

Cisco Voice Gateway

Module 1: Cisco Unified Communications Manager Introduction

Lesson 1: Describing the Role of Cisco Unified Communications Manager, Its Architecture and Its Deployment and Redundancy Options

- a) Overview of Cisco Collaboration Solution
- b) Cisco Unified Communications Manager Functions
- c) Cisco Unified Communications Manager Architecture
- d) Cisco Unified Communications Manager Models
- e) Cisco Unified Communications Manager Redundancy
- f) Summary

Module 2: Implementation of Single-Site Off-Cluster Calling

Lesson 1: Implementation of Single-Site Off-Cluster Calling Requirements

- a) PSTN Access methods
- b) TDM Gateway vs Cisco UBE
- c) TDM Gateway comparison
- d) Audio and Video Codec selection
- e) PSTN Numbering Plan
- f) Summary

Lesson 2: Implementing PSTN Access using MGCP Gateway

- a) MGCP Gateway Implementation Overview
- b) MGCP Gateway support in Cisco Unified Communications Manager
- c) MGCP Gateway Implementation Consideration
- d) Implement an MGCP Gateway in Cisco Unified Communications Manager
- e) Integrate Cisco IOS MGCP Gateway with Cisco Unified Communications Manager
- f) Configure Cisco IOS MGCP Gateway Fractional PRIs
- g) Path Selection in Cisco Unified Communications Manager
- h) Route Group in Cisco Unified Communications Manager
- i) Route Lists in Cisco Unified Communications Manager
- j) Digit Manipulation Requirements with Multiple paths
- k) Digit Manipulation Configuration Elements in Cisco Unified Communications Manager
- l) PSTN Access Digit Manipulation Example
- m) Summary

Lesson 3: Describing Cisco IOS H.323 and SIP Gateways

- a) H.323 and SIP Gateway Overview

- b) Dial Peer Overview
- c) Inbound Dial Peer Selection
- d) Outbound Dial Peer Selection
- e) Digit Manipulation Features
- f) Codec Configuration
- g) COR Configuration
- h) Summary

Lesson 4: Implementing PSTN Access using H.323 Gateway

- a) H.323 PSTN Gateway Configuration in Cisco Unified Communications Manager Deployments
- b) Dial Plan Design and Documentation
- c) Summary

Lesson 5: Describing the Cisco Unified Border Element

- a) Cisco Unified Border Element Overview
- b) Protocol Interworking on the Cisco Unified Border Element
- c) Media Flows on the Cisco Unified Border Element
- d) Codec Negotiation on the Cisco Unified Border Element
- e) Summary

Lesson 6: Using the Cisco Unified Border Element to Access the PSTN via SIP Trunk

- a) PSTN SIP Access Overview
- b) Configuration Requirements in Cisco Unified Communications Manager
- c) Configuration Requirements for the Cisco Unified Border Element
- d) Summary

Lesson 7: Using Cisco Unified Border Element for URI Dialing

- a) Cisco Unified Border Element URI Dialing Overview
- b) Cisco Unified Communications Manager URI Dialing Configuration Requirements
- c) Cisco Unified Border Element URI Dialing Configuration Requirements
- d) Summary

Lesson 8: Describing Dial Plan Interworking

- a) Dial Plan Interworking Characteristics
- b) Dial Plan Interworking Support
- c) Summary

Module 3: Centralized Call-Processing Redundancy Implementation

Lesson 1: Implementing SRST and MGCP Fallback

- a) Remote Site Redundancy Overview
- b) MGCP Fallback Operation
- c) Cisco Unified SRST Operation
- d) Cisco Unified Communication Manager Express in SRST Mode
- e) Dial Plan Requirement for MGCP Fallback and Cisco Unified SRST Scenarios
- f) Summary