

## WEBEX Calling Monitoring and Troubleshooting (WEBEX-CALL-TSHOOT)

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In this WEBEX Calling Monitoring and Troubleshooting 4-day instructor-led course is designed to provide in-depth, practical expertise in deploying, operating, and troubleshooting Cisco Webex Calling within enterprise environments, with a strong emphasis on real-world fault isolation and resolution. The curriculum begins with a focused overview of Cisco Webex Calling, highlighting key differentiators, dedicated instance deployments, and hybrid use cases to ensure learners understand the underlying architecture and service models before moving into operational scenarios. From there, the course addresses critical network planning, readiness assessments, security requirements, ports and protocols, and private network connectivity, enabling students to identify and resolve foundational issues that commonly impact call quality, registration, and service availability during deployments and migrations.

As the course progresses, learners develop hands-on troubleshooting skills for adding phones and devices, resolving registration failures, and using analytics to validate device health and behavior. User management troubleshooting is covered in depth, including provisioning failures, directory synchronization issues, SCIM workflows, Azure AD integration, and single sign-on using ADFS and OpenID Connect, ensuring administrators can diagnose identity and authentication problems that affect user onboarding and calling functionality. The course then transitions into configuration and troubleshooting of Cisco Webex Calling features such as auto attendants, call queues, hunt groups, hoteling, hotdesking, shared and virtual lines, voicemail, and executive assistant services, focusing on how misconfigurations impact call flows and user experience.

Advanced modules concentrate on PSTN architectures, local gateway deployments, and call routing design using CUBE and third-party SBCs, including certificate-based gateways, high availability, trunk configuration, dial plans, route groups, and interoperability with Unified CM. Learners gain structured troubleshooting methodologies for PSTN failures, routing issues, survivability scenarios, and emergency calling, supported by deep analysis using Cisco Webex Control Hub monitoring, analytics dashboards, alerts, webhooks, detailed call history, media quality metrics, logs, and packet captures with Wireshark. The course is reinforced with an extensive lab program that simulates real enterprise issues across network connectivity, user provisioning, device registration, Webex App behavior, directory synchronization, gateways, call routing, analytics, and survivability, equipping students with the confidence and technical depth needed to support Cisco Webex Calling in production environments.

#### How you'll benefit

This class will help you:

- Become well-prepared to Monitor, Identify, and Resolve a wide range of Webex Calling Issues
- Master advanced troubleshooting techniques

#### Course Duration

4 days

#### Course Price

\$3,895.00 or 38 CLCs

#### Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

## Why Attend with Current Technologies CLC

- Our Instructors are in the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

## Who Should Attend

The primary audience for this course is as follows:

- Collaboration Administrators
- Collaboration Engineer
- Network Administrators
- Network Engineer
- Helpdesk Support Administrators and Engineers
- IT Staff and Managers

## Module 1: Webex Calling Overview

- Module Topics
- Webex Calling Overview
- Webex Calling Differentiators
- Dedicated Instance for Webex Calling
- Hybrid Webex Calling Use Cases
- Module Summary

## Module 2: Network Planning, Network Assessment, and Security

- Module Topics
- Webex Administration Client Requirements
- Network Requirements
- Network Assessment for Webex
- Webex Calling Ports and Protocols
- Private Network Connect to Webex Calling
- Webex Calling Migration Considerations
- Module Summary

## Module 3: Troubleshooting Adding Phones and Devices

- Module Topics
- Adding a Phone Assigned to a User
- Adding a Personal Device
- Adding a Common Area Phone
- Adding a Shared Device
- Troubleshooting Device Registration and Analytics
- Module Summary

## Module 4: Troubleshooting User Management

- Module Topics
- User Provisioning
- Troubleshooting Users
- Directory Synchronization
- System for Cross-domain Identity Management (SCIM)
- Integrate Azure AD with Webex
- Single Sign-On with ADFS
- OpenID Connect and PKCE
- Module Summary

## **Module 5: Configuring Webex Calling Settings and Features**

- Module Topics
- Feature Overview
- Webex Calling-Service Settings
- Webex Calling – Client Settings
- Auto Attendant
- Call Park Extension and Call Park Group
- Call Pickup
- Call Queues
- Hunt Groups
- Hoteling
- Hotdesking
- Virtual Extensions
- Virtual Lines
- Shared Line
- Voicemail Group
- Executive Assistant
- Module Summary

