

Cisco CCIE Collaboration Advanced Workshop (CIEC)

Duration: **5 days**

Course Overview

The Cisco 360 Learning Program for CCIE Collaboration is a complete, 360-degree, blended learning program to accelerate competency and build the skills that are necessary for expert certification. The program aids students in preparation for the Cisco CCIE® Collaboration lab exam.

CCIE Collaboration Advanced Workshop (CIEC) v1.0 is part of the Cisco 360 Learning Program and teaches students how to use an expert-level, problem-solving process, including options analysis, to support complex Cisco Collaboration technologies and topologies.

The course goal is to develop an expert-level problem-solving process including options analysis to support complex Cisco Collaboration technologies and topologies. This is a highly intensive training, engaging students full time throughout the week.

The course is delivered worldwide by our specially trained CCSI instructors, authorized and certified by Cisco for this specific program.

Who should attend?

This course is for technical professionals who are in their initial stages of preparing for the Cisco CCIE Collaboration Lab Exam. The target audience is CCIE Collaboration candidates.

Certifications

This course is part of the following Certifications:

1. [Cisco Certified Internetwork Expert Collaboration](#) (CCIE)

Prerequisites

Prior to attending Cisco CCIE Collaboration Advanced Workshop, students should be very familiar with internetworking technologies, Cisco products, and Cisco Collaboration application features. Specifically, before attending this course, students should be able to demonstrate advanced level competencies (knowledge and skills) equivalent to the following:

1. Telephony and dial plan design skills
2. Cisco Unified Communications Manager configuration skills
3. Cisco gateway and gatekeeper configuration skills
4. Cisco Unified Communications troubleshooting skills

5. Cisco Unified Communications Manager Express and Cisco Unity Express skills
6. QoS configuration skills
7. Cisco Unity Connection and Cisco Unified Contact Center Express configuration skills
8. Cisco Unified IM and Presence configuration skills

To gain the prerequisite skills and knowledge, students must have passed the CCIE Collaboration Written Exam.

Course Objectives

After attending this course, you will be able to :

1. Describe CCIE level problem-solving approach to QoS task analysis
2. Describe the call and message flows, selected features, and troubleshooting approaches for Cisco Unity Connection, Cisco Unified IM and Presence, and Cisco Unified Contact Center Express
3. Describe how globalized call routing works and how it simplifies dial plan deployments in large customer environments
4. Describe Service Advertisement Framework and Call Control Discovery
5. Describe how Enhanced Location CAC works and how it is implemented in Cisco Unified Communications Manager deployments
6. Describe various hardware- and software-based media resources that include features like conferencing, transcoding, MOH, and others
7. Describe how URI dialing is implemented in the Cisco Unified Communications Manager and then what to consider when implementing SIP with other vendors
8. Explain how ILS works and how to implement it, and describe its main components
9. Explain the different call-routing tables that are available in Cisco Unified Communications Manager, as well as how the tables are used to route calls
10. Describe Cisco EMCC

Course Content

1. Quality of Service
2. Voice Applications
3. Globalized Call Routing
4. Service Advertisement Framework and Call Control Discovery
5. Enhanced Location CAC
6. Media Resources and Codec Preferences
7. SIP URI Dialing and Advanced SIP Deployments
8. Intercluster Lookup Service
9. Call-Routing Priorities
10. Cisco EMCC

Lab Exercises

- QoS in a Collaboration Environment
 1. Implement and Troubleshoot Voice Messaging

- 2. Implement and Troubleshoot IM and Presence**
- 3. Implement and Troubleshoot Customer Care**
- 4. Verify Globalized Call Routing**
- 5. Implement Call Control Discovery**
- 6. Implement Enhanced Location CAC**
- 7. Troubleshoot Media Resources**
- 8. Implement SIP URI Dialing and SIP Connectivity to Third-Party SIP Call Control Domains**
- 9. Implement Intercluster Lookup Service**
- 10. Verify Call Routing**
- 11. Implement Cisco EMCC**
- 12. Cisco 360 CCIE Collaboration Assessment Lab 1**