundations v1.0

Content

Virtual Classroom Live 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

Virtual Classroom Live Labs

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