

Title: **Recent Trends in Hacking**  
Panel Chair: Peter Mell (NIST)  
Panelist: Tom Longstaff (CERT)  
Panelist: Dark Tangent (DEF CON)  
Panelist: Andy Balinsky (Cisco)

**Abstract:**

If hacking techniques remained constant, the problem of computer security would have been solved long ago. Instead, previously unseen hacking paradigms emerge each year that take advantage of new features in software and which circumvent newly deployed security mechanisms. This panel will begin with a history of hacking events and developments starting from the 1970s to the present day. Then, experts from the hacking community, an incident handling organization, and a security vendor will discuss emerging hacking trends from their unique vantagepoint. Each new hacking trend represents a serious threat to our nation's computing infrastructure which must be addressed by the security community. To help the community address these problems the panelists will match each threat with a mechanism or technique that can prevent it.

**Brief Summary of Panelist Topics:**

**Peter Mell: Overview and a history of hacking**

Peter Mell will begin the panel by providing a history of hacking from the early 1970s until today. The major hacking events will be covered as well as important discoveries and paradigm shifts. He will follow this history with a short discussion of the state of the hacking field today.

**Tom Longstaff: Trends revealed from incident handling statistics**

Dr. Thomas A. Longstaff will address recent intrusion trends and attack tools. At the time of this writing, these consist of a variety of distributed denial of service tools and other coordinated attacks. However, the panel presentation will consist of emerging intrusion trends at the time of the conference. At the conclusion of the talk, Tom will indulge in speculation based on the current trends for what we may see next and how we can begin to prepare for those new tools.

**Dark Tangent: Trends from the hacking community perspective**

Dark Tangent will discuss trends in hacking from the perspective of the hacking community. As an organizer for the annual DEF CON hacking conference, Dark Tangent provides a unique view of trends that may be overlooked by more traditional security experts.

## **Andy Balinsky: Trends in attack script and vulnerability publication**

Andy Balinsky will discuss hacking and protection trends as seen from the perspective of a security software vendor. He will describe trends seen by both the Security Profile Assessment and Software Development groups within Cisco. He will address mechanisms that are used by security product vendors for detection.

### **Background of Audience**

We want to attract anyone interested in computer security since this is a talk on hacking trends.

**Peter Mell** is a computer scientist at the National Institute of Standards and Technology (NIST). He currently manages the ICAT vulnerability index product (<http://csrc.nist.gov/icat>). His recent research includes the areas of mobile agents, intrusion detection, computer penetration, and vulnerability databases. He has worked for the last four years developing intrusion detection systems and vulnerability databases with the last year focused on using mobile agents to enhance intrusion detection systems. He received an MS in computer science from the University of California at Davis in 1998.

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