Implementing Cisco Advanced Call Control and Mobility Services

Duration: 5 Days   **Course Code: CLACCM**   **Version: 1.1**

Overview:

The Implementing Cisco Advanced Call Control and Mobility Services (CLACCM) training provides you with knowledge about advanced call control and mobility services, focusing on Cisco Unified Communications Manager features such as Globalized Call Routing, Global Dial Plan Replication, Cisco Unified Mobility, Cisco Extension Mobility, SIP URI call routing, Call Admission Control, Cisco Unified Communications Manager Express and SRST gateway technologies, Cisco Unified Border Element Call deployments, signaling and media protocols, and features such as call coverage and time of day routing.

This course is worth 40 Continuing Education (CE) credits

Target Audience:

Collaboration engineers involved in the design, implementation and troubleshooting of Cisco collaboration advanced call control solutions and mobility services.

Objectives:

- **After completing this course you should be abe to:**

- Analyze and troubleshoot SIP and media protocol

- Understand call recording options and implement time-of-day routing, call park, call pickup, and Meet-Me conferences in Cisco Unified Communications Manager

- Describe call recording options in Cisco Unified Communications Manager

- Describe how to implement call coverage in Cisco Unified Communications Manager

- Describe how to configure and troubleshoot Cisco Unified Communications Manager Extension Mobility

- Describe how to configure and troubleshoot Cisco Unified Communications Manager Unified Mobility

- Describe how to implement Cisco Unified Communications Manager Express for SIP phones

- Describe how to implement globalized call routing within and between Cisco Unified Communications Manager clusters

- Describe how to implement advanced and enhanced SRST in Cisco Unified Communications Manager and Cisco IOS gateways

- Describe how to implement CAC and AAR in Cisco Unified Communications Manager

- Describe how to implement URI calling in Cisco Unified Communications Manager for calls within a cluster and between clusters

- Describe how to troubleshoot multisite Cisco Unified Communications Manager deployments

- Describe how to implement ILS between Cisco Unified Communications Manager clusters and enable GDPR

- Configure and troubleshoot Cisco Unified Border Element

Prerequisites:

Attendees should meet the following prerequisites:

- Internet web browser usability knowledge and general computer usage
- Basic understanding of networking technologies
- Basic understanding of voice and video
- CLFNDU - Understanding Cisco Collaboration Foundations
- CLCOR - Implementing and Operating Cisco Collaboration Core Technologies

Testing and Certification

Recommended as preparation for the following exams:

- **300-815 -** Implementing Cisco Advanced Call Control and Mobility Services (CLACCM**)** exam

After you pass the 300-815 CLACCM exam you will earn the Cisco Certified Specialist - Collaboration Call Control & Mobility Implementation certification, and will satisfy the concentration exam requirement for the CCNP Collaboration professional-level certification:

Content:

Signaling and Media Protocols

- SIP Review
- H.323 Review
- SIP and H.323 Trunking Considerations
- SIP and H.323 Troubleshooting Tools

Cisco Unified Communications Manager Supplemental Services

- Call Recording Options
- Call Park
- Call Pickup
- Meet-Me Conferences
- Time-of-Day Routing

Call Coverage in Cisco Unified Communications Manager

- Overview of Call Coverage in Cisco Unified Communications Manager
- Call Hunting
- Call Queuing

Cisco Unified Communications Manager Extension Mobility

- Issues with Roaming Users
- Cisco Unified Communications Manager Extension Mobility Characteristics
- Cisco Unified Communications Manager Extension Mobility Components
- Cisco Unified Communications Manager Extension Mobility Operation
- Cisco Unified Communications Manager Extension Mobility Considerations
- Cisco Unified Communications Manager Extension Mobility Troubleshooting.

