

Cyber Security Awareness and Outreach in 2011



Background

- TSA Information Assurance & Cyber Security Division (IAD) Cyber Security Awareness and Outreach (CSAO) Branch
- Mission:
 - Facilitate the measured improvement of the national transportation sector cyber security posture as both described and constrained by the National Infrastructure Protection Plan (NIPP), Homeland Security Presidential Directive -7 (HSPD-7), and modal private sector needs
 - Co-SSA with US Coast Guard for Maritime
- Branch Capabilities focused into four core competencies:
 - Education
 - Articulation
 - Coordination
 - Communication
- 2011 Branch Priorities:
 - Mitigating "Awareness as a Vulnerability"
 - Understanding and Communicating Common Risk
 - Enabling Better Information Sharing





What is Cyber Security?

 Webster: Measures taken to protect a computer or computer system (as on the Internet) against unauthorized access or attack

What we think: Systems are secure When they cannot be made to do more or less than their owners and society wish them to





Cyber Security Threat is Real

Cyber Attacks Today:

- Active, targeted real life objectives, physical impacts, reasonable success rate

Examples:

- Stuxnet: Weaponized Malware with specific operational physical impact.
 - Targeted: Iranian Nuclear Program
- HBGary: Expert Victims
 - Compromised by informal group of hackers using old, common techniques
 - Demonstrates that cyber security is hard to do effectively and reliably over time

Realities:

- Bad guys only need one way in: Defenders have to protect against them all
- It's safe to assume that someone can get in.
- Attacker capabilities limited due to resources and motivation; not skill.





Where to start?

- It's not just an IT or IT Security Responsibility
 - Recall the earlier definition of computer security?
- Owners, Executives, Operators are responsible for determining requirements and getting involved
 - You define the success criteria for cyber security
 - "Risks From Computer Systems"
- IT and IT Security staff responsible for engineering solutions
 - Address "risks to computers" which create the "risks from computers"
 - Within your appetite, other operational priorities, budget, etc.
- Collaboration needed on program and process components





What is TSA doing about it?

2011 Plans:

- Cyber Security Exercise
- Modal Outreach & Coordination
- Weekly Newsletter
- Summit 2011
- Strategy Development
- Information Sharing: Best Practices
- Facilitating/Aligning existing Government programs and efforts.
- All of the above accomplished through the TSSCWG





How can you get involved?

- Transportation Systems Sector Cyber Working Group (TSSCWG)
 - Critical Infrastructure Partnership Advisory Council (CIPAC)
 Chartered
 - 50+ members (Public and Private) and growing
 - Monthly Meetings join us!
- Sign up for our weekly newsletter
- Attend our 2011 Cyber Security in Transportation Summit





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