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The Art of Knowledge.

CIPT2 v6.0 - Implementing Cisco Unified Communications IP Telephony Part 2

Course Length
5 Days
TE5208_20080405

Course Description: Implementing Cisco Unified Communications IP Telephony Part 2 (CIPT2) v6.0 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.

Who Should Attend: This course is primarily for Network designers, Network administrators, Network engineers, Network managers, and Systems engineers.

Prerequisites: The knowledge and skills that a learner must have before attending this course are as follows: * Working knowledge of converged voice and data 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, and * Ability to configure and operate Cisco Unified Communications Manager in a single-site environment.

Benefits of Attendance: Upon completion of this course, students will be able to:

- Describe the issues in multisite deployments and their solutions, and describe and configure required dial plan elements.
- Implement call-processing resiliency in remote sites using SRST, MGCP fallback, and Cisco Unified Communications Manager Express.
- Implement CAC to prevent oversubscription of the IP WAN.
- Implement Cisco IOS Tcl and VoiceXML applications, along with mobility features such as Cisco Unified Communications Manager Device Mobility, Cisco Unified Communications Manager Extension Mobility, and Cisco Unified Mobility, so that users are reachable via their office phone numbers, regardless of their physical location and the various devices they may use.
- Secure a Cisco Unified Communications IP telephony deployment.

Course Outline:

Course Introduction
Overview
Course Goal and Objectives
Course Flow
Additional References
Your Training Curriculum

Module 1: Multisite Deployments
Identifying Issues in a Multisite Deployment
Identifying Solutions for a Multisite Deployment
Implementing Multisite Connections
Implementing a Dial Plan for Multisite Deployments
Lab 1-1: Implementing Basic Multisite Connections
Lab 1-2: Implementing Multisite Dial Plans

Module 2: Centralized Call-Processing Redundancy
Examining Remote Site Redundancy Options
Implementing SRST and MGCP Fallback
Implementing CiscUnified Communications Manager Express in SRST Mode
Lab 2-1: Implementing CiscUnified SRST and MGCP Fallback
Lab 2-2: Implementing CiscUnified Communications Manager Express as SRST Fallback

Module 3: Bandwidth Management and Call Admission Control
Implementing Bandwidth Management
Implementing Call Admission Control
Lab 3-1: Implementing Bandwidth Management
Lab 3-2: Implementing CAC

Module 4: Features and Applications for Multisite Deployments
Implementing Call Applications on CiscIOS Gateways
Implementing Device Mobility
Implementing Extension Mobility
Implementing CiscUnified Mobility
Lab 4-1: Enabling the Device Mobility Feature
Lab 4-2: Implementing CiscUnified Communications Manager Extension Mobility
Lab 4-3: Implementing CiscUnified Mobility

Module 5: IP Telephony Security
Understanding Cryptographic Fundamentals and PKI
Understanding Native CiscUnified Communications Manager Security Features and CiscUnified Communications Manager PKI
Implementing Security in CiscUnified Communications Manager
Lab 5-1: Implementing Security in CiscUnified Communications Manager