

IMPLEMENTING CISCO IP TELEPHONY AND VIDEO PART 1 (CIPTV1)

Temario

This course prepares delegates for implementing a Cisco Unified Communications Manager, CUBE and audio and video conferences in a single-site environment. This course focuses primarily on Cisco Unified Communications Manager Version 10.6 which is the call routing and signaling component for the Cisco Unified Communications solution.

Dirigido a

Network engineers deploying Cisco IP Telephony and Video solutions and students looking to achieve the CCNP Collaboration Certification. .

Pre-requisitos

Attendees should meet the following prerequisites:

- Working knowledge of fundamental terms and concepts of computer networking, including LANs, WANs, and IP switching and routing
- Ability to configure and operate Cisco routers and switches and to enable VLANs and DHCP
- Basics of digital interfaces, PSTN, and VoIP
- Fundamental knowledge of converged voice and data networks
- Ability to configure Cisco IOS gateways with traditional and VoIP call legs
- Prior attendance of the following is recommended: ICND1 and ICND2 or CCNABC, CICD or ICOMM and VIVND2 or CIVND2.

Objetivos

After you complete this course you will be able to:

- Describe Cisco Unified Communications Manager, including its functions, architecture, deployment and redundancy options, and how to install or upgrade
- Perform Cisco Unified Communications Manager initial configuration and user management
- Configure Cisco Unified Communications Manager to support on-cluster calling
- Implement PSTN access in Cisco Unified Communications Manager and to build a dial plan in a single-site Cisco Unified Communications Manager deployment

- Implement Cisco Unified Communications Manager media resources
- Implement Cisco Unified Communications Manager features and applications

Contenido

Cisco Unified Communications Manager Introduction

- Describing the role of Cisco Unified Communications Manager, its architecture and its deployment and redundancy options.
- Performing Initial Cisco Unified Communications Manager Configuration
- Deploying Endpoints and Users
- Deploying IP Phone Services

Dial Plan Introduction and Implementation of Single-Site On-Cluster Calling

- Describing Dial Plan Components
- Implementing Endpoint Addressing and Call Routing
- Implementing Calling Privileges
- Implementing Call Coverage in Cisco Unified Communications Manager

Implementation of Single-Site Off-Cluster Calling

- Analysing Single-Site Off-Cluster Calling Requirements
- Implementing PSTN Access Using MGCP Gateways
- Describing Cisco IOS H.323 and SIP Gateways
- Implementing PSTN Access Using H.323 Gateways
- Describing the Cisco Unified Border Element
- Using the Cisco Unified Border Element to Access the PSTN via a SIP Trunk
- Using the Cisco Unified Border Element for URI Dialing
- Describing Dial Plan Interworking

Media Resources

- Describing Media Resources in Cisco Unified Communications Manager
- Implementing Announcators and MOH
- Implementing MTPs

Audio and Video Conferencing

- Describing Conferencing Devices and their Functions
- Implementing Conference Bridges

- Describing Cisco TelePresence MSE 8000
- Implementing Cisco TelePresence Server
- Implementing Cisco TelePresence Conductor

Quality of Service

- Analysiing Quality of Service Requirements
- Describing QoS Components and their Functions
- Implementing Marking
- Implementing Policing and Shaping