U.S. Secret Service Investigative Strategy for Combating Cyber Crimes

Jurisdictional History

- 1865 - U.S. Secret Service created to fight counterfeit currency
- 1901 - Assigned Presidential Protection duties
- 1948 - Title 18 USC Section 470-474 (Counterfeiting and Forgery)
- 1984 - Title 18 USC Section 1029 (Access Device Fraud)
- 1986 - Title 18 USC Section 1030 (Computer Fraud)

Jurisdictional History

- 1990 - Title 18 USC Section 1344 (Bank Fraud)
- 1996 - Title 18 USC Section 514 (Fictitious Obligations)
- 1998 - Title 18 USC Section 1028 (Identity Theft)
- 2001 - USA PATRIOT Act (Expanded Cyber Crime Responsibilities)
- 2004 - Title 18 USC Section 1028A (Aggravated Identity Theft)

Global Cyber Threat

- Combination of the information revolution and the effects of globalization caused the investigative mission of the Secret Service to evolve
- Advent of technology and the Internet led to a transnational “cyber criminal”
- Marked increase in the quantity, quality, and complexity of cyber crime cases targeting U.S. financial institutions and critical infrastructure

Secret Service Investigative Strategy

DHS Mission 4: Safeguarding and Securing Cyberspace Mission Goals and Objectives

- Ensure malicious actors are unable to effectively exploit cyberspace, impair its safe and secure use, or attack the Nation's information infrastructure.

- Identify and evaluate the most dangerous threats to Federal civilian and private-sector networks and the Nation. Protect and make resilient information systems, networks, and personal and sensitive data.

Secret Service Investigative Strategy

- Disrupt the criminal organizations and other malicious actors engaged in high-consequence or wide-scale cyber crime.

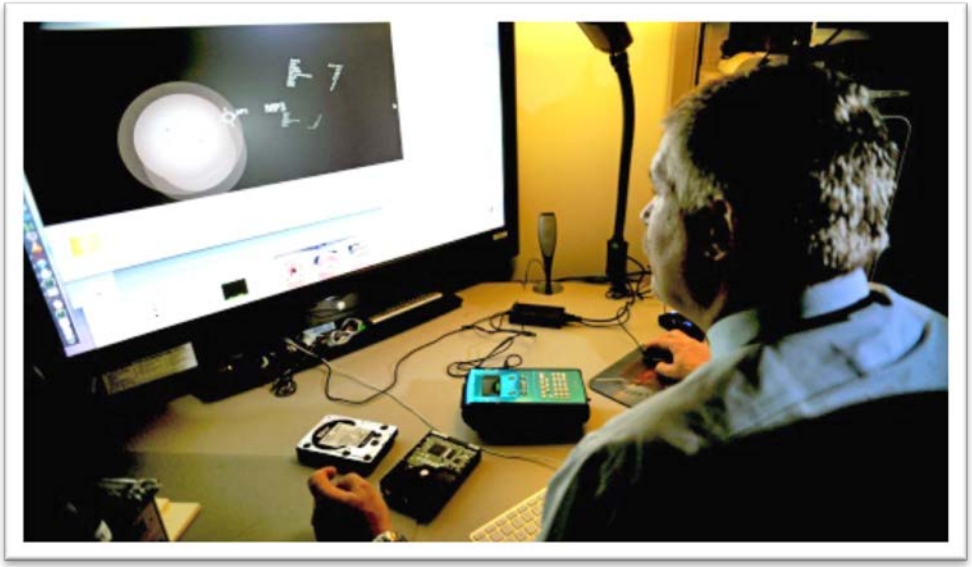
- Manage cyber incidents from identification to resolution in a rapid and replicable manner with prompt and appropriate action.

Secret Service Investigative Strategy

- Target organized criminal groups engaged in cyber crimes
  - Target key leadership to dismantle or disrupt organized crime
- Allocate resources and personnel to maximize impact
- Foster partnerships and combine resources
  - Respond and assist local police
  - Establish formal and informal task forces

