
Cisco® Implementing Cisco® Collaboration Cloud and Edge Solutions v1.0 (CLCEI)

Overview

This course provides students knowledge about Cisco Expressway Series solutions, such as B2B calls, Cisco Mobile and Remote Access for remote workers, authentication options, and additional Cisco Expressway Series features.

Prerequisite Comments

The knowledge and skills that you are expected to have before attending this course are:

- Understanding of networking technologies
 - Understanding of voice and video
 - Knowledge of Cisco collaboration core technologies
 - SIP and XMPP signaling protocols fundamentals
 - Collaboration call control fundamentals of Cisco Unified Communications Manager
- These are the recommended offerings that may help you meet these prerequisites:
- Understanding cisco Collaboration Foundations v1.0 (CLFNDU)
 - Implementing and Operating Cisco Collaboration Core Technologies v1.0 (CLCOR)

Target Audience

This section specifies the primary and secondary target audiences of this course by job roles and notes the relevance to each job role.

Collaboration Engineers and Administration

Primary audiences:

- Collaboration engineers involved in the design, implementation, and troubleshooting of Cisco collaboration core technologies.

Secondary audiences:

- Administration involved in support and troubleshooting of Cisco collaboration technologies.

Course Objectives

Upon completing this course, you will be able to meet these objectives:

- Describe the Cisco Expressway - C features and functionality within the collaboration architecture
- 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 MRA feature
- Describe the Cisco Expressway MRA security and integration options, including integration with Cisco Unity Connection and Cisco IM&P
- Configure Cisco Webex Hybrid Services

Course Outline

1 - Configuring and Troubleshooting the Cisco Expressway Series

Cisco Expressway Series Architecture
Discovery 1: Deploy virtualized Cisco Expressway
Discovery 2: Perform the initial Cisco Expressway series configuration
Describe SIP and H.323 in the Cisco Expressway series
Describe interworking in the Cisco Expressway series
Discovery 3: Register endpoints on Cisco Expressway series
Zones
Digital string manipulation
Search rules
Transforms
Discovery 4: Call search history and registrations
Troubleshoot call processing on Cisco Expressway series
Discovery 5: Troubleshooting tools
Backup and restore
Reference

2 - Configuring Cisco Expressway Additional Features

Describe bandwidth management
Hardening local endpoint registrations
Discovery 6: Configure Cisco Expressway series bandwidth management and registration restrictions
Discovery 7: Troubleshoot Cisco Expressway series endpoint registration and local dial plan
Describe Cisco Expressway security and clustering features
Discovery 8: Configure Cisco Expressway series security features

3 - Configuring and Troubleshooting Cisco Unified Communications Manager and Cisco Expressway Series

Cisco unified communications manager and Cisco Expressway-C integration overview
Dian plan overview
Call policy
Discovery 9: Configure Cisco unified communications manager to connect with Cisco Expressway-C
Troubleshooting options for Cisco unified communications manager and Cisco Expressway-C intergration
Discovery 10: Troubleshoot Cisco unified communications manager and Cisco Expressway series integration
Discovery 11: Configure and troubleshoot Cisco unified communications manager and Cisco Expressway series integration (practice activity)
References

4 - Configuring and Troubleshooting Cisco Collaboration Solutions for Bussiness-to-Bussiness

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
Discovery 12: Implement a B2B Cisco collaboration solution
Cisco Expressway series B2B call troubleshooting
Discovery 13: Troubleshoot B2B calls on the Cisco Expressway series
References
Discovery 14: Troubleshoot B2B calls on the Cisco Expressway series (practice activity)

5 - Securing Business-Business Communication

Firewall Traversal
Secure media
Secure media between Cisco unified communications manager and Cisco Expressway series
Toll fraud prevention
Discovery 15: Secure a B2B Cisco collaboration communication
References

6 - 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 procedure in Hybrid deployment
Cisco jabber configuration file
Discovery 16: Configure MRA on the Cisco Expressway series
MRA troubleshooting
Discovery 17: Troubleshoot MRA on the Cisco Expressway series

7 - 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
Discovery 18: Configure MRA with additional application integrations
References

8 - Configuring Cisco Webex Hybrid Services

Cisco Webex teams
Describe Cisco Webex control hub
Describe Cisco Webex hybrid media services
Describe Cisco Expressway requirements for using hybrid call service connect
Explore Cisco Expressway requirements for using hybrid call service connect
Describe Cisco Webex video mesh
Discovery 19: Prepare for Cisco Webex teams integration
Discovery 20: Configure Cisco Webex hybrid services

Related Courses, Certifications, Exams

- Cisco® Understanding Cisco® Collaboration Foundations v1.1 (CLFNDU)
- Cisco® Implementing and Operating Cisco® Collaboration Core Technologies v1.1 (CLCOR)