Legal Foundation and Enforcement: Promoting Cybersecurity

Regional Workshop on Frameworks for Cybersecurity and Critical Information Infrastructure Protection

February 19, 2008

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Legal Foundation & Enforcement Overview

- Laws
- Global Enforcement Reach
- Investigation
- Prosecution/Criminal Justice System
- Effective Networks/Cooperative Partnerships

Legal Foundation & Enforcement

- What is the role of the legal foundation and enforcement in cybersecurity?

- Cornerstone
  - Provide framework to investigate, prosecute and deter cyber crime
  - Promote Cybersecurity
  - Confidence In Legal Systems
  - Encourage Commerce

Legal Foundation: Laws

- Challenges/Barriers
  - New methods of attack
  - More sophisticated crime
  - Organized Crime
  - International Dimension

Recent Trends

- Increasingly Sophisticated Web Site Attacks That Exploit Browser Vulnerabilities - Especially On Trusted Web Sites
- Increasing Sophistication And Effectiveness In Botnets
- Cyber Espionage Efforts By Well Resourced Organizations Looking To Extract Large Amounts Of Data - Particularly Using Targeted Phishing
- Mobile Phone Threats, Especially Against iPhones And Android-Based Phones; Plus VOIP
- Insider Attacks
- Advanced Identity Theft from Persistent Bots
- Increasingly Malicious Spyware
- Web Application Security Exploits
- Increasingly Sophisticated Social Engineering Including Blending Phishing with VOIP and Event Phishing
- Supply Chain Attacks Infecting Consumer Devices (USB Thumb Drives, GPS Systems, Photo Frames, etc.) Distributed by Trusted Organizations

Source: http://www.sans.org/press/top10menaces08.php

Greater Sophistication

"Today's attackers are increasingly sophisticated and organized, and have begun to adopt methods that are similar to traditional software development and business practices."

- Increased professionalization and commercialization of malicious activities
- Threats that are increasingly tailored for specific regions
- Increasing numbers of multi-staged attacks
- Attackers targeting victims by first exploiting trusted entities
- Convergence of attack methods

Source: Symantec Internet Security Threat Report: Trends for January – June 07 (Published September 2007)

Malicious Code By Type

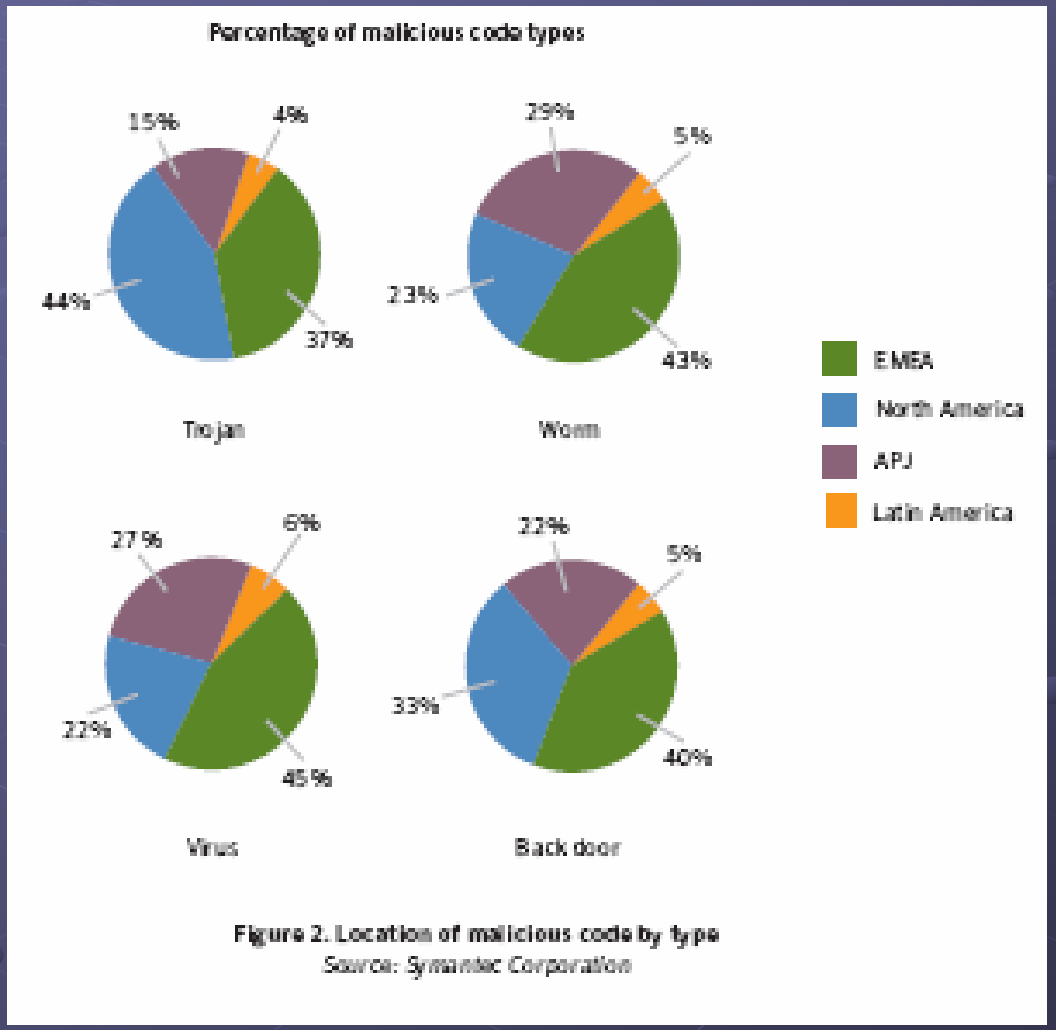


Figure 2. Location of malicious code by type
Source: Symantec Corporation

Legal Foundation: Laws

- Laws
  - Updated
  - Sufficient for present cybersecurity needs
  - Address core substantive and procedural areas
- Global Enforcement Reach
  - Address domestic Needs
  - International Cooperation
  - Coordination

Legal Foundation: Laws

- Convention on Cybercrime
- www.COE.int/cybercrime
  - Framework
  - Substantive Crimes
  - Procedural Rules
  - International Cooperation
- CCIPS Review Of Law Drafts
  - Betty.Shave@USDOJ.gov
  - (202) 514 1026

Investigation

Questions to ask:

- What is the ability of investigators to:
  - Follow criminal leads?
  - Collect and preserve evidence?
  - Find, apprehend the perpetrators?
- Where other countries are involved, how long will it take?

