Implementing Cisco IP Telephony & Video, Part 1 (CIPTV1)

Duration: 5 days

Who should attend?

The primary target audiences for the course are:

1. **Network administrators and network engineers**
2. **CCNP Collaboration candidates**

Secondary audiences are:

1. **Systems engineers**

Prerequisites

1. **Working knowledge of fundamental terms and concepts of computer networking, LANs, WANs, switching and routing**
2. **Ability to configure and operation Cisco routers and switches, enablement of VLANs and DHCP**
3. **Knowledge of basics of digital interfaces, PSTN, VoIP**
4. **Basics of converged voice and data networks**

Course Objectives

1. **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.**
2. **Describe the functions and the purpose of a dial plan and explains how to implement on-cluster calling**
3. **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 URLs.**
4. **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**
5. **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.**

6. **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.**

Follow On Courses

1. **Implementing Cisco Collaboration Applications (CAPPS)**
2. **Implementing Cisco IP Telephony & Video, Part 2 (CIPTV2)**
3. **Troubleshooting Cisco IP Telephony & Video (CTCOLLAB)**

Course Content

CIPTV1 v1.0 gives the learner all the tools they need to implement a Cisco Collaboration solution at a single site environment. This course focuses on Cisco Unified Communications Manager V10.x as the call routing and signaling component for the Cisco Collaboration solution.

CIPTV1 labs help the learners to successfully perform post-installation tasks, configure Cisco Unified Communications manager, implement MGCP ahd H.323 and SIP trunks. Learners will also implement audio/video conferencing, media resources, and describe QoS.