



DATASHEET

CISCO IP TELEPHONY TROUBLESHOOTING

In this authorized Cisco Systems® course, get the knowledge and skills required to troubleshoot enterprise Cisco® CallManager, Cisco Unity®, and IP network deployments. You will begin by learning a systematic approach to troubleshooting Cisco Unified Communications networks and reviewing Cisco CallManager signaling protocols, and you will continue with topics such as dial plans, E-911 implementation, internal service tools, and command-line interface tools. You will cover external tools, troubleshoot gateway problems with routers and switches, and look at call detail records and the administrative reporting tool, then finish up by troubleshooting voice-over-IP (VoIP) quality and Cisco Unity problems.

COURSE NUMBER

5605

DURATION

Five days

OBJECTIVES

Upon completion of this course, students will be able to perform the following tasks:

- Apply effective troubleshooting methods to resolve issues in complex IP telephony networks
- Troubleshoot common Cisco CallManager configuration, integration, and operation problems
- Troubleshoot Cisco Unified Communications and Microsoft components using the appropriate utilities and management tools
- Troubleshoot common router, switch, and gateway configuration; integration; and operation issues and problems in Cisco Unified Communications networks
- Resolve quality-of-service (QoS) issues in complex IP telephony networks using effective and appropriate troubleshooting and implementation methods
- Troubleshoot common Cisco Unity configuration, integration, and operation issues and problems
- Employ the Cisco Technical Assistance Center (TAC) as a troubleshooting and escalation tool

TARGET AUDIENCE

System engineers, field engineers, and anyone attempting IP telephony certification that includes IP telephony troubleshooting, would benefit.

PREREQUISITES

CCNA® equivalent experience as taught in the Interconnecting Cisco Network Devices (ICND) course.

COURSE OUTLINE

Module 1. Applying Troubleshooting Methods

- Overview of IP Telephony Troubleshooting
- Baseline and Document Integrated Voice and Data Networks
- Troubleshooting IP Telephony Networks

Module 2. Troubleshooting Cisco CallManager, Networks, Signaling, and Dial Plans

- Troubleshooting the Cisco CallManager Signaling Architecture
- Troubleshooting Cisco CallManager Dial Plans, Call Routing, and Media Resources
- Troubleshooting Cisco CallManager Computer Telephony Integration (CTI), Java Telephony Application Programming Interface (JTAPI), and Telephony Service Provider (TSP) Integration
- Troubleshooting Cisco CallManager Upgrades

Module 3. Troubleshooting Cisco Unified Communications Components

- Applying Cisco CallManager and Operating System Troubleshooting Tools
- Using Database Tools
- Using Other Useful Troubleshooting Tools

Module 4. Troubleshooting Network Infrastructure

- Troubleshooting Data Network Infrastructure
- Troubleshooting Gateways
- Troubleshooting Gatekeepers

Module 5. Applying QoS in VoIP Networks

- Resolving Voice QoS Issues with Cisco QoS Tools
- Troubleshooting VoIP Quality Problems
- Troubleshooting Echo

Module 6. Troubleshooting Cisco Unity Voicemail Systems

- Troubleshooting Common Cisco Unity Configuration, Integration, and Operation Issues
- Troubleshooting Cisco Unity Voicemail Systems
- Applying Cisco Unity Troubleshooting Tools
- Applying Cisco Unity System Tools.
- Troubleshooting Common Cisco Unity Problems

Module 7. Escalating Trouble Tickets to the TAC

- Using the TAC and Opening Cases
- Opening a TAC Case Using the TSP

INCLUDED MATERIALS

- Student guide

REGISTRATION INFORMATION

For more information about schedules and registration for this course, send e-mail to aeskt_registration@cisco.com.

For more information about Advanced Services Education course offerings, as well as Curriculum Planning Services and custom training options, refer to the Advanced Services Education Website: www.cisco.com/go/ndm.



Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters

Cisco Systems International
BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters

Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

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