Investigation

- Specialized Training
  - Obtaining Electronic Evidence
- Cooperation
  - Mutual assistance processes

Prosecution

- Enforce Criminal Law
  - Admit evidence in court
  - Deterrence
  - Punishment
- Criminal Justice System
  - Train judges

Effective Networks/Cooperative Partnerships

- International Partnerships
- Governments
  - National
  - State and Local
- NGOs
- Industry/Private Sector
  - Assisting investigation
  - Reporting crime

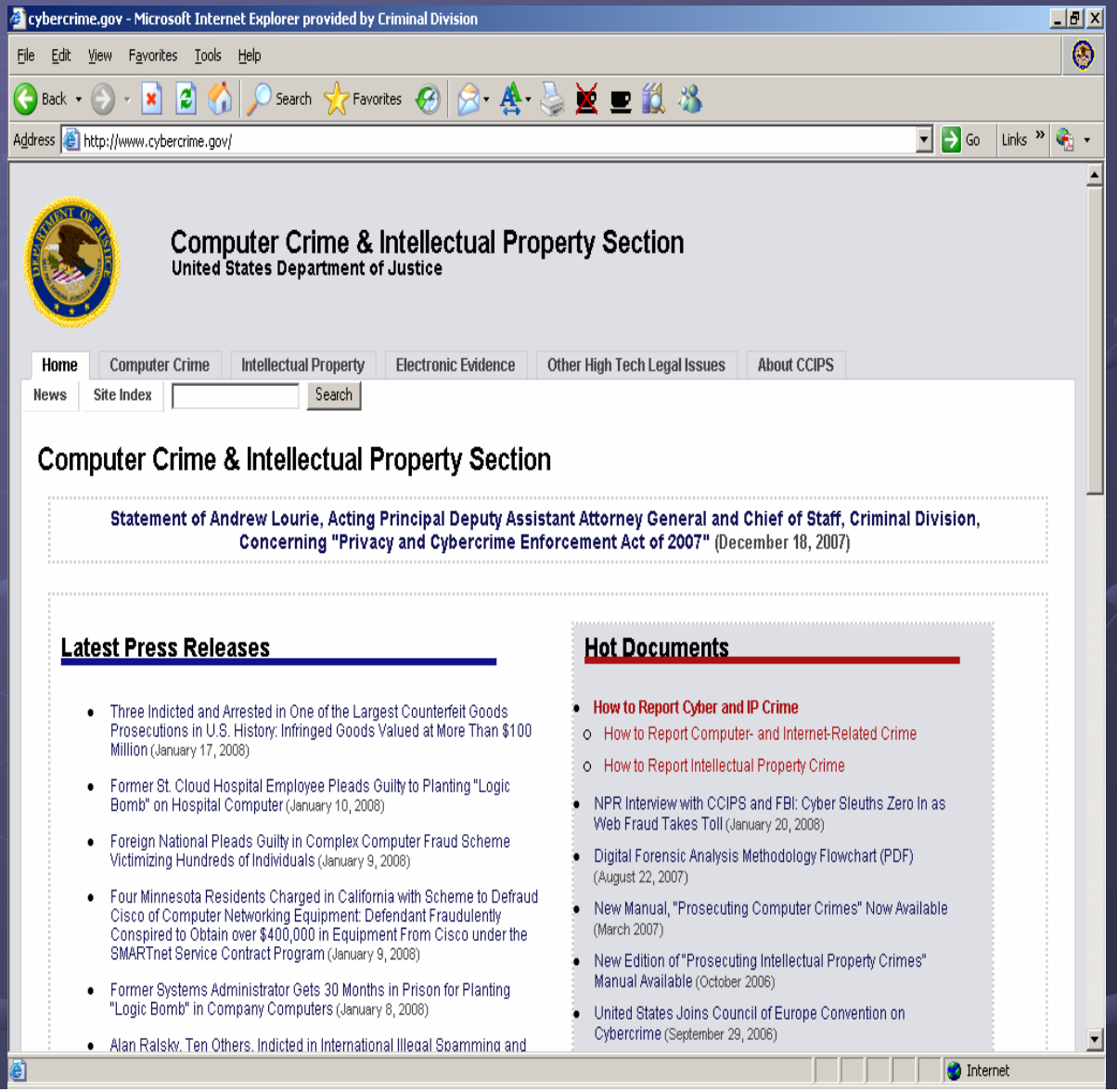
Conclusion

- Legal foundation and enforcement are essential for effective cybersecurity

- Assessment
  - How effective is the present legal foundation and enforcement?
  - What areas for improvement?
  - How to enhance regional and international cooperation?

Cybercrime.gov

- Public Page
- Latest News Releases
- Policies & Programs
- Legal Resources
- Contact Info
- Cases



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Questions ?

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Five Pillars

(1) Developing a national cybersecurity strategy
(2) Establishing national government-industry collaboration
(3) Creating a national incident management capability
(4) Deterring cybercrime
(5) Promoting a national culture of cybersecurity