

CIPTV2-Implementing Cisco IP Telephony and Video, Part 2

Duration: **On-Demand**

Overview:

This is a Professional-level self-study technical course in the curriculum for the CCNP Collaboration certification.

It prepares the learner for implementing Cisco Unified Communications Manager, Cisco VCS-C, and Cisco Expressway series in a multisite voice and video network. It covers globalized call routing, URI call routing, global dial plan replication based on the ILS, Cisco Unified SRST, mobility features, call admission control, integration of Cisco VCS and Cisco Unified Communications Manager, and Cisco Mobile Remote Access on Cisco Expressway Series

Audience:

- Network professionals who install, configure, and manage Cisco Collaboration solutions in multisite enterprises.

Pre-requisites:

To fully benefit from this course, you should first complete the following course or obtain the equivalent level of knowledge:

- Active CCNP Voice or CCNP Collaboration
- One to three years of active Call Manager/Unified Communication experience
- Experience with SIP, H.323, and MGCP protocols
- Basic understanding of Video Concepts inside unified communications

Module 1: Multisite Deployment Implementation

Lessons:

- Identifying Issues in a Multisite Deployment
- Identifying Multisite Deployment Solutions
- Implementing a +E.164 Based Dial Plan for International Multisite Deployments
- Implementing a URI Based Dial Plan for Multisite Deployments

Module 2: Centralised Call-Processing Redundancy Implementation

Lessons:

- Implementing SRTS and MGCP fallback

Module 3: Bandwidth Management and CAC Implementation

Lessons:

- Managing Bandwidth
- Implementing CAC

Module 4: Implementation of Features and Applications for Multisite Deployments

Lessons:

- Implementing Device Mobility
- Implementing Cisco Extension Mobility
- Implementing Cisco Unified Mobility

Module 5: Cisco VCS and Cisco Expressway

Lessons:

- Describing Cisco VCS and Cisco Expressway Series Deployment Options
- Deploying Users and Local Endpoints in Cisco VCS control
- Interconnecting Cisco Unified Communications Manager and Cisco VCS
- Implementing Unified Communications Mobile and Remote Access

- CIGD – Implementing Cisco Collaboration Devices
- CIVND2 – Implementing Cisco Video Network Devices v1.0
- CIPTV1 – Implementing Cisco IP Telephony & Video Part 1 v1.0

Course Completion:

- Issues in multisite deployments and their solutions
- Implement a variable-length on-net dial plan without globalisation supporting multiple sites with overlapping extensions
- Use v7, 8, and 9.1 features, including local route groups and global transformations
- Transition to a globalised E.164 dial plan
- Issues with globalisation in the NANP
- Implement a URI-based dial plan for multisite deployments
- Implement call-processing resiliency in remote sites using SRST, MGCP fallback, and CUCM Express
- Implement CAC to manage calling and prevent oversubscription of the IP WAN
- Implement enhanced call admission control
- Implement mobility features such as CUCM device mobility and CUCM extension mobility
- Explore the use of gatekeepers
- Configure and implement solutions to reduce bandwidth requirements in the IP WAN
- Implement Cisco VCS
- Implement Cisco Expressway series
- Implement users and endpoints in Cisco VCS Control
- Interconnecting and integrating Cisco Unified Communications Manager and Cisco VCS
- Implement a dial plan on Cisco VCS
- Implement Unified Communications and Mobile Remote Access (MRA)
- Implementing ILS
- Implement Global Dial Plan Replication (GDPR)

Module 6: GDPR and CCD

Lessons:

- Implementing ILS and GDPR
- Implementing CCD
- Implementing Policing and Shaping