
CS120 The Information Era

Chapter 2 – Personal Safety Online

TOPICS: Acceptable Use
Policies, Security, Protection,
Piracy

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Netizen

- It is up to you to be a good citizen of the Internet
- There are rules and laws that govern your behavior offline
- There also rules for being online

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Acceptable Use Policy

- Acceptable Use Policy (AUP)
 - outlines the acceptable use of the Internet and is enforced/monitored by the designated System Administrators
- Does Pacific University have an AUP?
- Using the WWW, search for an AUP at Pacific. If you find an AUP, skim the document for items in the document that you find disturbing

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Staying Safe

- Don't share passwords (like underwear)
 - What are examples of good passwords?
 - You should change passwords regularly
- Don't open attachments in email with .vbs
- Check for viruses, Trojan horses, and worms

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Viruses, Trojan Horses

- Virus
 - A computer program that can replicate itself by files that move from one computer to another.
 - Most viruses are benign but some are capable to destroying files or entire file systems.
- Trojan Horse
 - A computer program that invades your systems under the disguise of another program.
 - Blatant trojan horses might record your keystrokes including passwords, credit card numbers, ... in real time or saved to a log file. Wow!!!

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Worms

- Worms
 - A worm is similar to a virus, but a virus spreads via media such as floppies, file downloads and requires a "host file" to propagate.
 - Worms depend on network activity and can have different parts running on different machines doing different things. They can also communicate with each other over the network.
 - Worms can just tie up computer resources while others can be malicious.

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What to do?

- Use Antivirus Software
 - What are the main antivirus companies?
- Update the antivirus definitions of a regular basis
- Update the Operating System patches on a regular basis
- Do not leave your computer connected to the Internet longer than necessary
- Install a firewall

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Virus Punishment

- What do you think is the punishment for releasing a virus, trojan, or worm?
- Recent cases:
 - Blaster worm variant:
<http://www.msnbc.msn.com/id/6881275>
 - Melissa virus:
<http://news.bbc.co.uk/1/hi/world/americas/1963371.stm>
 - Sasser worm:
<http://news.bbc.co.uk/1/hi/world/europe/3695857.stm>

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Mac vs Wintel vs Linux

- Most computers in the world run one of three Operating Systems.
 - In terms of virus outbreaks, which Operating System do you think is most susceptible to virus outbreaks? Why?
- Email is the main source of viruses.
 - How does an email virus spread?
- Melissa Virus
 - Was an example of a macro virus. How do these work?

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Email Attachments

- What to do when you receive an email attachment?
 - If you receive an unsolicited attachment, delete it
 - An email attachment with an empty message body should probably be deleted
 - If you decide to open an email attachment, scan it with antivirus software first
 - Disable macros in Microsoft Office before opening a document
- A safe way for you and your friends to exchange Word documents is using RTF format. What is RTF format and how would you do this?

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Microsoft Patches

- Patches
 - Windows OS
 - Outlook
 - Outlook Express
 - Explorer
- Microsoft Windows Update Center
 - <http://windowsupdate.microsoft.com/>

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Hacker Attacks

- Less common but far more destructive
- Easy to do, you do not have to be a computer programmer
- Large companies are better protected than home computers
- Hackers can
 - Create, delete, or modify files on your computer
 - Take control of your mouse or change your wallpaper
- Hacking is illegal under state and federal laws!

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Hacker Attacks

- What are hackers interested in?
- What do you have on your computer that a hacker might want?
- Your computer could end up being a drone
- How can you protect yourself from hackers?
 - Use a firewall!
 - Give examples of firewalls

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Shopping Online

- Credit Cards vs Checks/Money Orders/Debit Cards
 - The Fair Credit Billing Act requires credit card issuers to limit your potential loss to \$50 if you report the dispute in time.
 - Bank cards/debit cards/checks do not give the same protection.
 - The address page should use Secure Sockets Layer (SSL) which can be identified by the page beginning with https://

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Shopping Online

- Do business with reputable companies
- Look for return policy and contact info
- Save a copy of all purchase orders and confirmation numbers
- Review credit card billing statements for questionable charges

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Privacy

- Every search engine you use has a privacy policy
- Most search engines collect information about every page you visit including your ip address and the page you visited
 - Why would they do this?
- Many people are concerned about this:
 - <http://www.google-watch.org/bigbro.html>

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Online Auctions

- eBay
 - Online trading post linking buyers with sellers
 - Over 100,000 full-time businesses
 - 1 in 25,000 transactions are fraudulent
 - 34 million transactions in 2001 exchanging \$10 billion worth of goods
- Who has shopped on eBay and what has your experience been?

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Libel and Lawsuits

- A written or pictorial statement that damages a person or organisation
- Libel is not a criminal offense, but you could be sued for damages in civil court
- Public figures can be publicly ridiculed, even if it borders on libel. Why?

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What is Illegal

- Software piracy
 - First conviction for software piracy in 1999 for a senior at the University of Oregon
 - Felonies or misdemeanors
- Child pornography
- Unauthorized distribution of copyright material
- Threats of violence

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Music

- Copyright Issues
 - Copyright Act of 1971 states that only the owner can make a copy of a recording
 - Recording Act of 1992 protects consumers from lawsuits if they make a recording from an original source
 - Recording Act also give you permission to convert CD tracks to MP3 files as long as you own the original CD

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Copyright

- Laws protect creative and economic interests of writers, musicians, and artists
 - Intellectual property rights
- Does an author renounce copyright privileges when a work appears online?
- Are all web pages in the public domain?
- Are all older written works in the public domain?
- Does an author have to mark a document with a copyright notice for it to be protected?

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Copyright

- Can I print copies of online materials?
- Can I store on my own computer any files that I find elsewhere?
- Can I download a web page and mail a print copy of it to a friend?
- If a photograph has been printed in a newspaper or magazine, can I scan it and put it online?

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Copyright

- Can I use a graphic I find on another's web page on mine?
- Can I alter images that I find online?

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Hoaxes and Legends

- You can't believe everything you read, especially if you read it on the Internet
- Have you come across any hoaxes? Describe them

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Summary

- We have covered chapters 1 and 2 in the book