

Safe Computing

Tom Kelliher, CS 102

Feb. 9, 2004

1 Administrivia

Announcements

PowerPoint assignment due Friday. E-mail attachment *before* class.

Assignment

Read 2.6–2.10. Questions on pp. 93–94: 13, 14, 17, and 18.

From Last Time

PowerPoint lab.

Outline

1. Introduction to safe computing.

Coming Up

Lab.

2 Introduction to Safe Computing

1. Important to control our cyber-selves and secure our PCs.
 - (a) Identity theft.
 - (b) SPAM.
 - (c) Loss of data through hacking.
 - (d) Responsibility to secure PCs. Incrimination?
 - (e) On the horizon: RFID technology.
2. History of hacking. In the beginning, hacking was a good thing.
Mentality of hackers.
3. Acceptable Use Policies/Terms of Service
 - (a) No spam.
 - (b) No commercial use.
 - (c) No illegal activity.
 - (d) No excessive use of resources.
 - (e) No damage.
 - (f) Right to cut you off.
 - (g) No re-selling of service.
 - (h) Limit on number of nodes in a home network.

Goucher AUP.

4. Passwords

- (a) **Never** reveal.
- (b) Choose good passwords. How to choose?
- (c) How many to use? How often to change? Why?

5. Anonymizers and throw-away e-mail addresses as tools.

6. Social engineering as a hacker's tool.

7. Safe computing:

- (a) Viruses, trojans, worms; what are they?

(Come as disguised executables in e-mail, DOS attacks via “drones,” SQL Slammer: three minutes after release was scanning 55 million hosts per sec. Worldwide damage within 10 minutes.)

Macro viruses, script viruses.

- (b) Prevention: virus scanning software:

- i. Config to check everything.
- ii. Auto-download updates.
- iii. Be paranoid.

- (c) More prevention: firewall:

- i. Types of protection: inbound blocking, outbound monitoring.
- ii. Basics of networks: workstations, routers, DNS/IP, ports.
- iii. How they work.
- iv. Spyware. In KaZaA.

Spyware is not well understood.

v. Is ICF enough?

vi. Free firewall: Zone Alarm.

Symantec has Norton Personal Firewall.