Call for Papers
IEEE Workshop on VoIP Security: Challenges and Solutions
December 3, 2004
(in conjuction with GLOBECOM 2004)

Duration: Full Day (Dec. 3)

Co-Chairs:

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VoIP (Voice Over IP) is the technology for next generation networks supporting voice, video and multimedia services over Internet. New protocols and methods for signaling, QoS and traffic management are being defined. Recently there has been tremendous interest in the deployment of VoIP technology in the enterprises as well as residences. In contrast to PSTN, security and survivability have been great concern for deployment of this technology in government agencies and service provider networks. In addition, support for Voice Over WLAN and mobility further complicates the security issues. Several challenges are facing this new technology for making it a reality. This workshop is designed to facilitate the exchange of key issues and solutions between researchers from Universities, government agencies, service providers and equipment manufacturers.

Workshop Schedule:

Keynote Speakers
> *Paul Kurtz:* **Executive Director of Cyber Security Industrial Alliance and former special assistant to President Bush**

> *Jeffery Hunker***: Professor of Technology and Public Policy, Carnegie Mellon University and former Senior Director of Critical Infrastructure for White House**

Morning Sessioons:
> **VoIP Tutorial: 1 hour (with questions and answers)**
> **Break**
> **Session A: Requirements, current technology and status of research**

Afternoon Session:
> **Session B: Problems and solutions**
> **Session C: Problems and solutions**
> **Panel Session: 1 hour (with panelists from DARPA, NSF, NIST, Telcorodia, Cisco, Level3, Avaya)**

We are expecting leading edge technology and research papers and plan to publish a book out of this workshop. Each session will be lead by experts from industry (e.g., VP of technology from Cisco, Level3 and SBC), government (e.g., from DARPA or FCC or NSF) and leading university researchers. A panel discussion on current research status and challenges of VoIP related to security. We would plan to arrange this topic every year either in GLOBECOM or part of other conferences.

Papers are invited from the following topics (but not limited to):
- Telecom Policy
- VoIP firewalls
- Traversal of new services through firewalls and NATs
- Dial tone availability
- Protocol repairs
- SS7 and IP inter working issues
- Voice spamming and worms
- Call hijacking and toll fraud
- DOS attacks on IP phones, IPPBX, MGW and other VoIP network elements
- Trust, behavior and threat models for voice sessions
- Authentication and Access Control in Voice Over WLAN (VoWLAN)
- Mobility and security in Voice Over WLAN (VoWLAN)

Tentative Schedule:

   Paper submissions: 1st of September (send to session chair)

   Author notifications: 1st October

   Final manuscripts: 1st of November

The workshop website is:
http://www.csci.unt.edu/~rdantu/VoIPSecurityWorkshop.htm

Program Committee:

   Tim Gibson, DARPA
   NSF (not yet confirmed)
   Timothy Grance, NIST
   Mike Frendo, Cisco
   Paul Kurtz, CSIA
   Jeffery Hunker, CMU
   Pete O'connell, Lucent
   Robert Maher, Netrake
   Panayiotis Thermos, Telcordia
   Jasson Casey, Level3