

Integrating Cisco Unified Communications Applications v8.0 (CAPPS 8)

Course Objectives

- Describe voice-mail integration options and requirements
- Implement Cisco Unity Connection in a Cisco Unified Communications Manager deployment
- Describe how to implement Cisco Unity Express in a Cisco Unified Communications Manager Express deployment
- Implement voice-mail networking using VPIM
- Implement Cisco Unified Presence and Cisco Unified Personal Communicator

Prerequisites

The knowledge and skills you must have before attending this course are as follows:

- Working knowledge of converged voice and data networks
- Basic knowledge of Cisco IOS gateways
- Working knowledge of Cisco Unified Communications Manager and Cisco Unity Connection
- Cisco CCNA® certification recommended prerequisite

Course Outline

Module 1: Introduction to Voice Mail

Describe voice-mail integration options and requirements.

Lesson 1: Voice Mail Integration Overview

This lesson defines voice-mail integration options, corresponding traffic flows, and available client interfaces.

- Voice Mail Introduction
- Cisco Unity Connection Client Interfaces

Lesson 2: General Requirements for Voice-Mail Integration

This lesson defines general requirements for voice-mail integration, including user-account synchronization, redirecting-number explanation, call flows in SRST mode or under no-bandwidth conditions, CoS implications of MWI, and voice-mail notifications.

- Voice-Messaging Integration and Synchronization

- Voice-Messaging Features
- Voice-Messaging System Design
- Call Flows

Module 2: Cisco Unity Connection in a Cisco Unified Communications Manager Environment

Implement Cisco Unity Connection in a Cisco Unified Communications Manager deployment.

Lesson 1: Integration with Cisco Unified Communications Manager

This lesson defines how to use SCCP and how to use SIP to integrate Cisco Unity Connection with Cisco Unified Communications Manager, and compare these two options.

- Cisco Unity Connection and Cisco Unified Communications Manager Integration Options
- Voice-Mail Integration on Cisco Unified Communications Manager
- Integration on Cisco Unity Connection
- Cisco Unity Connection Integration via SIP

Lesson 2: Configuring the Cisco Unity Connection System

This lesson defines Cisco Unity Connection system settings.

- Cisco Unity Connection System Settings Overview
- Cisco Unity Connection System Settings
- Cisco Unity Connection Authentication and Roles
- Cisco Unity Connection Restriction Tables
- Cisco Unity Connection LDAP Integration

Lesson 3: Using Cisco Unity Connection Partitions and Search Spaces

This lesson defines Cisco Unity Connection dial plan partitions and search spaces.

- Cisco Unity Connection Dial Plan Components
- Cisco Unity Connection Dial Plan

Lesson 4: Implementing Cisco Unity Connection Call Management

This lesson defines the Cisco Unity Connection dial plan, Call Transfer options, and call handlers, including auto-attendant functionality and related templates.

- Cisco Unity Connection Call Routing
- Cisco Unity Connection Call Handler Types
- Call Handler Templates
- System Call Handler
- Directory Handler
- Interview Handler

Lesson 5: Configuring Cisco Unity Connection Users

This lesson defines user-account management options and user-related configuration elements, including account policies, subscriber classes of service, and related templates.

- Cisco Unity Connection User Templates
- Cisco Unity Connection User
- Cisco Unity Connection Class of Service

Lesson 6: Monitoring and Troubleshooting Cisco Unity Connection

This lesson defines the tools that can be used to monitor Cisco Unity Connection operation and to troubleshoot issues that relate to voice mailboxes and MWI.

- Troubleshooting Cisco Unity Connection
- Cisco Unified RTMT

Module 3: Cisco Unity Express Implementation in Cisco Unified Communications Manager Express Environment

Describe how to implement Cisco Unity Express in a Cisco Unified Communications Manager Express deployment.

Lesson 1: Understanding Cisco Unity Express

This lesson defines the features and characteristics of Cisco Unity Express.

- Cisco Unity Express Characteristics
- Cisco Unity Express Interfaces, Integration, and Architecture

Lesson 2: Cisco Unity Express Integration with Cisco Unified Communications Manager Express

This lesson defines how to integrate Cisco Unity Express with Cisco Unified Communications Manager Express using SIP.

- Voice Mail Integration on Cisco Unified Communications Manager Express
- Additional Voice Mail Integration Components
- Voice Mail Integration on Cisco Unity Express

Lesson 3: Configuring the Cisco Unity Express System

This lesson defines the Cisco Unity Express system settings.

- Cisco Unity Express General Settings
- Cisco Unity Express Time and Schedules

Lesson 4: Configuring Cisco Unity Express User Accounts

This lesson defines user account management options and user-related configuration elements including account policies and subscriber classes of service.

