IMPORTANT

Common Internet Crime Schemes

http://www.ic3.gov/crimeschemes.aspx
Current and ongoing Internet trends and schemes identified by the Internet Crime Complaint Center along with its description.

- Auction fraud
- Counterfeit cashier's check
- Credit card fraud
- Debt elimination
- Parcel courier e-mail scheme
- Employment/ Business opportunities
- Escrow services fraud
- Identity theft
- Internet extortion
- Investment fraud
- Lotteries
- Nigerian Letter or "419"
- Phishing/spoofing
- Ponzi/pyramid
- Reshipping
- Spam
- Third-party receiver of funds

http://www.ic3.gov/preventiontips.aspx
How to prevent these crimes through individual actions.

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Sources of Laws

- Statutory law
  - Statutory laws are the laws passed by local, state, and federal legislative bodies.
  - Specific statutory laws, such as the Computer Fraud and Abuse Act (CFAA), govern behavior.
- Administrative law
  - Power granted to government agencies through legislation.
  - This power of lies in the ability to enforce behaviors through administrative rule making.
  - Example: Federal Trade Commission (FTC), have made their presence felt in the Internet arena with respect to issues such as intellectual property theft and fraud.
- Common law
  - Laws derived from previous events or precedence and originates in the judicial branch of government.
  - As new cybercrime cases continue to unfold in the courts, precedents are being made on which future crimes involving computers can be judged.

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Computer Trespass

- Unauthorized access of a computer system
  - Independent of access method
  - Considered a crime in many countries
  - May warrant significant punishment
  - Treaties between countries regulate ways to deal with the cyber offenders

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Convention on Cybercrime (2004)

- First international treaty that addresses crimes committed through the Internet and other computer networks.
- Ratified by EU, U.S., Canada, Japan, and others
- Created common policies to handle cybercrime
- Focused on:
  - Copyright infringement
  - Computer-related fraud
  - Child pornography
  - Violations of network security

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Significant U.S. Laws

- **The United States**
  - A leader in the development and use of computer technology.
  - As such, it has a long history associated with computers, and with cybercrime.
  - Because legal systems tend to be reactive and move slowly, this leadership position has translated into a leadership position from a legal perspective as well.
- **Some significant US laws dealing with cybercrime**
  - Electronic Communications Privacy Act
  - Stored Communications Act
  - Computer Fraud and Abuse Act
  - Controlling the Assault of Non-Solicited Pornography and Marketing Act
  - USA Patriot Act
  - Gramm-Leach-Bliley Act
  - Sarbanes-Oxley Act

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Electronics Communications Privacy Act (ECPA)

- Addresses legal privacy issues related to computer use and telecommunications
- A common practice with respect to computer access and privacy today is the use of a warning banner
- **Warning Banners are common practice in**:
  - Establishing the level of expected privacy
  - Serving notice of intent to conduct real-time monitoring
    - Real-time monitoring can be conducted for
      - Security reasons
      - Business reasons
      - Technical network performance reasons.
  - Obtaining user's consent to monitoring. Typically displayed upon login
  - Providing consent to law enforcement search

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Computer Fraud and Abuse Act (1986)

- Provides the foundation of U.S. law on unauthorized access
- Criminalizes activities such as:
  - to knowingly access a computer, either considered a government computer or a computer used in interstate commerce, without permission
  - Using a computer in interstate crime
  - Trafficking in passwords or access information
  - Transmitting code, commands, or programs that result in damage

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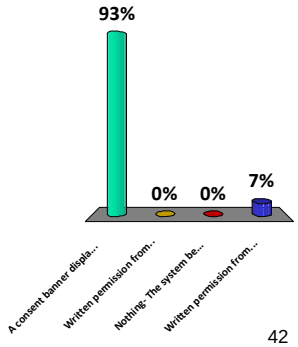
The VP of IS wants to monitor user actions on the company's intranet. What is the best method of obtaining the proper permission

1. A consent banner displayed upon login
2. Written permission from a company officer
3. Nothing- The system belongs to the company
4. Written permission from the user



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Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003 (CAN-SPAM)

- Established spam e-mail regulations
- **Provided rules of compliance**
  - Unsubscribe
    - Requires an obvious opt-out provision to allow users to unsubscribe, with these requests being honored within ten days.
  - Content
    - The content must be clear and not deceptive.
    - Header Information- Adult content must be clearly labeled and subject lines must be clear and accurate.
  - Sending Behavior
    - Sending behavior rules include not using harvested e-mail addresses, not falsifying headers, and not using open relays.
    - CAN-SPAM criminalizes header manipulation
- Has had a poor track record of convictions

