

Module 1: Multisite Deployment Implementation

Lesson 1: Identifying Issues in a Multisite Deployment

- Multisite Deployment Issues Overview
- Quality Issues
- Bandwidth Issues
- Availability Issues
- Dial Plan Issues
- NAT and Security Issues

Lesson 2: Identifying Multisite Deployment Solutions

- Multisite Deployment Solution Overview
- QoS
- Solutions to Bandwidth Limitations
- Availability
- Dial Plan Solutions
- NAT and Security Solutions

Lesson 3: Implementing Multisite Connections

- Multisite Connection Options
- MGCP Gateway Implementation Review
- H.323 Gateway Implementation Review
- Trunk Implementation Overview
- SIP Trunk Implementation
- Intercluster and H.225 Trunk Implementation

Lesson 4: Implementing a Dial Plan for International Multisite Deployments

- Multisite Dial Plan Overview
- Implementing Site Codes for On-Net Calls
- Implementing PSTN Access in Cisco IOS Gateways
- Implementing Selective PSTN Breakout in CUCM
- Implementing PSTN Backup for On-Net Intersite Calls
- Implementing Tail-End Hop-Off
- Globalized Call Routing
- Globalized Call-Routing Considerations

Module 2: Centralized Call-Processing Redundancy Implementation

Lesson 1: Examining Remote Site Redundancy Options

- Remote Site Redundancy Overview
- Cisco Unified SRST Operation
- MGCP Fallback Operation
- Cisco Unified SRST Versions and Feature Support
- Dial Plan Requirements for MGCP Fallback and Cisco Unified SRST Scenarios

Lesson 2: Implementing SRST and MGCP Fallback

- MGCP Fallback and Cisco Unified SRST Configuration Overview
- CUCM SRST Configuration
- Cisco IOS Gateway SRST Configuration
- Cisco IOS Gateway MGCP Gateway Fallback Configuration
- CUCM Dial Plan Configuration for Cisco Unified SRST Support

Lesson 3: Implementing CUCM Express in SRST Mode

- CUCM Express Overview
- CUCM Express Features
- General Configuration of CUCM Express
- Configuration of CUCM Express in SRST Mode



Implementing Cisco Unified Communications Manager Part 2

Course Outline

Module 3: Bandwidth Management and CAC Implementation

Lesson 1: Managing Bandwidth

- Bandwidth Management Overview
- CUCM Codec Configuration
- Local Conference Bridge Implementation
- Transcoder Implementation
- Multicast MOH from Branch Router Flash Implementation

Lesson 2: Implementing CAC

- CAC Overview
- Locations
- RSVP-Enabled Locations
- Automated Alternate Routing
- SIP Preconditions
- H.323 Gatekeeper CAC

Module 4: Implementation of Features and Applications for Multisite Deployments

Lesson 1: Implementing Device Mobility

- Issues with Devices Roaming Between Sites
- Device Mobility Overview
- Device Mobility Configuration Elements
- Device Mobility Operation
- Device Mobility Interaction with Globalized Call Routing
- Device Mobility Configuration

Lesson 2: Implementing Cisco Extension Mobility

- Issues when Users Roam Between Sites
- Cisco Extension Mobility Overview
- Cisco Extension Mobility Configuration Elements
- Cisco Extension Mobility Operation
- Cisco Extension Mobility Configuration

Module 5: CCD

Lesson 1: Implementing SAF and CCD

- SAF and CCD Overview
- SAF Characteristics
- CCD Characteristics
- CCD Operation
- SAF and CCD Implementation
- CCD Considerations



Learning Solutions



Implementing Cisco Unified Communications Manager Part 2

Course Labs

- Lab 1: Topology and Deployment
- Lab 2: CUCM Initial Setup
- Lab 3: Enhanced - HQ Common Configuration
- Lab 4: IP Phone and IP Communicator Phone Load
- Lab 5: Exclusive - H.323 Gateway at HQ: Global Protocol Configuration and Incoming Calls
- Lab 6: Enhanced - Gatekeeper-Controlled H.323 Intercluster Trunks
- Lab 7: Enhanced - Outgoing to PSTN at HQ via H.323 PRI
- Lab 8: Enhanced - Line/Device: Geographic Routing
- Lab 9: Enhanced - Line/Device: Class of Service (Optional)
- Lab 10: Exclusive - Branch A Deployment
- Lab 11: Enhanced - European Branch Deployment
- Lab 12: Exclusive - Branch B Deployment
- Lab 13: Exclusive - SRND 8.x Variable-Length On-Net Dial Plan
- Lab 14: Enhanced - Tail End Hop Off
- Lab 15: Enhanced - SRST and CFUR
- Lab 16: SRST using CME
- Lab 17: Multisite: Regions
- Lab 18: Multisite: Locations
- Lab 19: Enhanced - Dial Plan Lab: H.323 Gatekeeper-Controlled Trunk
- Lab 20: Enhanced - Automated Alternate Routing
- Lab 21: RSVP and SIP Precondition
- Lab 22: Device Mobility
- Lab 23: Extension Mobility
- Lab 24: Enhanced - Service Advertisement Framework
- Lab 25: Exclusive - E.164 Dial Plan

Exclusive Legacy Labs

- Lab 26: Gateway Lab: MGCP Global Protocol Configuration (Optional)
- Lab 27: Gateway Lab: MGCP FXS (Optional)
- Lab 28: Gateway Lab: MGCP T1-CAS (Optional)
- Lab 29: Gateway Lab: MGCP FXO (Optional)
- Lab 30: Gateway Lab: T1-CAS Dial Plan (Optional)



Learning
Solutions