

# Computer Security: Legal and Ethical Issues

Benjamin Anderson  
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## Overview

- Ethical Issues for Security Professionals
- Important Computer Laws
- Special Topics

## Ethical Issues

- “When you graduate, you will be given more responsibilities than most people will be given in their entire lives.”
- Paraphrased from comments by Dr. Jack Lutz.

## Ethical Issues

- “With great power there also must come -- great responsibility!”
- Stan Lee. (Creator of Spider-Man.)

## Ethical Issues

- “Sed quis custodiet ipsos custodiet?”
  - “But who is watching the watchers?”

## Ethical Issues

- Legal and ethical are not the same.
- It might be legal for an administrator to monitor email usage.
- Not ethical to monitor them without a valid reason such as suspicion of leaking proprietary information.

## Ethical Issues

- To provide guidance, Ethical Codes for computer professionals have been created.
  - ACM: Code of Ethics (ACM)
  - IT Code of Ethics (SANS Institute)
  - CISSP Code of Ethics (ISC<sup>2</sup>)

## Computer Laws

- There are many laws that apply to computer security.
- We will examine some of the ones with the greatest impact.

## Computer Laws

- 18 U.S.C. § 1030
  - Fraud and related activity in connection with computers.
  - Concerns attacking computers without authorization.

## Computer Laws

- Health Insurance Portability and Accountability Act (HIPAA)
  - Concerns the protections required for computer systems that deal with protected health information.
  - The law also covers what is meant by “protected health information”.

## Computer Laws

- Sarbanes-Oxley (SOX)
- 15 U.S.C. § 7262
  - Annual report must contain an assessment of the effectiveness of internal control structure and procedures.

## Computer Laws

- Digital Millennium Copyright Act (DMCA)
  - Section 1201: “No person shall circumvent a technological measure that effectively controls access to a work protected under this title.”
  - First offense: Up to \$500,000 fine and 5 years in prison.
  - Second offense: \$1,000,000 and 10 years.

# Computer Laws

- Prosecution for a computer crime can often be difficult.
- How do you prove the person behind the computer?

# Computer Laws

- Criminals can:
  - Create a zombie, (also called a bot), by installing a rootkit.
  - Spoof an IP. (Or a MAC address.)
  - Use an open wireless access point.
  - Use a public computer.
- How do you prove the user behind the IP?

# Special Topic: Copyright

- Copyright law does allow for “Fair Use” which considers:
  - The purpose of use.
  - The nature of the work.
  - The amount of the work used.
  - Potential effect on market value.

# Special Topic: Copyright

- If not covered under fair use and you use the copyrighted materials without consent you:
  - Are not guilty of piracy.
  - Are not guilty of theft.
  - You are guilty of copyright infringement.
    - Can be a felony.

## Special Topic: Copyright

- With numerous lawsuits going on regarding copyright violation, there are many viewpoints on the necessity or appropriateness of copyright.
- What are some of the different viewpoints that you have heard of or have?

## Special Topic: Copyright

- Viacom v. YouTube
  - There is copyright infringement.
  - DMCA sets out how takedown notices are handled.
- However, YouTube makes money in the lag time between posting and takedown notice.
- Some abuses were obvious.

## Special Topic: Copyright

- RIAA Lawsuits:
  - Monitor peer-to-peer networks for evidence.
  - File charges against “John Doe” and obtain a subpoena for the ISP records regarding that ISP.
  - Update charges to be for actual person.

## Special Topic: Copyright

- What are some of the technical problems regarding this technique?
- What are the ethical and legal issues regarding this technique?