CISC-10 - CLCOR - IMPLEMENTING AND OPERATING CISCO COLLABORATION CORE TECHNOLOGIES V1.3

Categoria: **Cisco**

INFORMAZIONI SUL CORSO

Durata:	Categoria:	Qualifica Istruttore:	Dedicato a:	Produttore:
5 Giorni	Cisco	Cisco Certified Instructor	Professionista IT	Cisco

OBIETTIVI

After completing this course, you should be able to:

- -Describe the Cisco Collaboration solutions architecture.
- -Compare the IP Phone signaling protocols of SIP, H323, 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 analog voice into digital streams.
- -Describe a dial plan and explain call routing in Cisco Unified Communications Manager.
- -Describe cloud calling using the on-premises local gateway option through Webex by Cisco.
- -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.
- -Implement and troubleshoot Webex Calling dial plan features in a hybrid environment.
- -Deploy the Webex app in a Cisco Unified Communications Manager environment and migrate from Cisco Jabber to Webex app.
- -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.

PREREQUISITI

Attendees should meet the following prerequisites:

- -Basic understanding of networking technologies
- -Basic understanding of voice and video

Recommended prerequisites:

-CCNA - Implementing and Administering Cisco Solutions
-CLFNDU - Understanding Cisco Collaboration Foundations

CONTENUTI

Cisco Collaboration Solutions Architecture

-Overview of Cisco Collaboration Solutions Architecture
-Collaboration Deployment Models
-Licensing
-High Availability
-Capacity Planning
-Security Requirements
-SIP OAuth on Cisco UCM
-Webex Control Hub Features
-Disaster Recovery
-Dial Plan
-IP Network Protocols
-Codecs

Call Signaling over IP Networks

-IP Phone Initialization
-Single Site On-Cluster Calling
-Single Site On-Cluster Call Setup Troubleshooting
-Describe the Call Setup and Teardown Process
-Describe SIP Call Signaling for Call Setup and Teardown
-Compare the Call Control Protocols
-Describe DTMF Signaling over IP Networks

Cisco Unified Communications Manager LDAP

-Overview of LDAP Integration in Cisco Unified Communications Manager
-Options for Importing and Synchronizing Cisco Unified Communications Manager Users in Webex
-LDAP Synchronization in Cisco Unified Communications Manager
-LDAP Authentication in Cisco Unified Communications Manager
-LDAP Attribute Mapping in Cisco Unified Communications Manager
-LDAP Considerations in Cisco Unified Communications Manager
-Access Control Groups in Cisco Unified Communications Manager
-Feature Group Templates in Cisco Unified Communications Manager
-Directory Connector

Cisco Unified Communications Manager Provisioning Features

-Overview of Provisioning Options
-Self-Provisioning Prerequisites
-Self-Provisioning Components
-Self-Provisioning Authentication Modes
-Batch-Provisioning Tools

Exploring Codecs

-Define Codecs

-Compare Audio Codecs
-Compare Video Codecs
-Evaluate the Effects of Encryption on Codecs
-Describing Call Admission Control

Dial Plans and Endpoint Addressing

-Dial Plan Overview
-Dal Plan Components and Their Functions
-EndPoint Addressing
-Overview of Cisco Unified Communications Manager Call Routing
-Cisco Unified Communications Manager Call-Routing Logic
-Address Methods and Digit Analysis
-Variable-Length Patterns, Overlapping Patterns and Urgent Priority

Cloud Calling Hybrid Local Gateway

-Overview of Webex Calling Using Local Gateway
-Routers Used for Local Gateway
-Scenarios Using Local Gateway

Calling Privileges in Cisco Unified Communications Manager

-Calling Privileges Overview
-Partitions and CSSs
-Partition and CSS Considerations
-Time-of-Day Routing
-Client Matter Codes and Forced Authorization Codes

Toll Fraud Prevention

-Toll Fraud Prevention Overview
-Cisco Unified Communications Manager CoS for Toll Fraud Prevention

Globalized Call Routing

-Overview of Multisite Dial Plans
-Globalized Call Routing Overview
-Globalized Call Routing Number Formats
-Globalization of Localized Call Ingress
-Localization During Call Egress

Media Resources in Cisco Unified Communications Manager

-Media Resources Overview in Cisco Unified Communications Manager
-Media Resource Selection and Access Control in Cisco Unified Communications Manager
-Describing the Annunciator Feature
-Describing Unicast and Multicast MOH Characteristics
-Audio and Video Conference Bridge Devices
-Audio and Video Conference Bridge Integration Options
-MTP and Transcoder Devices
-MTP and Transcoder Requirements

Webex Calling Dial Plan Features

-Webex Control Hub Settings

-Router Configuration
-Testing and Troubleshooting Webex Calling

Webex App

-Migrating Cisco Jabber Users with Cisco Webex Cloud-Connected UC
-Migrating Cisco Jabber Clients to Cisco Webex

Cisco Unity Connection Integration

-Overview of Cisco Unity Connection Integration
-SIP Integration
-Typcial Integration Mistakes
-Integration Considerations

Cisco Unity Connection Call Handlers

-Call Handler Overview
-System Call Handler
-Caller Input
-Operator Call Handler
-Goodbye Call Handler
-Directory Handler
-Interview Handler

Collaboration Edge Architecture

-Describe Collaboration Edge (Expressway -C and Expressway -E)
-Describe Supported Services for B2B Collaboration
-Describe Prerequisites for Mobile and Remote Access
-Describe Service Discovery
-Explore Expressway Settings for MRA
-Describe Cisco Unified Border Element (CUBE)
-Device Onboarding Using Activation Codes

Quality Issues in Converged Networks

-Converged Networks
-Available Bandwidth
-Components of Network Delay
-End-to-End Delay Calculations
-Jitter
-Packet Loss

Defining QoS and QoS Models

-QoS Defined
-Network Traffic Indentification
-Divide Network Traffic into Classes and Define Policies
-QoS Mechanisms
-QoS Models
-DSCP Encoding
-Expedited Forwarding and Assured Forwarding
-Class Selector

Classification and Marking

- -Classification and Marking Overview
- -Classification and Marking at the Network and Data Link Layers
- -QoS Service Class
- -Cisco Marking Recommendations
- -QoS Markings in a SIP Call Flow
- -MQC Classification and Marking Options

Classification and Marking on Cisco Catalyst Switches

- -Overview of QoS Trust Boundaries
- -Ingress QoS Models
- -QoS Marking and Table Maps
- -Internal DSCP

Labs

- -Use 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
- -Configure Regions and Locations
- -Implement Endpoint Addressing and Call Routing
- -Configure Calling Privileges
- -Implement Toll Fraud Prevention on Cisco Unified Communications Manager
- -Implement Globalized Call Routing
- -Configure the Integration between Unity Connection and Cisco Unified CM
- -Manage Unity Connection Users
- -Configure QoS

INFO

Esame: 350-801 - Implementing and Operating Cisco Collaboration Core Technologies
Materiale didattico: Materiale didattico ufficiale Cisco in formato digitale
Costo materiale didattico: incluso nel prezzo del corso a Calendario
Natura del corso: Operativo (previsti lab su PC)