## **Module 6: Call Routing and PSTN Gateways**

- Module Topics
- PSTN Gateway Options and Overview
- Cisco Provided PSTN
- Call Routing with Cloud Connect for Webex Calling (formerly Cloud Connected PSTN) Architecture
- Premises-Based PSTN Architecture
- CUBE Premises-Based Architecture
- Premise-Based Cube Registration Based
- Multiple Registration-Based Gateway on a Single CUBE
- Certificate-Based Premises-Based PSTN
- Configuring a Certificate-Based PSTN
- CUBE Configuration Platform Configuration and Certificates
- CUBE Certificates Configuration
- CUBE Trunk Enablement Configuration
- CUBE Call Routing Configuration
- CUBE High Availability
- Managing Gateways from the Webex Control Hub
- Enroll the Gateway in the Control Hub
- Validate Registration-Based LGW Configuration through Control Hub
- 3rd Party SBC as a Local Gateway
- Module Summary

## **Module 7: Webex Calling Trunks, Route Group Dial Plans**

- Module Topics
- Webex Calling Routing Overview
- Webex Calling Locations
- Dial Plans
- Route Groups, Trunks, and Dial Plans
- Webex Calling Routing Flows
- Webex Calling Caller Identity
- Interworking Webex Calling and Unified CM On-Premise
- Call Routing with Premises-Based PSTN
- Dial Plan
- PSTN Migration
- Survivability

- ICE: Media Path Optimization
- PSTN for Room Video Systems
- Module Summary

### **Module 8: Webex Calling PSTN/Gateway Troubleshooting**

- Module Topics
- PSTN/Gateway Troubleshooting Overview
- Troubleshooting Call Routing
- Troubleshooting PSTN Calling
- Troubleshooting Case Study
- Module Summary

### **Module 9: Webex Calling Site Survivability**

- Module Topics
- Site Survivability Solution Overview
- Webex App and Endpoint Changes
- Call Forward Unreachable Settings
- Emergency Calling
- Survivability Call Flows
- Deployment Workflow
- Managing Gateways from the Webex Control Hub
- Add a New Gateway Instance in Control Hub
- Enroll the Gateway in the Control Hub
- Assign Survivability Service to the Gateway from within the Control Hub
- Platform Licenses
- Certificates
- Common Global Configuration
- Data Sync and Updated CLI
- Debugs
- Show Commands
- Limitations and Restrictions
- Testing Survivability
- Colocation of Unified-SRST with Webex-SGW
- Module Summary

### **Module 10: Monitoring, Analytics, and Troubleshooting with Webex Control Hub**

- Module Topics
- Webex Calling Monitoring, Analytics, and Troubleshooting Overview
- Webex Sites Status
- Webex Calling Alerts and Webhooks
- Webex Analytics > Dashboards
- Webex Analytics > Calling
- Webex Analytics > Calling Media Quality
- Webex Analytics > Calling - Call Queue- Call Queue Stats
- Webex Analytics > Call Queue- Agent Stats
- Webex Analytics > Calling Auto-Attendant
- Webex Troubleshooting
- Phone Logs and Problem Reports
- Module Summary

## **LABS**

Lab 1: Connecting to the Webex Calling Lab

Lab 2: Verify and Troubleshoot Network Connectivity

Lab 3: Troubleshoot Webex Calling Control Issues

Lab 4: Troubleshoot Adding Users

Lab 5: Troubleshoot Phone Registration

Lab 6: Troubleshoot Webex App

Lab 7: Troubleshoot Phone and Webex App Issues using Wireshark

Lab 8: Setting up Alerts

Lab 9: Troubleshoot Directory Synchronization Issue and Azure AD Issues

Lab 10: Troubleshoot Webex Calling Features

Lab 11: Troubleshoot Dial Plans

Lab 12: Troubleshooting Call Routing

Lab 13: Troubleshoot Premise-Based Gateways

Lab 14: Troubleshoot Gateways Issues Using Wireshark

Lab 15: Webex Calling Analytics

Lab 16: Webex Calling Troubleshooting