

Course Code: 100628

Cisco Unified Communications Manager Software 12.5/14.x | Cisco IM&P v12.5/14.x

This hands-on, exclusive course builds on the foundation provided by ACUCW1 and focuses on advanced administration of Cisco Unified Communications Manager (CUCM). In this course, you will learn to build the UC infrastructure, including deploying a variable-length on-net dial plan that supports multiple sites.

After learning how to configure the system, you'll discover how native presence and instant messaging, and presence can enhance collaboration. You'll deploy a client services framework client, Jabber, and explore the challenges that are presented by the North American Numbering Plan (NANP).

You will explore bandwidth management and call admission control tools used to manage calling in a network with multiple sites. You will learn about mobility features, including device mobility, extension mobility, and unified mobility (single number reach), that are used in networks with multiple sites. You will configure hunt lists, call park options, and configure IP phone services.

Interested to know more about ACUCW2? Contact us to discuss course customization: we can design a custom course for you covering the material you need covered in the time you have available.

What You'll Learn

Why Take ACUCW2 from Global Knowledge?

Global Knowledge is the only training partner offering role-based training on a real-world multi-site lab topology specifically designed for the needs of North American students. No other training partner offers a course, like ACUCW2, designed to address the needs of advanced or senior administrators in North America and specifically targeting multi-site deployments:

View the enhanced Global Knowledge real-world topology

- Many Cisco Collaboration Solution administrators are focused on application administration and do not configure routers: router configuration is not included in the class
- Labs are based on real world multi-site network
- Accompanying follow-on courses provide an excellent track for career development.

What You'll Learn in Class?

In this class you will learn the advanced administrative concepts needed to understand Cisco Collaboration Solution configuration:

- Learn about the Cisco Collaboration Solutions 12.5 Preferred Architecture
- Perform initial system configuration including service activation, enterprise and system parameter configuration,
- CallManager group and device pools configuration
- Build a line/device multi-site dial plan using local route groups
- Deploy calling privileges using partitions, calling search spaces and translation patterns
- Understand the NANP (North American Numbering Plan) and its implications for multi-site deployments
- Deploy CUCM mobility features: extension mobility, device mobility, and unified mobility (single number reach)
- Configure Instant Messaging and the Presence Server
- Configure Jabber Clients for full UC services

Who Needs to Attend

- Administrators who need a more comprehensive understanding of the Cisco UC infrastructure.
- Administrators, engineers, network architects, and integrators with overall responsibility for Cisco UC networks.

Prerequisites

For this advanced administrative course, you should have experience performing basic CUCM administrative tasks, including IP Phone moves, adds and changes and as well have some familiarity with the CUCM Administrative GUI. An understanding of router configuration is not needed.



Course Code: 100628

CLASSROOM LIVE

\$5,395 CAD

5 Day

Classroom Live Outline

1. Cisco Unified Communications Manager Architecture and Initial Configuration

- Describing the Role of Cisco Unified Communications Manager, Its Architecture and Its Deployment and Redundancy Options
- Performing Initial Cisco Unified Communications Manager Configuration
- Deploying Endpoints and Users

2. Multisite CUCM Dial Plan Design and Deployment

- Describing Dial Plan Components
- Understanding Call Flows and Call Legs
- Endpoint Addressing and Call Routing Overview
- Implementing Calling Privileges
- Identifying Issues in a Multisite Deployment
- Identifying Multisite Deployment Solutions
- Implementing Gateway Selection and PSTN-Access Features
- Implementing Call Coverage

3. Bandwidth Management and Call Admission Control

- Managing Bandwidth
- Implementing Call Admission Control

4. Implementation of Features and Applications for Multisite Deployments

- Implementing Device Mobility
- Implementing Cisco Extension Mobility
- Implementing Cisco Unified Mobility

