

# **Integrating Cisco Unified Communications Applications v8.0 (CS-CAPPS-5DAYS)**

**Modality: Virtual Classroom**

**Duration: 5 Days**

**CLC: 38 Units**

## **About this Course:**

This course is specifically designed for Network Engineers, Administrators, and System Engineers striving to develop proficiency in Cisco Unified Communication Applications Integration and Implementation. Professionals with proficient knowledge and skills of managing and integrating Cisco Applications are greatly valued by small and large IT-based businesses. On average, a Cisco Systems Communications Manager earns \$111,227 annually.

The Integrating Cisco Unified Communication Application Course v8.0 focuses on the essential integration features and functionalities of Cisco Unity Express, Cisco Unity Connection, and Cisco Unity Presence. The teachings of this course also cover the core concepts relating to Troubleshooting Mechanisms, Cisco Unified Presence Functionalities, and Voice Messaging Deployment. Furthermore, the primary focus of this course is on helping professionals learn the art of effectively utilizing Cisco Unified Communication Managers Features to integrate Cisco Unified Personal Communicator and Cisco Unified Presence.

## **Course Objectives:**

The core objective of this course is to help professionals develop a better understanding and sound knowledge of the following key concepts:

- Voice-Mail Integration Features & Requirements
- Cisco Unity Connection Implementation & Cisco Unified Connection Manager
- Cisco Unity Express Implementation & Cisco Manager Express Deployment
- Voice-Mail Networking Implementation with VPIM
- Cisco Unified Personal Communicator & Cisco Unified Presence Implementation

## **Audience:**

This course is specifically tailored for the following group of professionals and interested candidates:

- Network Engineers and Administrators
- CCNP Voice Professionals
- IT Professionals & System Engineers

## **Prerequisites:**

Professionals planning to enroll in the Integrating Cisco Unified Communications Applications v8.0

(CS-CAPPS-5DAYS) course must comply with the following prerequisites:

- Practical Knowledge of Data Networks and Converged Voices
- Fundamental Understanding of Cisco Internetwork Operating System (IOS) Gateways
- Familiarity with Cisco Unity Connections & Cisco Unified Communications Manager
- Cisco CCNA® Certification is highly Recommended but not Obligatory

## **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