



Administering Cisco Unified Communication Manager 8.0 (ACUCM)

Days: 5
Format: Instructor-Led
Class Code ACUCM +AUC
Certification Exams:
Certification Track:
Recommended Course Sequence

Knowledge of prerequisites
noted below.

*Course content is subject to change
without notice.*

Course Description:

Administering Cisco Unified Communications Manager (ACUCM) v8.0 provides system administrators and networking professionals with an understanding of the Cisco Unified Communications Manager System. This course teaches the concepts of IP telephony based in system administration, including its function, features, and configuration. This is an entry-level course that begins with the basic concepts of IP telephony and very quickly moves the learner forward into an understanding of system concepts: clustering, creation of phones and users, route plans, digit manipulation, media resources, and phone features, which are all important to supporting

IP telephony in the enterprise network. The course focuses on Cisco Unified Communications Manager version 8.x.

The course is geared to individuals that will be using and managing the system and performing administration for Level 1 and Level 2 support. Level 1 support is geared toward supporting phone users and making moves, adds, and changes to the desktop phone environment. Level 2 support is oriented to supporting changes in the organization, such as opening new office locations or relocating departments. The course does not cover issues of initial deployment, new cluster deployment or international deployments. Also, the course does not cover issues with the underlying network that involve routers, switches, or Cisco IOS software configuration.

This course includes various lab exercises to apply what was learned in each preceding lesson. Labs begin with a newly installed publisher and subscriber. The only element that is preconfigured is two MGCP gateways, for the headquarters (HQ) and branch (BR), and an intercluster trunk pointing to the neighbor's pod. Therefore, the student will become familiar with all the various concepts through configuration of the elements in the lab environment.

Target Audience:

The primary audiences for this course are:

- Phone network administrators
- Data system administrators
- Entry-level network engineers
- Administrators
- IT support personnel
- Helpdesk support staff

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The secondary audience includes:

- Learners looking to gain a technical overview of Cisco Unified Communications Manager
- Learners who need a preparatory course before taking Implementing Cisco Unified Communications IP Telephony Part 1 (CIPT1) and Implementing Cisco Unified Communications IP Telephony Part 2 (CIPT2)

Prerequisites:

To fully benefit from this course, students should have the following prerequisite skills and knowledge:

- Basic knowledge of IP and networking or voice networks is suggested, but not required
- Basic knowledge of the Windows desktop environment
- Basic understanding of fundamental terms and concepts of computer networking, including LANs, WANs, and IP switching and routing.
- Basic knowledge of traditional PSTN operations and technologies, including PBX and voice-mail administration tasks

Course Objectives:

After completing this course, students will be able to...

- Describe the Cisco Unified Communications Manager network, service, and features
- Understand the importance of and configuration of redundancy and high availability in the enterprise network
- Describe user configuration and the user web interface
- Explain basic phone options and the use of BAT
- Explain the route plan and on-net/off-net calling
- Describe the various media resources, including conferencing and MOH
- Describe the basic phone features and use of hunt groups
- Explain the function of Cisco Unity Connection and the various interfaces that are used to access the system

Course Outline

Module 1: Introduction to IP Telephony

Lesson 1: Exploring IP Telephony
<ul style="list-style-type: none">■ Traditional Voice versus IP Telephony■ Clustering Overview■ Intracluster Communications■ Cisco Unified Communications Manager Clusters■ Clustering Options■ Platform Requirements
Lesson 2: Describing Deployment Models
<ul style="list-style-type: none">■ Single-Site Deployment■ Centralized Call-Processing Deployment■ Distributed Call-Processing Deployment■ Distributed Single-Cluster Call-Processing Deployment■ Hybrid Call-Processing Deployment■ New Advanced Multicenter Options
Lesson 3: Understanding Advanced Multisite Features
<ul style="list-style-type: none">■ Need for CAC■ Deploying AAR■ Survivable Remote Site Telephony■ SRST Failover

