

Outline for January 4, 2002

1. Greetings and Felicitations!
2. Puzzle of the day
3. Overview of goals of computer security
 - a. Security and the software life cycle
 - b. Roles of trust and assurance
4. How do you design a security policy?
 - a. Risk analysis
 - b. Analysis of other factors:
 - c. Procedures
5. Risk analysis
 - a. What are the threats?
 - b. How likely are they to arise?
 - c. How can they best be dealt with?
6. Analysis of other factors
 - a. What else affects the policy (federal or state law, needs, *etc.*)?
 - b. Law: as above; discuss jurisdiction (federal or local), problems (authorities' lack of knowledge about computers, *etc.*); chain of evidence
 - c. Discuss cryptographic software controls (possibly here, formerly in France, *etc.*)
7. Procedures
 - a. What procedures need to be put in place, and how will they affect security?
8. Human Factors
 - a. Principle of Psychological Acceptability (*note*: illegal violates this)
 - b. Principle of common sense (it's not common; more when we discuss robust programming)
9. Role of trust
 - a. What is trust?
 - b. Who cares?
10. Robust Programming
 - a. Go through handout, emphasizing principles
 - b. Information hiding and abstraction
 - c. Error handling