

High-Touch Delivery Learning Services

Cisco TelePresence Troubleshooting Training (TTST)



The Cisco TelePresence Troubleshooting Training version 1.0 instructor-led course offered by High-Touch Delivery Learning Services provides students with the ability to troubleshoot issues ranging from configuration errors to complex infrastructure issues. This course gives students a detailed understanding of what is happening at a low level and the skills to be able to identify the likely causes of errors and resolve them. The course also recognizes that in many installations the engineer does not have access to all parts of the telepresence network and thus will show students how to build up evidence of problems in order to demonstrate it to other departments and to the Cisco® Technical Assistance Center (TAC).

Duration

Five days.

Target Audience

This course is designed for engineers who are responsible for installing, configuring, and maintaining devices in a telepresence network. The primary audience for this course includes:

- Customer support professionals who provide second- and third-level support rather than first-level helpdesk support
- Partner technical professionals

Course Objectives

Upon completion of this course, you should be able to:

- Locate and interpret diagnostic information related to registration, calls, call quality, and provisioning on infrastructure devices including the Cisco VCS, Cisco Unified Communications Manager (UCM), and Cisco TelePresence® Management Suite (TMS)
- Obtain and display IP traces; display logs on Cisco C Series Codecs and the Cisco VCS; capture, display, and interpret Session Initiation Protocol (SIP), H.320, H.323, and interworking logs on Cisco TelePresence hardware; identify and troubleshoot faults in the call setup process; and trace and interpret messages involved in connecting a provisioned endpoint
- Describe symptoms of faults and good fault-prevention methods and use Cisco TMS to identify reliability patterns

- Describe how Cisco TMS communicates with other infrastructure devices and troubleshoot faults within Cisco TMS itself
- Troubleshoot issues related to firewalls and clustering on Cisco TelePresence infrastructure devices and configure relevant service records (SRV) for Domain Name System (DNS)
- Describe the effect of network settings on the telepresence experience
- Communicate effectively with Cisco Technical Assistance Center (TAC) and with the Cisco Global Licensing Operations (GLO) team
- · Resolve multiple faults in a preconfigured network

Course Prerequisites

Following are the prerequisites for this course:

- Cisco TelePresence Support and Operations Training (TSOT)
- Cisco TelePresence Installation and Configuration Training (TICT) or Cisco Installing Advanced TelePresence Video Solutions 1 and 2 (PAIATVS1 and 2), or equivalent knowledge and experience
- Networking knowledge, including IPv4 addressing, Open Standards Institute (OSI) 7-layer model, uses of switches and routers, Dynamic Host Configuration Protocol (DHCP), cabling, and DNS

Course Outline

The course outline is as follows:

- Module 1: Review of Cisco TelePresence Principles and Network Build
- Module 2: Basic Fault Finding
- Module 3: Tools
- · Module 4: Protocols
- Module 5: Fault-Finding Process
- Module 6: Cisco TelePresence Management Suite
- Module 7: IP Network Infrastructure
- Module 8: Clustering
- Module 9: TAC
- · Module 10: Case Study

Lab Outline

The lab outline is as follows:

- Lab 1: Network Configuration and Testing
- Lab 2: Cisco VCS and Endpoint Fault Finding
- Lab 3: Cisco UCM Provisioning Fault Finding
- Lab 4: Cisco TMS Provisioning Fault Finding
- Lab 5: Cisco Multipoint Control Unit (MCU) Fault Finding
- Lab 6: Cisco Conductor Fault Finding
- Lab 7: Cisco TelePresence Manager Fault Finding

- . Lab 8: Cisco TelePresence Multipoint Switch Fault Finding
- . Lab 9: IP Traces
- Lab 10: Capturing and Viewing Logs, Part 1
- · Lab 11: Capturing and Viewing Logs, Part 2
- · Lab 12: Network Tools
- Lab 13: Reading H.323 Logs
- · Lab 14: Reading SIP Logs
- · Lab 15: Reading Internetworking Logs
- · Lab 16: Reading ISDN Logs
- Lab 17: Reading Provisioning Logs
- Lab 18: Fault-Finding Process
- Lab 19: Cisco TMS Device Connectivity Faults
- · Lab 20: Fault Finding Using Cisco TMS
- · Lab 21: Firewall Traversal
- · Lab 22: DNS Configuration
- · Lab 23: Cisco VCS Cluserting
- Lab 24: TAC
- · Lab 25: Case Study



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