Module 2: Defining the Basic Configuration

Lesson 1: Logging In to Cisco Unified Communications Manager
<ul style="list-style-type: none">■ Logging In to Cisco Unified CM Administration and Cisco Unified Serviceability■ Logging In to Cisco Unified Operating System Administration and the DRS■ Navigation Menu■ Command-Line Interface
Lesson 2: Examining Basic Server Configuration
<ul style="list-style-type: none">■ Server Configuration—Eliminating DNS Reliance■ Configuring Enterprise Parameters
Lesson 3: Describing Multilevel Administration
<ul style="list-style-type: none">■ Configuring Multilevel Administration■ Creating End Users■ Creating Roles■ Creating User Groups■ Assigning Users to User Groups
Lesson 4: Configuring DRS Backup and Restore Procedures
<ul style="list-style-type: none">■ DRS Backup Procedures■ DRS Restore Procedures

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Module 3: User Administration

Lesson 1: Understanding User Configuration
<ul style="list-style-type: none">■ Understanding User Management■ Configuring Users
Lesson 2: Using the User Web Pages
<ul style="list-style-type: none">■ Understanding the User Web Pages■ Using the User Web Pages

Module 4: Exploring Phone Registration and Cisco Unified IP Phones

Lesson 1: Configuring System Parameters
<ul style="list-style-type: none">■ Cisco Unified CM Configuration■ Cisco Unified Communications Manager Group Configuration■ Phone NTP Configuration■ Date/Time Group■ Codecs and Regions■ Location Configuration■ Device Pool Configuration■ DHCP Service Configuration■ Device Defaults Configuration■ Clusterwide Parameters■ Licensing
Lesson 2: Supporting Cisco Unified IP Phones
<ul style="list-style-type: none">■ Cisco Unified IP Phones Overview■ Specialized Cisco Unified IP 7900 Series Phones■ Phone Button Templates■ Softkey Templates
Lesson 3: Exploring Phone Registration and IP Phone Communications
<ul style="list-style-type: none">■ Cisco Unified IP Phone Registration■ Cisco Unified IP Phone Configuration
Lesson 4: Utilizing the Bulk Administration Tool (BAT)
<ul style="list-style-type: none">■ Overview of Cisco Unified Communications Manager BAT■ Cisco Unified Communications Manager TAPS

Module 5: Basic Route Plan Configuration

Lesson 1: Implementing Dial Plan Connectivity
<ul style="list-style-type: none">■ Organizational Dial Plan■ Trunks■ Gateways
Lesson 2: Creating Route Plans
<ul style="list-style-type: none">■ Dial Plan Overview■ Route Pattern Overview■ Digit Collection■ Call Routing

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Module 6: Route Filters and Digit Manipulation

Lesson 1: Configuring Translation Patterns and Route Filter
<ul style="list-style-type: none">■ Translation Patterns■ The 9.@ Pattern■ Route Filters
Lesson 2: Implementing Digit Manipulation
<ul style="list-style-type: none">■ Discard Digits Instruction■ Transformation Masks■ Route Plan Report

Module 7: Class of Control

Lesson 1: Defining Class of Control
<ul style="list-style-type: none">■ Overview of Class of Control■ Partitions■ CSS Configuration■ PLAR Application
Lesson 2: Using Class of Control Features
<ul style="list-style-type: none">■ Call Restriction■ Time of Day Routing■ Traditional vs. Line/Device Approach

Module 8: Understanding Media Resources

Lesson 1: Defining Media Resources
<ul style="list-style-type: none">■ Overview of Media Resources■ Conference Bridge■ Media Termination Points■ Transcoder■ Music on Hold■ Annunciator
Lesson 2: Exploring Media Resource Management
<ul style="list-style-type: none">■ MRG Management■ Configuring MRGs■ Configuring MRGLs

Module 9: Features and Services

Lesson 1: Describing Basic Features
<ul style="list-style-type: none">■ Call Park■ Call Pickup■ Cisco Call Back■ Shared Lines with Barge and Privacy
Lesson 2: Exploring Hunt Groups
<ul style="list-style-type: none">■ Hunt Group Overview■ Line Group Configuration■ Hunt List Configuration■ Hunt Pilot Configuration

■ Final Forwarding
Lesson 3: Describing Phone Services
■ Cisco IP Phone Services
■ Cisco Phone Services Configuration