



# FEDERAL BUREAU OF INVESTIGATION

SUPERVISORY SPECIAL AGENT (SSA)

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CYBER DIVISION

# Initial Stages of Investigation

- Determine what approach to take.
- Identify the sources of electronic evidence
- Preserve electronic evidence
- Integrate electronic evidence into the investigation
- Case Management and investigation plan

# Initial Stages of Investigation

- Perform traditional investigative steps:
  - Who, What, When, Where, how?
- Is there a victim? Is there a target?
- What crime has been committed? (fraud, intrusion, child exploitation, traditional crime)
  - Child exploitation/pornography cases are distinct from all others in the way they are initially approached by investigators.



# Initial Stages of Investigation

- Conduct your traditional criminal checks before leaving the building (+Search Engines)
- Systematic approach/Chaotic approach

# Child Exploitation

- Conduct criminal history of checks for target or targets
- Determine who else has access to system
- Is there a possibility of imminent danger ?
- Possibility of Flight?
- Gather evidence
- Obtain legal authority to conduct searches
- Interview suspects

# Property Intrusion

- What is the motive?
- Determine who has access
- Interview Systems Administrators and Other witnesses
- What is the purpose of the intrusion (theft/disruption)
- Internal vs External Threat

# Fraud

- What is the fraud loss?
- Conduct criminal history of target or targets
- What type of fraud is being committed?
- What digital channels are being utilized to commit fraud
- How large is the fraud scheme?
- Possibility of Flight?



# Traditional Types

- What type of crime was committed?
- What types of digital devices and services does the suspect use?
- Who has access to these devices and services
- Preservation of evidence

# Sources of Evidence

- Divide evidence into 3 categories:
  - Host Based
  - Network Based
  - Other (Includes Interview information)

# Host-based Evidence

- Child Exploitation
  - Email
  - Photo/Video
  - Documents
  - Chat logs

# Interpol Case: Christopher Paul Neil



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- German police/computer experts “un-swirled” photo
- Interpol (circulated photo via Internet) received approximately 400 responses via email
  - Christopher Paul Neil
    - Taught English in South Korea
    - Three Thai youths contacted police after seeing Neil’s photograph on television. Neil showed them pornographic images on his computer.
    - Traced mobile phone calls made by Ohm, a 25-year old Thai transvestite Neil had befriended

# Interpol Case: Christopher Paul Neil



บัตรเข้าเมือง  
THAI ARRIVAL CARD Thai Immigration Bureau

โปรดเขียนตัวอักษรและทำเครื่องหมาย  
PLEASE WRITE CLEARLY IN BLOCK LETTERS AND MARK

ชื่อ  
Family Name: NEIL

ชื่อและนามสกุล  
First Name and Middle Name: CHRISTOPHER PAUL

สัญชาติ  
Nationality: CANADIAN  Male  Female

เลขที่หนังสือเดินทาง  
Passport No. [ ]

เที่ยวบิน/ยานพาหนะ  
Flight or Other Vehicle No. 76639

วันที่ออกเดินทาง  
Date of Issue: 06 02 1975

ที่พำนักในประเทศไทย  
Address in Thailand: TOURING ROSE JAM, 5013

ลายเซ็น  
Signature: Chris Neil

สำหรับเจ้าหน้าที่/For official use  
IMMIGRATION THAILAND  
HO 07726  
9 NOV 2007



# Interpol Case: Christopher Paul Neil





# Host-based Evidence

- Property Intrusion
  - Emails
  - Server Logs
  - Documents
  - Transaction History
  - Spreadsheets
  - Scanned Documents
  - Backup Files

# Network-based Evidence

- Child Exploitation
  - ISP Logs of Subscriber
  - IP Address History
  - Logon/Logoff record
  - Subscriber Information
    - Address
    - Phone
    - Form of Payment
    - Contact Person

# Network-based Evidence

- Property/Intrusion
- Log files/router/firewall
- Subscriber information
- User activity
- Network Based Content (email, profiles, tweets),
  - e.g. Facebook, Myspace, Linkedin, Twitter

# Preservation

- Child Exploitation
  - Screen Capture software
  - Email preservation from Service Provider
  - Direct to Law Enforcement Computer (P2P)
  - Seizure of digital evidence
  - Obtaining an image (exact copy) of evidence

# Preservation

- Property/Intrusion
- Screen capture software
- Preservation letter to ISP
- Direct to LE (P2P)
- Seizure
- Imaging

# Preservation

- Whichever option you choose:
  - You must collect data in a forensically sound manner.
  - You must protect the integrity of the data
- Confer with a forensic examiner
- What agencies/services are available to process this data?
- Case management is a priority

# Questions?

