

Implementing Cisco Advanced Call Control and Mobility Services (CLACCM)

Modality: Virtual Classroom

Duration: 5 Days

CLC: 43 Units

About this course:

The Implementing Cisco Advanced Call Control and Mobility Services (CLACCM) v1.0 course covers advanced call control and mobility services. You will learn how to use Cisco Unified Communications Manager (Cisco Unified CM) features to consolidate your communications infrastructure into a scalable, portable, and secure collaboration solution.

Through a combination of lessons and hands-on experiences, you will also learn about a wealth of other features such as Globalized Call Routing, Global Dial Plan Replication, Cisco Unified Mobility, Cisco Extension Mobility, Device Mobility, Session Initiation Protocol Uniform Resource Identifier (SIP URI) call routing, Call Admission Control, Cisco Unified CM Express and Survivable Remote Site Telephony (SRST) gateway technologies, Cisco Unified Board Element Call deployments, signaling and media protocols, call coverage, and time-of-day routing.

This course helps you prepare for the Implementing Cisco Advanced Call Control and Mobility Services (300-815 CLACCM) exam.

Course Objectives:

After taking this course, you should be able to:

- Analyze and troubleshoot SIP, H.323, and media protocols
- Implement call coverage in Cisco Unified CM
- Configure and troubleshoot Cisco Unified CM Device Mobility, Extension Mobility, and Unified Mobility
- Implement Cisco Unified CM Express for SIP phones
- Implement globalized call routing between Cisco Unified CM clusters
- Implement Media Gateway Control Protocol (MGCP) fallback and Survivable Remote Site Telephony (SRST) in Cisco Unified CM and in Cisco IOS XE gateways
- Implement Call Admission Control and automated alternate routing (AAR) in Cisco Unified CM
- Troubleshoot multisite Cisco Unified CM deployments
- Implement Intercluster Lookup Service (ILS) between Cisco Unified CM clusters and enable General Data Protection Regulation (GDPR)
- Configure and troubleshoot Cisco Unified Border Element

Audience:

This course is designed for Collaboration engineers and administration professionals in job roles such as:

- Network administrator
- Network architect
- Network designer
- Network engineer
- Network manager

Prerequisite:

Before taking this course, you should have the following knowledge and skills:

- Basic understanding of networking, voice and video technologies
- Describe the different codecs and how they transform analogue voice into digital streams
- Knowledge of Cisco IOS XE command line
- Configure and modify requirements within the Cisco Unified CM
- Deploy and troubleshoot IP phones via manual configuration within Cisco Unified CM
- Describe the call setup/teardown process for a SIP device
- Manage user accounts and call routing in a Cisco Unified CM
- Describe and configure dial plan elements within a single site Cisco Unified CM deployment
- Implement basic globalized call routing within a Cisco Unified CM cluster
- Implement public switched telephone network (PSTN) access
- Implement, manage and troubleshoot media resources in a Cisco Unified CM

The following Cisco courses can help you gain the knowledge you need to prepare for this course:

- Understanding Cisco Collaboration Foundations (CLFNDU) v1.0
- Implementing and Operating Cisco Collaboration Core Technologies (CLCOR) v1.0

Course Outline:

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Analyzing and Troubleshooting Signaling and Media Protocols
 Implementing Cisco Unified Communications Manager Supplemental Services
 Implementing Call Coverage in Cisco Unified Communications Manager
 Configuring and Troubleshooting Cisco Unified Communications Manager Device Mobility
 Configuring and Troubleshooting Cisco Unified Communications Manager Extension Mobility
 Configuring and Troubleshooting Cisco Unified CM Unified Mobility
 Implementing Cisco Unified Communications Manager Express
 Implementing Globalized Call Routing
 Implementing Remote Site Survivability
 Implementing Call Admission Control in Cisco Unified Communications Manager
 Implementing URI Calling in Cisco Unified Communications Manager
 Troubleshooting Multisite Cisco Unified Communications Manager Deployments
 Examining Global Dial Plan Replication
 Configuring and Troubleshooting Cisco Unified Border Element

Labs Outline:

Analyze SIP, H.323, and Media Protocols
 Troubleshoot SIP and Media Protocols
 Implement Cisco Unified Communications Manager Supplemental Services
 Implement Call Hunting and Call Queueing in Cisco Unified Communications Manager
 Configure Device Mobility
 Troubleshoot Cisco Unified Communications Manager Device Mobility
 Configure Cisco Unified Communications Manager Extension Mobility
 Troubleshoot Cisco Unified Communications Manager Extension Mobility
 Configure Cisco Unified Mobility
 Troubleshoot Cisco Unified Mobility
 Implement Endpoints in Cisco Unified Communications Manager Express
 Implement Endpoint Addressing and Call Routing in Cisco Unified Communications Manager Express
 Implement Calling Privileges in Cisco Unified Communications Manager Express
 Implement Hunt Groups, Call Park, and Paging in Cisco Unified Communications Manager Express
 Implement Globalized Call Routing
 Implement TEHO, PSTN Backup, and CoS in a Globalized Call-Routing Deployment
 Implement MGCP Fallback and Survivable Remote Site Telephony
 Implement Call Admission Control
 Implement a URI-Based Dial Plan for Multisite Deployments
 Troubleshoot Globalized Call Routing
 Troubleshoot Call Admission Control
 Implement Global Dial Plan Replication
 Implement Cisco Unified Border Element
 Troubleshoot Cisco Unified Border Element