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USA Patriot Act

- Response to the 9/11 terrorist attacks
- Altered U.S. laws on Internet wiretaps and tracing
- Permits the Justice department to rollout Carnivore program, an eavesdropping program for the Internet
  - The name Carnivore has now been retired but the right of the government to eavesdrop remains a hot topic
- Requires ISPs to facilitate Internet monitoring
- Provides for federal law enforcement investigation and adjudication of computer intrusions

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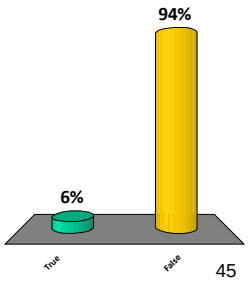
Falsifying header information is not covered by the CAN-SPAM Act.

1. True
2. False



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Gramm-Leach-Bliley Act (GLBA)

- Enacted in 1999
- Financial industry legislation to protect individual privacy.
- Key privacy tenet - Created an opt-out method providing individual control over the use of personal information
- Enforced by state, federal and securities laws
- Restricts information sharing with third-party firms, while still allowing for internal sharing in accordance with the Fair Credit Reporting Act.
  - For example: SSN, other facts kept by your bank

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Payment Card Industry Data Security Standard (PCI DSS)

- Contractual rules governing exchange of credit card data between banks and merchants
  - Voluntary standard
- Noncompliance may result in:
  - Higher transaction fees
  - Expensive fines
  - Inability to process credit cards

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Import/Export Encryption Restrictions

- Includes use to secure network communications
- U.S. export control laws handled by the Dept. of Commerce
- Administered by the Bureau of Industry and Security
- U.S. encryption export control policies rest on three principles:
  - Review of encryption products prior to sale
  - streamlined post-export reporting
  - License review of certain exports of strong encryption to foreign government end users.

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Non-U.S. Laws

- Wassenaar Arrangement
  - International agreement on export controls dealing with dual-use goods and technologies.
  - Removed key length restrictions on encryption products to allow for mass-market distribution of encryption products
- Cryptographic use restrictions
  - Many countries tightly restrict the use and possession of cryptographic technology.

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U.S. Digital Signature Laws

- **Signatures -**
  - A means of affixing a sign of one's approval for centuries
  - A ring and wax seal, a stamp, or a scrawl
- **Digital signatures-**
  - As communications have moved into the digital realm, there exists a need for signatures to move with the new medium
  - Means to show approval for electronic records
    - Cryptography provides integrity and non-repudiation.
    - Enables e-commerce transactions
  - Equivalent to notarized signatures for all transactions in the US for all transactions in which both parties agree to use digital signature
- **Electronic Signatures in Global and National Commerce Act (E-Sign Law)**
  - Electronic forms of signatures, contracts, and other records are just as valid and enforceable as those written on paper.

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Other Digital Signature Laws

- United Nations
  - UN Commission on International Trade Law Model Law on Electronic Commerce
- Canada
  - Uniform Electronic Commerce Act
- European Union
  - Electronic Commerce Directive

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Digital Millennium Copyright Act (DCMA)

- **Digital Rights Management**
  - Generic term for access control technologies that can be used by hardware manufacturers, publishers, copyright holders and individuals to limit the usage of digital content and devices.
  - Used to describe any technology that inhibits uses of digital content not desired or intended by the content provider.
- **Digital Millennium Copyright Act (DCMA)**
  - Protects rights of recording artists.
  - Identifies how new computer technology relates to copyright laws.
  - Makes it illegal to develop, produce, and trade any device or mechanism designed to circumvent technological controls used in copy protection.

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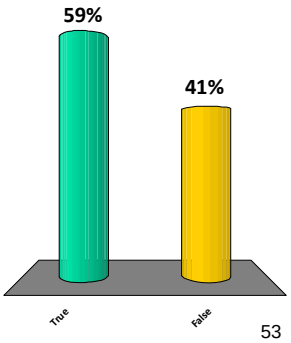
Digital signatures are equivalent to notarized signature **only for non-real property transactions** in the US in which both parties agree to use Digital signatures

1. True
2. False



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- The terms of use agreement

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