5. Module 5: Cisco Unified Communications Manager IM&P

• Understanding Cisco Unified Communications Manager IM and Presence

Enabling Cisco Unified Communications Manager IM and Presence Service

6. Module 6: Cisco IP Phone Services

Deploying IP Phone Services

Classroom Live Labs

- Lab 1: Remote Lab Access
- Lab 2: Initial System Configuration Enhanced
- Lab 3: NTP and Date/Time Group Configuration
- Lab 4: Device Pool Configuration Enhanced
- Lab 5: BUF850 SIP Trunk Configuration and Testing
- Lab 6: Route Group Configuration
- Lab 7: Route List Configuration
- Lab 8: Route Pattern Configuration and Testing Enhanced
- Lab 9: Calling Privileges Configuration Testing Enhanced
- Lab 10: Deploy NYC516 Site NEW
- Lab 11: Deploy SEA253 Site NEW
- Lab 12: Deploy SEA425 Site OPTIONAL BONUS Lab NEW
- Lab 13: Deploy HAM601 Site OPTIONAL BONUS Lab NEW
- Lab 14: Deploy WPG602 Site OPTIONAL BONUS Lab NEW
- Lab 15: Jabber Configuration in Phone Mode BONUS Lab NEW
- Lab 16: Region Configuration Enhanced
- Lab 17: Locations Configuration Enhanced
- Lab 18: Device Mobility Enhanced
- Lab 19: Extension Mobility Enhanced
- Lab 20: Unified Mobility Enhanced
- Lab 21: Enable IM and Presence Enhanced
- Lab 22: LDAP Configuration OPTIONAL BONUS Lab Enhanced
- Lab 23: Disaster Recovery OPTIONAL BONUS Lab
- Lab 24: Call Hunting OPTIONAL BONUS Lab



Course Code: 100628

VIRTUAL CLASSROOM LIVE

\$5,395 CAD

5 Day

Virtual Classroom Live Outline

1. Cisco Unified Communications Manager Architecture and Initial Configuration

- Describing the Role of Cisco Unified Communications Manager, Its Architecture and Its Deployment and Redundancy Options
- Performing Initial Cisco Unified Communications Manager Configuration
- Deploying Endpoints and Users

2. Multisite CUCM Dial Plan Design and Deployment

- Describing Dial Plan Components
- Understanding Call Flows and Call Legs
- Endpoint Addressing and Call Routing Overview
- Implementing Calling Privileges
- Identifying Issues in a Multisite Deployment
- Identifying Multisite Deployment Solutions
- Implementing Gateway Selection and PSTN-Access Features
- Implementing Call Coverage

3. Bandwidth Management and Call Admission Control

- Managing Bandwidth
- Implementing Call Admission Control

4. Implementation of Features and Applications for Multisite Deployments

- Implementing Device Mobility
- Implementing Cisco Extension Mobility
- Implementing Cisco Unified Mobility

5. Module 5: Cisco Unified Communications Manager IM&P

• Understanding Cisco Unified Communications Manager IM and Presence

Enabling Cisco Unified Communications Manager IM and Presence Service

6. Module 6: Cisco IP Phone Services

Deploying IP Phone Services

Virtual Classroom Live Labs

- Lab 1: Remote Lab Access
- Lab 2: Initial System Configuration Enhanced
- Lab 3: NTP and Date/Time Group Configuration
- Lab 4: Device Pool Configuration Enhanced
- Lab 5: BUF850 SIP Trunk Configuration and Testing
- Lab 6: Route Group Configuration
- Lab 7: Route List Configuration
- Lab 8: Route Pattern Configuration and Testing Enhanced
- Lab 9: Calling Privileges Configuration Testing Enhanced
- Lab 10: Deploy NYC516 Site NEW
- Lab 11: Deploy SEA253 Site NEW
- Lab 12: Deploy SEA425 Site OPTIONAL BONUS Lab NEW
- Lab 13: Deploy HAM601 Site OPTIONAL BONUS Lab NEW
- Lab 14: Deploy WPG602 Site OPTIONAL BONUS Lab NEW
- Lab 15: Jabber Configuration in Phone Mode BONUS Lab NEW
- Lab 16: Region Configuration **Enhanced**
- Lab 17: Locations Configuration Enhanced
- Lab 18: Device Mobility Enhanced
- Lab 19: Extension Mobility Enhanced
- Lab 20: Unified Mobility Enhanced
- Lab 21: Enable IM and Presence Enhanced
- Lab 22: LDAP Configuration OPTIONAL BONUS Lab Enhanced
- Lab 23: Disaster Recovery OPTIONAL BONUS Lab
- Lab 24: Call Hunting OPTIONAL BONUS Lab

Sep 29 - Oct 3, 2025 | 8:30 AM - 4:30 PM EDT

Oct 6 - 10, 2025 | 8:30 AM - 4:30 PM EDT

Nov 3 - 7, 2025 | 8:30 AM - 4:30 PM EST

Dec 15 - 19, 2025 | 8:30 AM - 4:30 PM EST

Jan 5 - 9, 2026 | 8:30 AM - 4:30 PM EST

Feb 9 - 13, 2026 | 8:30 AM - 4:30 PM EST

Mar 9 - 13, 2026 | 8:30 AM - 4:30 PM EDT



Course Code: 100628

PRIVATE GROUP TRAINING

5 Day

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.

Date created: 8/30/2025 10:28:24 PM

Copyright © 2025 Global Knowledge Training LLC. All Rights Reserved.