Configuring and Troubleshooting Cisco Unified CM Unified Mobility

- Issues with Multiple Devices
- Cisco Unified CM Mobility Overview
- Cisco Unified CM Unified Mobility Operation
- Cisco Unified CM Mobility Considerations
- Cisco Unified CM Unified Mobility Troubleshooting

Cisco Unified Communications Manager Express

- Cisco Unified Communications Manager Express Overview
- Endpoint Addressing and Call Routing in Cisco Unified Communications Manager Express
- Calling Privileges in Cisco Unified Communication Manager Express

Globalized Call Routing

- Overview of Multisite Dial Plans
- Globalized Call Routing Overview
- Globalized Call-Routing Number Formats
- Globalization of Localized Call Ingress
- Localization During Call Egress
- Calls that involve Non-DID Endpoints
- TEHO, Including Local PSTN Backup
- Class of Service in Globalized Call Routing Deployments

Advanced Remote Site Survivability

- Overview of Remote Site Survivability
- Cisco Unified SRST
- Reachability Within the Remote Site and to the Outside

Call Admission Control in Cisco Unified Communications Manager

- CAC Overview
- Location CAC Within a Cluster
- Location CAC for Off-Cluster Calls Using Locally Configured Locations
- Intercluster Location CAC
- PSTN Backup for Intracluster Calls Denied by CAC
- PSTN Backup for Intercluster Calls Denied by CAC

URI Calling in Cisco Unified Communications Manager

- URI Call-Routing Overview
- Directory URIs in Cisco Unified Communications Manager
- URI Call-Routing Process
- SIP Route Patterns and SIP Trunks
- URI Call Routing Considerations

Multisite Cisco Unified Communications Manager Deployments

- Call Routing Troubleshooting
- Calling-Party Presentation Troubleshooting
- Egress Device Selection and SIP Trunk Troubleshooting
- CAC Troubleshooting

Global Dial Plan Replication

- GDPR Overview
- ILS Characteristics
- GDPR Components
- Call Routing with GDPR
- PSTN Backup

Cisco Unified Border Element

- Overview of Cisco Unified Border Element
- Cisco Unified Border Element Call Routing
- Explore Advanced Cisco Unified Border Element Dial-Peer Features
- Cisco Unified Border Element SIP Header and SDP Manipulation
- Cisco Unified Border Element Signaling and Media Bindings
- Toll Fraud Prevention
- Registration-Based Session Initiation Protocol Trunks
- Multiple Trunks Using Tenants
- SIP Transport Layer Security Support
- Cisco Unified Border Element Troubleshooting

Labs:

- Discovery Lab 1: Analyze SIP, H.323, and Media Protocols
- Discovery Lab 2: Troubleshoot SIP and Media Protocols
- Discovery Lab 3: Implement Cisco Unified Communications Manager Supplemental Services
- Discovery Lab 4: Implement Call Hunting and Call Queueing in Cisco Unified Communications Manager
- Discovery Lab 5: Configure Cisco Unified Communications Manager Extension Mobility
- Discovery Lab 6: Troubleshoot Cisco Unified Communications Manager Extension Mobility
- Discovery Lab 7: Configure Cisco Unified Mobility
- Discovery Lab 8: Troubleshoot Cisco Unified Mobility
- Discovery Lab 9: Implement Endpoints in Cisco Unified Communications Manager Express
- Discovery Lab 10: Implement Endpoint Addressing and Call Routing in Cisco Unified Communications Manager Express

- Discovery Lab 11: Implement Calling Privileges in Cisco Unified Communications Manager Express
- Discovery Lab 12: Implement Globalized Call Routing
- Discovery Lab 13: Implement TEHO, PSTN Backup, and CoS in a Globalized Call-Routing Deployment
- Discovery Lab 14: Implement Advanced Survivable Remote Site Telephony
- Discovery Lab 15: Implement Call Admission Control
- Discovery Lab 16: Implement a URI-Based Dial Plan for Multisite Deployments
- Discovery Lab 17: Troubleshoot Globalized Call Routing
- Discovery Lab 18: Troubleshoot Call Admission Control
- Discovery Lab 19: Implement Global Dial Plan Replication
- Discovery Lab 20: Implement Cisco Unified Border Element
- Discovery Lab 21: Troubleshoot Cisco Unified Border Element

Further Information:

For More information, or to book your course, please call us on 0800/84.009

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