eogogicsinc

Course ID	Course Title
CALEA	**Communications Assistance to Law Enforcement Act (CALEA): Technologies and Compliance for TDM and Packet Voice Services**
Course Duration	
2-3 days	

Related Courses

- Emerging Communications and Technologies in Public Safety, Law Enforcement and Homeland Security (EMERGE-LAW, 2-3 days)
- Security, Privacy and Information Integrity for Managers Executives and Policy Makers (SECURITY-EXEC, 2-3 days)
- IEEE 802.11 (WiFi) Wireless LAN Security (WIFISEC, 3 days)
- Architecture and Operation of Wireless Networks for Technical Investigators: From Their Analog Origins to the Emerging 3G Technologies (WIRELESS-TI, 4-5 days)
- IP, Location and Geo-Location Technologies for Law Enforcement, Intelligence and Public Safety (IPGEOLOC, 2-3 days)
- IP Security v2 (IPSec v2) Architecture and Protocols (IPSEC, 2-3 days)
- IP Security v3 (IPSec v3) Workshop (IPSECWS, 2-3 days)
- Principles of Network Security: CompTIA Security+ and US DoD Directive 8570.1 (NETSEC, 3-4 days)
- SIP Security: A Comprehensive Short Course (SIPSEC, 2 days)
- VoIP Security (VOIPSEC, 2 days)

Aimed At

Law enforcement officers and agents who must understand conventional TDM telephony technologies as well as their emerging packet-based counterparts as they relate to CALEA as well as carrier and service provider personnel responsible for CALEA compliance.

Group Size

5-25

Prerequisites

You should have a basic understanding of TDM circuit and IP packet network operations and protocols.

Course In a Nutshell

We will begin with the fundamentals needed to understand CALEA implementation in conventional Time Division Multiplexing (TDM) circuit voice networks and the emerging IP-packet based Voice over IP (VoIP) and Unified Communications systems. This will be followed by a comprehensive discussion of the CALEA concepts, issues, requirements, and implementation.

Customize It!

Customize this course to your group's requirements at little-to-no added cost. We can teach this course from the law enforcement perspective or that of carriers and service providers.

This course can be extended to cover conventional and/or packet voice concepts and details in more depth; or shortened, covering CALEA only for audiences who are already knowledgeable in voice systems.

Website: www.eogogics.com
E-mail: sales@eogogics.com
Tel. +1 (703) 281-3525
Fax +1 (866) 612-6896

Course Outline

- History of Lawful Intercept in the US
- Communications Assistance for Law Enforcement Act (CALEA)
  - CALEA Vocabulary
  - Procedural Overview
    - Traditional Wiretapping
    - VoIP/Unified Communications
  - Call Identifying Information
  - Call Content
  - Responsibilities for Telecom Equipment Manufacturers
- CALEA Compliance
  - FBI Regulations
  - FCC Regulations
  - Law Enforcement Filings
- Electronic Surveillance Standards
  - Lawfully Authorized Electronic Surveillance: J-STD-025-2000
  - Lawfully Authorized Electronic Surveillance (Trial Use) (Addendum 1): J-STD-025-1-2000
  - Lawfully Authorized Electronic Surveillance (Trial Use) (Addendum 2): J-STD-025-2-2000
  - Lawfully Authorized Electronic Surveillance (Trial Use): J-STD-025A-2000
  - OAM&P - Extension to Generic Network Model for Interfaces between Service Provider Administrative System (Lawful Authorized Electronic Surveillance) and Network Elements: T1.260-1998
  - CALEA Suite of Standards for Traditional Paging, Advanced Messaging and Ancillary Service
  - PacketCable™ Electronic Surveillance Specification: PKT-SP-ESP-I01-991229
  - IP Cablecom Electronic Surveillance Standard: SCTE 24-13 2001
- Traditional TDM Architectures and Protocols
  - Analog and Digital
  - Voice Coding
  - TDM Voice Signaling
    - In Band
    - Out of Band
  - Call Identification
  - End-to-End Call Flow
- Packet Voice Architectures and Protocols
  - Digital Voice Coding in VoIP
  - VoIP and UC Voice Protocols
    - H.323
    - Session Initiation Protocol (SIP)
    - Proprietary (Cisco Skinny, etc.)
    - Real Time Protocol/Real Time Control Protocol
  - Numbering and Identification
    - Phone Numbers

- ▪ IP Addresses
- ▪ MAC Addresses
- ▪ URIs/URLs
  - ° Detection Avoidance Methods and Countermeasures
- Mass/Bulk Surveillance
- CALEA Technical Details
  - ° Traditional Wire-tapping Techniques
  - ° Trap and Trace
  - ° CALEA Protocol Messages
  - ° The Call Content Channel (CCC)
  - ° Local Digital Switch (LDS) to the Collection Equipment Interface
  - ° ASN.1 Messages and J-STD-025 Call Data Channel (CDC)
  - ° CALEA ASN.1/BER Structure
  - ° Implementation and Testing Procedures
- CALEA implementation
  - ° Requirements and Responsibilities
  - ° Timeframes
  - ° Penalties for Non-compliance
  - ° Compliance Services
- Conclusion

How You Will Learn

- You will learn from an instructor who's well versed in a variety of current and emerging communications technologies and issues from the law enforcement perspective.
- Along with the lecture, we will use interesting activities and exercises to enrich the instruction and drive home the important points.
- If you already know something about communications or CALEA, we will build on that base. We'll compare and contrast what's familiar with what's new, making the new ideas easier to learn as well as more relevant.
- If your background is less technical, we will use examples and analogies to simplify the complex subject matter.
- The Participant Handbook will provide you with a framework to which you can add the information and insight provided in real-time, turning it into a useful reference you can take back to your job.

Revised   *May 7 2008f*