



### «LEGAL LIMITS OF PROACTIVE ACTIONS: COREFLOOD BOTNET EXAMPLE»

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## **Operation Odeona**

Basics

**Court Decision & Operation** 

**Results & Findings** 



- Oldest, in continuous operation, active from 2002
- Motive: DDoS, selling anonymity services, full-fledged bank fraud
- 2,336,542 computer; App. 1,853,005 in USA
- The full extent of the financial loss caused by the Coreflood Botnet is not known, due in part to the large number of infected computers and the quantity of stolen data.
- State and local gov. agencies (17);
  Financial Ins. & Banks (5);
  Hospital (20);
  Police Dep. (1);
  Defense Contractor (2);
  College & University (30);
  Private Company & Businesses (100+)

# Court

Search and Seizure Warrant; Temporary

#### **Restraining Order**

• Seize and replace command-and-control

servers

- Collect the IP addresses
- Remote "exit," or stop, command

• A temporary measure

- Continue to temporarily disable the malware
  - Notify the ISPs, a form letter
  - Instruct infected computers

**Extention Order** 

## Operation

° 5 C & C servers and 29 domain names were seized

Remote "exit," or stop, command

° How to "opt out

° 19,000 uninstall commands to computers owned by 24 victims.

### Results

• Size of the Coreflood, more than 95%

° 3 tier action

Victim notification

° Coordination with Internet service providers and antivirus vendors

• The operation of the substitute server and take down

# Legal Findings

<sup>o</sup> Domestic, computers reasonably located in USA; inform others

° Consent, limited action (retrain, stop, notify, if accepted actively engage)

• Resilient dijital environment in respect of privacy

• Reasoning «continue to running on the infected computers will cause a continuing and substention injury to owners and users of infected computers»

° Financial stability as a public good

### **Thank You**

# Stay in touch

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