

Outline for VoIP for E-911 Professionals Class

FULL OUTLINE

What is Voice over IP?

VoIP
The Voice "Family Tree"
Circuit-to-Packet
IP Telephony
Traditional Voice and VoIP Compared
Quality Measurements

Why VoIP?

Drivers
Enablers
Speed Bumps &
Show Stoppers
VoIP "Killer" Applications
VoIP Shortcomings

"Top 5" VoIP 911 Issues

- 1- Non-payment of 911 fees
- 2- VoIP may not support 911
- 3- VoIP may not support ESN, ANI or ALI
- 4- Background noises, whispers and soft sounds may not be transmitted
- 5- Uncertain legal/regulatory status

VoIP Interoperation with E-911

No 911 Support
Cheap calling plans
VoIP-based Long Distance services
Some (many?) enterprise implementations
911 service provided by underlying LEC
Inadequate
Vonage, AT&T, others ...
Provide support via 10-digit dial numbers
Don't pay 911 fees or file 911 plans
Full 911 support
Cable companies
Some utility company VoIP solutions

VoIP Technical Overview

Analog voice transmission
Voice packetization issues
How is VoIP Implemented?
PC-to-PC
PC-to-Phone and Phone-to-PC
Phone-to-Phone
VoIP over Cable
What protocols does VoIP use?
H.323, SIP, TIPHON, CSCCP
Protocol comparison

Future VoIP 911 Architectures

NENA IP PSAP 9-1-1 System Features & Capabilities
Operational Information Document (58-501)
IETF SIP and SIPPING WG Framework and
Requirements for Emergency Calling
GEOPRIV WG GPS Info for Callers
IEPREP WG Disaster Communications
TIA TR-41.4 VOIP standards for Enterprise Enhanced-911

VoIP Legal & Regulatory Status

US Summary
Briefing for *YOUR STATE*
US Federal Overview
International Summary

911 Agency VoIP Strategies & Tactics

Predicting the future of VoIP and 911

Short term, Mid term, Long term

Conclusion

*"Real world knowledge the
911 professional can put right to work."
- Richard Atkins
Assistant Director
Tarrant County 9-1-1 District*

PROGRAM "AT A GLANCE"

Program Type: Class
Available to Public: Y
Available for Single Client: Y
Program Length: 1 day
Program Times: 9:00 am - 4:30 pm
Lunch Provided: Y
Audience: 911 Professionals, Managers and Planners.
Prerequisites: Public safety background and basic Internet knowledge..
Difficulty Rating: 2 out of 5 (!!!..).

PRINCIPAL PROGRAM DEVELOPER



James P. Cavanagh

James P. Cavanagh has worked closely with the top five telecom technologies of our time very early in their life cycles. He has been intimately involved with the engineering, sales support, marketing, design, installation and training for ATM, Frame Relay, IP, optical networking and xDSL since their early commercialization. Mr. Cavanagh has also been closely involved in network security, disaster recovery planning and infrastructure security since the early 1980s. Jim is able to combine his experience with creativity and a long, varied career to develop exceptionally effective solutions for his consulting clients as well as having a rich background for his teaching and writing. Jim is a former member of the ATM forum

To request a class, contact us at VoIP@MobileIN.com
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