

# Cisco® Implementing Cisco® IP Telephony & Video, Part 1 v1.0 (CIPTV1)

## Course Overview

Implementing Cisco IP Telephony & Video, Part 1 (CIPTV1) v1.0 is a five-day course that prepares the learner for implementing a Cisco Collaboration solution at a single-site environment. This course focuses primarily on Cisco Unified Communications Manager Version 10.x, which is the call-routing and signaling component for the Cisco Collaboration solution.

## Who Should Attend

The primary target audiences for the course are:

Network administrators and network engineers  
CCNP Collaboration candidates  
Secondary audiences are:

Systems engineers

## Course Objectives

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

Describe the role of Cisco Unified Communications Manager in a Cisco Collaboration Solution, including its functions, architecture, deployment, and redundancy options, and how to deploy endpoints, users, and Cisco IP Phone Services.

Describe the functions and the purpose of a dial plan and explains how to implement on-cluster calling.

Describe how to configure MGCP, H.323, and SIP gateways. The module also describes how to create a dial plan that supports inbound and outbound off-cluster calling for numbers and URIs.

Describe the types of media resources that Cisco Unified Communications Manager supports, how to configure Cisco Unified Communications Manager server software-based media resources, and how to implement Cisco hardware-based media resources.

Describe how to implement audio and video conferencing devices that can be used with Cisco Unified Communications Manager, built-in Cisco Unified Communications Manager software audio bridge, Cisco IOS-based audio and video conference bridges, and Cisco TelePresence conferencing products including Cisco TelePresence MSE 8000, Cisco TelePresence Server, Cisco TelePresence MCU, and Cisco TelePresence Conductor.

Provide an introduction to QoS with emphasis on the QoS components, often referred to as the QoS toolkit, that are used to provide services for various business applications.

This is a 5-day class

## Upcoming Dates

Date	Time	Where
10/28/2019	8:00AM - 5:00PM	Online LIVE
12/02/2019	8:00AM - 5:00PM	Online LIVE

[View All Course Dates & Register Today](#)

# Cisco® Implementing Cisco® IP Telephony & Video, Part 1 v1.0 (CIPTV1)

## Course Outline

### 1 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

### 2 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

### 3 Implementation of Single-Site Off-Cluster Calling

Analyzing 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 Cisco Unified Border Element for URI Dialing  
Describing Dial Plan Interworking

### 4 Media Resources

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

### 5 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

### 6 Quality of Service

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