- Importing Cisco Unity Express Subscribers
- Cisco Unity Express Mailboxes
- Message Notification
- Class of Service
- Voice View Express
- IMAP Messaging

Lesson 5: Understanding Cisco Unity Express AutoAttendant

This lesson defines how the Cisco Unity Express AutoAttendant application works and how it is configured.

- Cisco Unity Express AutoAttendant Application
- Prompts and Scripts
- Call Handling in Cisco Unity Express
- Basic Script Example

Lesson 6: Troubleshooting Cisco Unity Express

This lesson defines the available traces that can be used to troubleshoot issues that are related to voice mailboxes and MWI.

- Cisco Unity Express Troubleshooting Methodologies
- Troubleshooting SIP Integration
- Troubleshooting Message Waiting Indicator
- Troubleshooting Subscriber and Mailbox

Module 4: Voice Profile for Internet Mail Implementation

Implement voice-mail networking using VPIM.

Lesson 1: Understanding VPIM

This lesson defines the features and characteristics of VPIM.

- Voice Messaging Network Options
- VPIM Networking

Lesson 2: Implementing VPIM in Cisco Unity Connection

This lesson defines how to implement VPIM in Cisco Unity Connection.

- Implementing VPIM in Cisco Unity Connection
- Cisco Unity Connection SMTP Setup
- Cisco Unity Connection Remote Users

Lesson 3: Implementing VPIM in Cisco Unity Express

This lesson defines how to implement VPIM in Cisco Unity Express.

- Implementing VPIM in Cisco Unity Express
- Troubleshooting VPIM Between Cisco Unity Connection and Cisco Unity Express

Module 5: Cisco Unified Presence Implementation

Implement Cisco Unified Presence and Cisco Unified Personal Communicator.

Lesson 1: Understanding Cisco Unified Presence

This lesson defines the features and characteristics of Cisco Unified Presence.

- Cisco Unified Presence Introduction
- Cisco Unified Presence Overview

Lesson 2: Understanding Cisco Unified Presence Components and Communication Flows

This lesson defines the components of a Cisco Unified Presence solution, their functions, and the communication flows between the individual components.

- Cisco Unified Presence Components
- Cisco Unified Presence Approaches
- Cisco Unified Presence Federation
- Enterprise Instant Messaging and Persistent Chat
- Designing Cisco Unified Presence

Lesson 3: Integrating Cisco Unified Presence

This lesson defines how to integrate Cisco Unified Presence with Cisco Unified Communications Manager and Cisco Unified Communications applications.

- Configuring Cisco Unified Communications Manager for Presence Integration
- Cisco Unified Presence System Settings
- Configuring Cisco Unified Presence for Presence Integration
- Configuring Intercluster Peers

Lesson 4: Configuring Cisco Unified Presence Features and Implementing Cisco Unified Personal Communicator

This lesson defines how to configure Cisco Unified Presence features, such as Cisco IP Phone Messenger and Cisco Unified Personal Communicator support, and how to implement Cisco Unified Personal Communicator including Active Directory integration.

- Configuring Cisco IP Phone Messenger
- Configuring Cisco Unified Personal Communicator

- Cisco Unified Personal Communicator Setup
- Desk Phone Control Configuration
- Meeting Notification

Lesson 5: Verifying and Troubleshooting Tools for Cisco Unified Presence Components

This lesson defines the Cisco Unified Presence verification and troubleshooting tools that are available for different Cisco Unified Presence Components and explain how to use them.

- Cisco Unified Presence Troubleshooter
- Troubleshooting Cisco Unified Personal Communicator
- Cisco Unified Presence Tracing

CAPPS 8.0 LABS

- Lab 2-1: Integrating Cisco Unity Connection with Cisco Unified Communications Manager
- Lab 2-2: Configuring Cisco Unity Connection System Settings
- Lab 2-3: Implementing Cisco Unity Connection Partitions and Search Spaces
- Lab 2-4: Implementing Cisco Unity Connection Call Management
- Lab 2-5: Configuring Cisco Unity Connection Users
- Lab 2-6: Troubleshooting Cisco Unity Connection
- Lab 3-1: Integrating Cisco Unity Express with Cisco Unified Communications Manager Express
- Lab 3-2: Configuring Cisco Unity Express System Settings
- Lab 3-3: Configuring Cisco Unity Express Users
- Lab 3-4: Implementing Cisco Unity Express AutoAttendant
- Lab 3-5: Troubleshooting Cisco Unity Express
- Lab 4-1: Implementing VPIM in Cisco Unity Connection and Cisco Unity Express
- Lab 5-1: Integrating Cisco Unified Presence with Cisco Unified Communications Manager
- Lab 5-2: Configuring Cisco Unified Presence Features and Implementing Cisco Unified Personal Communicator
- Lab 5-3: Troubleshooting and Verifying Cisco Unified Presence Components