

Course ID
911-IP
Course Duration
2-3 days

Course Title
911 for IP Professionals

Related Courses

- IP, Location and Geo-Location Technologies for Law Enforcement, Intelligence and Public Safety (IPGEOLOC, 2-3 days)
- Unified Communications in Public Safety, Law enforcement, and Homeland Security (UNIFIED, 2-3 days)
- SIP Security: A Comprehensive Short Course (SIPSEC, 2 days)
- IP Security v2 (IPSec v2) Architecture and Protocols (IPSEC, 2-3 days)
- IP Security v3 (IPSec v3) Workshop (IPSECWS, 2-3 days)
- VoIP: Protocols, Design, and Implementation (VOIP, 2-3 days)
- VoIP Security (VOIPSEC, 2 days)
- Principles of Network Security: CompTIA Security+ and US DoD Directive 8570.1 (NETSEC, 3-4 days)
- Multimedia Applications: IMS, SIP, and VoIP (MULTIMEDIA, 2 days)
- Internetworking with TCP/IP Version 6 (IPV6, 2-3 days)

Aimed At

Those responsible for designing, specifying, purchasing, installing, and supporting IP networks as well as corporate and agency security, safety, and risk management personnel.

Group Size

5-25

Prerequisites

You should have a basic understanding of IP networks, their protocols, and operation.

Course in a Nutshell

The ability to place a call for emergency services using the 911 emergency service number from within corporate and agency facilities and to have that call reach the appropriate Public Safety Answering Point (PSAP) that dispatches police, fire and ambulance for that location is a critical part of any safety plan for any agency or organization and, in many states and jurisdictions, it is also the law. This course focuses on the protocols and procedures to properly integrate 911 call handling into organizational IP networks using VoIP as the predominant method of placing telephone calls. This course will present appropriate technical material in such a way as to allow you to fully understand and easily apply the concepts and techniques taught in this course.

Customize It!

We can adapt this course to your group's background and work requirements at little to no added cost. Let us know how we can tailor this course to your specific needs.

**Course
Outline**

- Introduction: Why 911 Matters
- 911 Internals
 - Traditional Calls
 - Cellular/Wireless Calls
 - VoIP Calls
 - NENA I-1
 - NENA I-2
 - NENA I-3
 - Location Issues
 - Call Routing
 - MSAG Records
 - PSAP Geographic Alignment
 - Services and Dispatch
 - Geographic Location
 - ANI and ALI
 - Billing Address
 - Service Address
 - Server Location
- VoIP and 9-1-1
 - Generic Call Model
 - Call Set-Up
 - Information Transfer
 - Call Tear-Down
 - Dial Templates and Digit Analysis
 - 9-1-1
 - 9-9-1-1
 - H.323
 - Session Initiation Protocol
 - Proprietary Protocols and 911
 - Cisco
 - Alcatel
 - Avaya
 - Nortel
 - Shoretel
 - VoIP Services by Service Providers
 - VoIP SP

- ISP
- Carrier
- Cable Company
- Implementing a Safe, Secure 9-1-1 System
 - Policy
 - Liability, Legal and Regulatory
 - Implementation
 - Documentation/Awareness
- Conclusion

How You Will Learn

- You will be taught by an instructor who is expert on the application of communications technologies to public safety.
- If you already know something about the subject matter, we will build on that knowledge base. If your background is less technical, we will employ suitable examples and analogies to make the technical material easier to understand.
- We will provide you with a Participant Handbook that will help you recall and reference what you learned in class.

Revised

May8, 2008f