

Outline for May 27, 2003

1. Reference monitor
 - a. Concept
 - b. Reference validation mechanism
 - c. Security kernel
 - d. Trusted computing base
2. Example of add-on vs. built-in: AT&T UNIX systems with MLS
3. Policy specification
 - a. What it is
 - b. Using a standard
 - c. Creating new policy
 - d. Mapping into existing policy model
 - e. Example: System X
4. Justifying requirements
5. Techniques to support design assurance
 - a. Subsystem, subcomponent, module
6. Design documents
 - a. Security functions summary specification
 - b. External functional specification
 - c. Internal design description
7. Justifying design meets requirements
 - a. Formal methods
 - b. Review
8. Implementation assurance
 - a. Programming language
 - b. Modularity
 - c. Security features (bounds checking, strong typing, *etc.*)
 - d. Implementation management such as configuration management
9. Security testing
 - a. Functional testing (black box testing)
 - b. Structural testing (white box testing)