

Outline for VoIP Protocols Crash Course Class

FULL OUTLINE

Primary VoIP Protocols

Brief VoIP History
VoIP Evolution
SGCP
IPDC
MGCP
Megaco/H.248
Signaling
ITU H.323 Family
IETF SIP Family
ETSI TIPHON
Cisco Skinny (CSCCP)
Gateway Control
MGCP
TGCP
Megaco/H.248
Media Transport

Other VoIP Protocols

Voice over Frame Relay
Voice over ATM
AAL2
AAL5
VoDSL
VoIP over Cable
VoIP over 802.11

Protocol Comparison

H.323 vs SIP
MGCP vs Megaco/H.248
Bandwidth Utilization

VoIP Implementation Models

PC/IP Phone to PC/IP Phone
PC/IP Phone to Phone and
Phone to PC/IP Phone
Phone to Phone via gateway

Voice over Cable

User provided on HSI
Carrier provided on HSI
Packet Cable over DOCSIS1.1

Hottest Future Topics

VoIP over 802.11
VoIP Security
VoIP 911 and E-911
Law Enforcement
CALEA
CARNIVORE

Protocol Details

802.3, 802.11x
IP
TCP, UDP, WDP
RTP, RTCP

H.323, SIP, Cisco CSCCP, MGCP

Definition
Architecture
Reference Model
Protocol Internals
Call Traces

VoIP Implementation Issue

Numbering Plans
Vendor Interoperability
VoIP / PSTN Interoperability
DTMF Support
FAX/VBD
Security
Codecs and Intellectual Property/Licensing

Conclusion

"VoIP QoE was a great complement to VoIP In One Day."
- Sean Thomas
Network Engineer
NSAi

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: Engineers, technicians, planners and support personnel involved in VoIP design.
Prerequisites: Understanding of IP protocol suite and working knowledge or protocol concepts..
Difficulty Rating: 4+ 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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