February 7, 2023 Outline

Reading: text, §§8.4–8.5, 9.1–9.2

Assignments: Homework #2, due February 7
Project Progress Report, due February 14

Note: There will be no class on February 9, 2023 (that’s next Thursday)

1. Role-based Access Control (RBAC)
   (a) Definition of role
   (b) Partitioning as job function
   (c) Axioms
   (d) Containment and other uses
   (e) RBAC₀, RBAC₁, RBAC₂, RBAC₃

2. Traducement
   (a) Problem of recordation
   (b) Requirements of solution
   (c) Ideas, entities, and rules
   (d) Proposition and theorems
   (e) Naming
   (f) Validation of model
   (g) Consequences
      i. Practice and use
      ii. Assumptions

3. Break-the-glass policies

4. Problem with instantiation of Bell-LaPadula Model
   (a) Covert channel example: what is “writing”?
   (b) Composition of lattices
   (c) Principles of autonomy and security

5. Deterministic noninterference
   (a) Model of system
   (b) Example
   (c) Relationship of output to states
   (d) Projections and purge functions