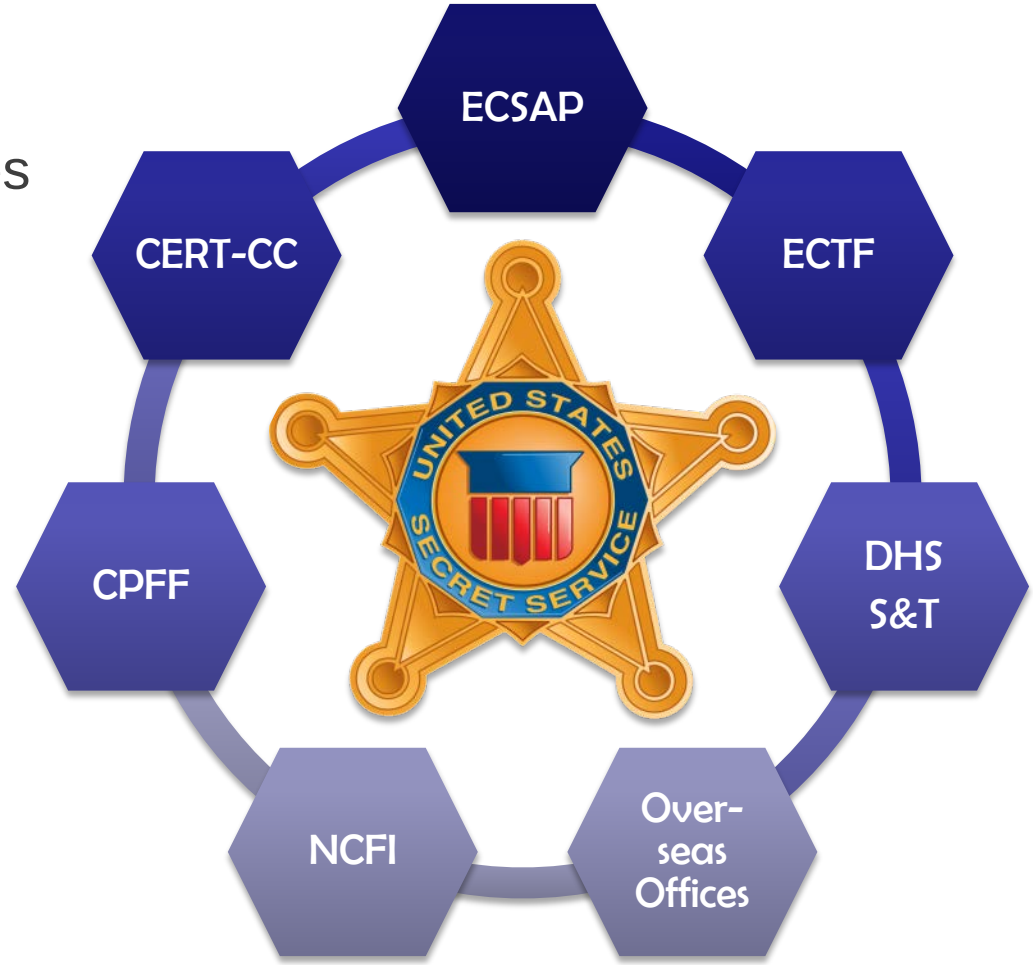
Secret Service Investigative Strategy

- Cooperate with the financial industry and academia
  - Collaborate with banks and financial institutions to identify and correct systematic weaknesses
- Develop and expand the Electronic Crimes Special Agent Program (ECSAP)
- Provide training and education to private sector and law enforcement



Multi-agency Approach to Combating Cyber Crime

- Electronic Crimes Special Agent Program (ECSAP)
- Electronic Crimes Task Forces (ECTF)
- Cyber Intelligence Section (CIS)
- Secret Service Offices Overseas
- National Computer Forensic Institute (NCFI)
- Cell Phone Forensic Facility
- Computer Emergency Response Team (CERT-CC)



Multi-agency – DHS S&T Partnership

Partner:

- Global Cyber Security Conference
- *Insider Threat Study: Illicit Cyber Activity Involving Fraud in the U.S. Financial Services Sector*
- Physical Extraction and Reconstruction of Evidence from Electronic Devices (University of Tulsa)
- Evidence Extraction from Mobile Phones Using SIM Side Channels

Customer:

- Blackthorn3 GPS Forensics Tool
- TriageResponder Tool
- CyberFETCH Portal
- Disposable Cell Phone Analysis
- NAND Flash Memory Chip Analysis
- Mobile Wireless Investigations

Multi-agency – DHS S&T Partnership

Burner Phone Forensics

- Mobile phones with pre-pay service are frequently used in criminal activity largely due to their ease of procurement
- Acquiring data is challenging because most run proprietary OS and have limited external connections
- Developing free phone unlocking tutorials for law enforcement

Solid State Drive Forensics

- Increasing popularity of solid state drives (SSDs) in products such as laptops is a challenging problems for forensic investigators
- The advanced technology behind SSDs renders traditional computer forensics techniques obsolete
- Over 200 million units will be shipped annually by 2016

Vehicle and Infotainment System Forensics

- Infotainment systems store user related data such as recent destinations, call logs, contact lists, SMS messages, and emails
- Information is difficult to extract and stored in a proprietary format
- 9 million vehicles produced in 2012 with built-in systems, estimates exceeding 70 million by 2020