Implementing Cisco Collaboration Cloud and Edge Solutions (CLCEI)

Cisco

- **Nível:** Avançado
- **Duração:** 35h

Sobre o curso

The **Implementing Cisco Collaboration Cloud and Edge Solutions (CLCEI)** course provides you with knowledge about Cisco® Expressway Series solutions enabling business-to-business (B2B) calls, Cisco Mobile, remote access, authentication options, and additional Cisco Expressway Series features. Through a combination of lessons and hands-on labs, you will learn how to leverage collaborative technology to access secure, collaborative work supports including video, voice, content, and remote workloads.

This course also prepares you for the **300-820 Implementing Cisco Collaboration Cloud and Edge Solutions (CLCEI)** exam.

This course will help you:

- Acquire the knowledge and skills to use the tools and systems designed to facilitate team-based collaboration whether in-office or remote.
- Gain hands-on experience in using Cisco Expressway software for secure, remote access for phones, endpoints, smartphones, tablets, video, and other communication devices to support nontraditional workspaces.
- Prepare for the **300-820 CLCEI** exam

After taking this course, you should be able to:

- Configure and troubleshoot Cisco Unified Communications Manager and Cisco Expressway Series integration
- Describe the Cisco Expressway-C additional features
- Configure and troubleshoot Cisco Collaboration solutions for B2B calls
- Describe how to secure B2B communication with Cisco Expressway Series
- Describe the Mobile and Remote Access (MRA) feature
- Describe the Cisco Expressway MRA security and integration options, including integration with Cisco

Unity® Connection and Cisco Instant Messaging and Presence (IM&P)
- Configure Cisco Webex® Hybrid Services

Destinatários

Collaboration Engineers involved in the design, implementation and troubleshooting of Cisco collaboration technologies, as well as administrators involved in the support and troubleshooting of Cisco collaboration technologies.

Pré-requisitos

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

- Understanding of networking technologies
- Understanding voice and video
- Knowledge of Cisco collaboration core technologies
- Session Initiation Protocol (SIP) and Extensible Messaging and Presence Protocol (XMPP) signaling protocol fundamentals
- Collaboration call control fundamentals of Cisco Unified Communications Manager

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

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

Metodologia

Instructor-led training: 5 days in the classroom with hands-on lab practice.

Programa

- Configuring and Troubleshooting the Cisco Expressway Series
- Configuring Cisco Expressway Additional Features

- Configuring and Troubleshooting Cisco Unified Communications Manager and Cisco Expressway Series
- Configuring and Troubleshooting Cisco Collaboration Solutions for Business-to-Business
- Securing Business-to-Business Communication
- Configuring and Troubleshooting Mobile and Remote Access
- Integrating and Securing Mobile and Remote Access
- Configuring Cisco Webex Hybrid Services

Configuring and Troubleshooting the Cisco Expressway Series

- Cisco Expressway Series Architecture
- Describe SIP and H.323 in the Cisco Expressway Series
- Describe Interworking in the Cisco Expressway Series
- Zones
- Digit String Manipulation
- Search Rules
- Transforms
- Troubleshoot Call Processing the Cisco Expressway Series
- Backup and Restore

Configuring Cisco Expressway Additional Features

- Describe Bandwidth Management
- Hardening Local Endpoint Registrations
- Describe Cisco Expressway Security and Clustering Features

Configuring and Troubleshooting Cisco Unified Communications Manager and Cisco Expressway Series

- Cisco Unified Communications Manager and Cisco Expressway-C Integration Overview
- Call Flow
- Dial Plan Overview
- Call Policy
- Troubleshooting Options for Cisco Unified Communication Manager and Cisco Expressway-C Integration

Configuring and Troubleshooting Cisco Collaboration Solutions for Business-to-Business

- Describe Supported Services for B2B Collaboration
- Describe Prerequisites for Business to Business Collaboration
- Call Flow Including Cisco Unified Communications Manager Endpoints
- Network Address Translation in a Collaboration Environment

- Cisco Expressway Series B2B Call Troubleshooting

Securing Business-to-Business Communication

- Firewall Traversal
- Certificates
- Secure Media
- Secure Media Between Cisco Unified Communications Manager and Cisco Expressway Series
- Toll Fraud Prevention

Configuring and Troubleshooting Mobile and Remote Access

- Describe Prerequisites for Mobile and Remote Access
- Describe Service Discovery
- Explore Expressway Settings for MRA
- Certificates
- HTTP Proxy
- Cisco Jabber Registration Procedure
- Cisco Jabber Registration in Hybrid Deployment
- Cisco Jabber Configuration File
- MRA Troubleshooting

Integrating and Securing Mobile and Remote Access

- Secure Cisco Unified Communications Integration
- Cisco Unity Connection Integration
- Cisco MRA Access Control Options
- Additional Cisco MRA Features

Configuring Cisco Webex Hybrid Services

- Cisco Webex Teams
- Describe Cisco Webex Control Hub
- Describe Cisco Webex Hybrid Media Services
- Describe Cisco Expressway Network Requirements for Using Hybrid Call Service Connect
- Explore Cisco Expressway Requirements for Using Hybrid Call Service Connect
- Describe Cisco Webex Video Mesh

Labs

- Deploy Virtualized Cisco Expressway
- Perform the Initial Cisco Expressway Series Configuration
- Register Endpoints on Cisco Expressway Series

- Call Search History and Registration
- Troubleshooting Tools
- Configure Cisco Expressway Series Bandwidth Management and Registration Restrictions
- Troubleshoot Cisco Expressway Series Endpoint Registration and Local Dial Plan
- Configure Cisco Expressway Series Security Features
- Configure Cisco Unified Communications Manager to Connect with Cisco Expressway-C
- Troubleshoot Cisco Unified Communications Manager and Cisco Expressway Series Integration
- Configure Cisco Unified Communications Manager and Cisco Expressway Series Integration (Practice Activity)
- Implement a B2B Cisco Collaboration Solution
- Troubleshoot B2B Calls on the Cisco Expressway Series
- Troubleshoot B2B Calls on the Cisco Expressway Series (practice activity)
- Secure a B2B Cisco Collaboration Communication
- Configure MRA on the Cisco Expressway Series
- Troubleshoot MRA on the Cisco Expressway Series
- Configure MRA with Additional Application Integrations
- Prepare for Cisco Webex Teams Integration
- Configure Cisco Webex Hybrid Services