Outline for January 30, 2002

Reading: §4.1–4.5, §5.1–5.3 (not including §5.2.3, 5.3.1)

1. Greetings and Felicitations!
2. Puzzle of the day
3. Policy
   a. Sets of authorized, unauthorized states
   b. Secure systems in terms of states
   c. Mechanism vs. policy
4. Types of Policies
   a. Military/government vs. confidentiality
   b. Commercial vs. integrity
5. Types of Access Control
   a. Mandatory access control
   b. Discretionary access control
   c. Originator-controlled access control
6. High-Level Policy Languages
   a. Characterization
   b. Example: DTEL
7. Low-Level Policy Languages
   a. Characterization
   b. Example: Tripwire configuration file
8. Goals of Confidentiality Policies
9. Bell-LaPadula Model with Levels Only
   a. Security Levels
   b. Simple Security Property
   c. *-Property
   d. Basic Security Theorem
10. Bell-LaPadula Model
    a. Compartments
    b. BLP as lattice structure
    c. Simple Security Property
    d. *-Property
    e. Basic Security Theorem
11. DG/UX B2 UNIX System
    a. Hierarchy of levels
    b. Labels, explicit and implicit
    c. MAC tuples