

## Formation Implementing Cisco IP Telephony and Video



SII-314 5 Days (35 Hours)

### Description

This training provides the skills to implement Cisco Unified Communications Manager and CUBE solutions as well as Audio and Video conferencing in a single-site environment. This training focuses on Cisco Unified Communications Manager v10 which is the main component of the Collaboration solution.

### Who is this training for ?

#### For whom

This training is aimed at network engineers and integrators of Cisco Collaboration solutions.

#### Prerequisites

- Have knowledge of basic networking concepts, LANs, WANs, switching and routing.
- Be able to configure and operate Cisco routers and switches and make available VLANs and DHCP, VoIP, basic knowledge of converged voice and data networks. Be able to configure Cisco IOS gateways with traditional and VoIP calls.

### Training objectives

- Describe Cisco Unified Communications Manager, including features, architecture, deployments, and redundancy options
- Install and update Cisco Unified Communications Manager
- Perform initial configuration of Cisco Unified Communications Manager and manage users
- Configure Cisco Unified Communications Manager to support intra-cluster calls
- Implement PSTN access in Cisco Unified Communications Manager and create a dial plan in the single-site deployment
- Implement Cisco Unified Communications Manager media resources
- Implement Cisco Unified Communications Manager features and applications

### Training program

## Introduction à Cisco Communications Manager

- Describe the role of the Cisco Unified Communications Manager, its architecture, deployment and redundancy options
- Perform the initial configuration of the Cisco Unified Communications Manager
- Deploy the terminals and users
- Deploy IP Phone services

## Introduction au plan de numérotation et configuration des appels intra cluster

- Describe the components of the dial plan
- Implement terminal addressing and call routing
- Implement call discrimination
- Implement call groups

## Mettre en œuvre les appels off-cluster dans une architecture mono-site

- Analyze the needs for off-cluster calls
- Implement RTC access via MGCP gateways
- Describe H.323 gateways and SIP gateways
- Implement PSTN access via H.323 gateways
- Describe the components of the CUBE
- Use the elements of the CUBE to access the PSTN via a SIP Trunk
- Use CUBE elements for URI dialing

## Ressources Média

- Describe media resources in Cisco Unified Communications Manager
- Implement Annunciators and MOH resources
- Implement MTPs

## Conférences Audio et Vidéo

- Describe conferencing devices and their functions
- Implement conference bridges
- Introduce the Cisco Telepresence MSE 8000
- Implement the Cisco Telepresence Server
- Implement the Cisco Telepresence Conductor

## La Qualité de Service

- Analyze Quality of Service needs
- Describe the QoS components and their functions
- Implement marking
- Implement works on Policing and Shaping