

Understanding Cisco Collaboration Foundations (CPLL-CLFNDU)

Duration: 180 days

The Cisco Collaboration Foundations (CLFNDU) Learning Path guides you through the process of deploying and managing Cisco's on-premises and cloud-based communication solutions. This includes configuring Cisco Unified Communications Manager for device registration, dial plans, calling features, and reporting, along with using media resources like conferencing tools and voicemail. You will also explore Cisco's edge services, such as Expressway for secure remote access and Unified Border Element for IP-to-PSTN connectivity. The Learning Path covers Webex setup, user and device management, troubleshooting in Control Hub, and hybrid solutions like Edge Audio and Video Mesh. Additionally, you will study Cloud Connected UC for integrating Unified Communications Manager with Control Hub.

Skills You'll Learn

- Understand the overall architecture of Cisco collaboration solutions, including on-premises, cloud, and hybrid deployments
- Explore core media resources like conferencing and transcoding and compare audio/video codecs used in communication
- Understand SIP message flows for registration, call setup, and teardown processes
- Manage Cisco Unified Communications Manager users, roles, groups, and authentication settings
- Identify Cisco IP phone and video endpoint models, along with their firmware support
- Design and troubleshoot dial plans and call routing in Cisco Unified Communications Manager, including directory numbers, route patterns, translation patterns, digit manipulation, and calling privileges
- Develop practical troubleshooting and maintenance skills using tools like Real-Time Monitoring Tool, Cisco Call Detail Records (CDR), Analysis and Reporting (CAR), Unified Reporting, and Cisco Disaster Recovery System (DRS)
- Configure and support hybrid work environments with Webex tools such as Voice Mail, Edge Audio, and Video Mesh
- Administer hybrid UC environments through Cisco Webex Cloud Connected UC (CCUC) for centralized management of on-prem systems via Webex Control Hub

Learning Path Objectives

1. **Cisco Collaboration Foundations:** Understand Cisco's on-premises and cloud-based solutions, their components, and the codecs needed for audio and video communication. Learn how to manage users and endpoints within Cisco Unified Communications Manager.
2. **On-premises Cisco Collaboration Solution:** Develop hands-on expertise in deploying and supporting Cisco Unified Communications Manager, from initial setup to device registration, dial plans, Class of Service, calling features, and reporting.

3. **On-Premises Applications and Media Resources:** Understand key media resources like conferencing, music on hold, and media termination points. Dive into Instant Messaging and Presence for soft clients like Jabber and Webex, plus voicemail management with Cisco Unity Connection.
4. **Cisco Collaboration Edge Services:** Explore Expressway for secure firewall traversal and remote access, alongside Cisco Unified Border Element for IP-to-PSTN connectivity with service providers.
5. **Cisco Cloud Collaboration Solution:** Learn to configure Webex via Control Hub, manage users and devices, set up Webex Calling with Cloud Connector PSTN partners, enable calling features, and use troubleshooting and reporting tools.
6. **Cloud and Hybrid Applications and Media Resources:** Discover hybrid collaboration tools, including cloud voicemail, Edge Audio for conferencing, Video Mesh for hybrid meetings, and Cloud Connected UC for integration and migrations.

