Implementing Cisco Unified Communications Manager Part 2 version 6

Course Code: CIPT2V6
Version: 6.0

Duration: 5

Overview

This hands on instructor led course prepares you for installing and configuring, a Cisco Unified Communications Manager solution in a multisite environment. This course focuses on Cisco Unified CallManager Release 6.0, the call routing and signaling component for the Cisco Unified Communications solution. It also includes H.323 and Media Gateway Control Protocol (MGCP) gateway implementation, the use of a Cisco Unified Border Element, and configuration of Survivable Remote Site Telephony (SRST), different mobility features, and voice security.
This course includes lab activities in which you will apply a dial plan for a multisite environment, configure survivability for remote sites during WAN failure and implement solutions to reduce bandwidth requirements in the IP WAN. You will also enable call admission control (CAC) and automated alternate routing (AAR), a feature that allows rerouting of calls over the public switched telephone network (PSTN) in case of no available bandwidth. There are labs for implementing Cisco Unified Communications Manager Device Mobility, Cisco Unified Communications Manager Extension Mobility, Cisco Unified Mobility, and voice security.

Pre-Requisites

The skill sand knowledge required for a delegate to take this course are as followed;

- Working knowledge of fundamental terms & concepts of computer networking to include LANs, WANs, and IP switching and routing. – CCNA Recommended
- Ability to configure and operate Cisco routers and switches and to enable VLANs and DHCP. – BCMSN Recommended
- Fundamental knowledge of converged voice and data networks. – CVOICE Recommended
- Ability to configure voice interfaces on Cisco voice-enabled equipment for connection to traditional, nonpacketized telephony equipment and to configure the call flows for POTS and VoIP dial peers. – CIPT1 Recommended

<u>Target Audience</u>

This course is vital for network professionals intending to deploy video on IP telephony networks and for those needing to properly secure their networks. Network professionals who are installing, configuring, and managing Cisco IP telephony solutions will also benefit greatly, as will Cisco support personnel, channel partners, and customers.

Objectives

At the end of this course delegates will be in a position to be able to;

- Working knowledge of converged voice and date networks
- Working knowledge of MGCP, session initiation protocol (SIP), and H.323, as well as their implementation on Cisco IOS gateways
- Ability to configure and operate Cisco routers and switches
- Ability to configure and operate Cisco Unfied Communications Manager in a single-site enviroment

Content

Multisite Deployments

- Identifying Issues in a Multisite Deployment
- Identifying Solutions for a Multisite Deployment
- Implementing Multisite Connections
- Implementing a Dial Plan for Multisite Deployments

Centralized Call-Processing Redundancy

- Examining Remote Site Redundancy Options
- Implementing SRST and MGCP Fallback
- Implementing Cisco Unified Communications Manager Express in SRST Mode

Bandwidth Management and Call Admission Control

- Implementing Bandwidth Management
- Implementing Call Admission Control

Features and Applications for Multisite Deployments

- Implementing Call Applications on Cisco IOS Gateways
- Implementing Device Mobility
- Implementing Extension Mobility Implementing Cisco Unified Mobility

IP Telephony Security

- Understanding Cryptographic Fundementals and PKI

- Understanding Native Cisco Unified Communications Manager Security Features and Cisco Unified Communications Manager PKI, Inplementing Security in Cisco Unified Communications Manager

Certification

642-456 CIPT2

Follow on Courses

The following courses are recommended for further study:

- TUC – Troubleshooting Unified Comms
- GWGK – Implementing Cisco Voice Gateways & GateKeepers
- QoS- Implementing Cisco QoS