Ethics of Computer Security

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Cyber-Attack

- Hacking
- Motives
  - Cyber-crime
  - Espionage
  - Hacktivism
  - Intellectual property theft
Hacktivism Ethics

- Jeremy Hammond- Leaked information from the private intelligence firm Stratfor revealed they were spying on human rights activists for corps and U.S. government via wikileaks
  November 2013, 10 years Federal Prison

- Anonymous- huge hacking group
  Took down several websites of 2014 World Cup Sponsors
  Hyundai, Brazilian Intelligence Agency
  Protesting huge funds spent on world cup, not population
  Are these people Ethical?
Hacktivism Ethics (cont.)

- Auernheimer exposed security flaw on an AT&T website
- Access to personal email addresses over 140,000 iPad users
- Publicized exploit
- Gave high profile email addresses, Mayor Michael Bloomberg, to Gawker, online publication.
- Electronic Frontier Foundation, Harvard Law School, Stanford University Law Clinic found he hadn’t broken any laws, computer fraud and security act
- Sentence repealed

Is this case different?
Method of Cyber-Attack

- Step 1: Reconnaissance
- Step 2: Probe
- Step 3: Exploit
Reconnaissance

- Scan for live hosts
- Browse webpages for information
- Acquire lists from other attackers
Probe

- Improper security settings
- Missing system patches
- Passwords
- Social Engineering
- Nessus- attackers and security
- Proactive
Exploit

- **System Compromise**
  - Exploit software vulnerabilities

- **Denial of Services**
  - Unavailable to users

- **System Misuse**
  - Write-access to website
  - File-system, copyrighted
  - Phish emails with bad links
Targets

- Systems housing sensitive data
- Systems transmitting this data
- Almost all systems
- Log-in credentials
- Spoofing - false identification
- NSA - Controversy spying
What must be done

Reform Computer Fraud and Abuse Act

- 1986
- Must add to the law to better protect against foreign attackers
- Appropriate sentence length
- Downey 15 year sentence for attacking PayPal for getting rid of their WikiLeaks donation page same as recent child sexual abuse and gang related homicide
Works Cited


