

Outline for May 19, 2006

Reading: text, §17.3—17.3.1.2

1. Greetings and felicitations!
2. Covert channels
 - a. Storage vs. timing
 - b. Noise vs. noiseless
 - c. Existence
 - d. Bandwidth
3. Covert channel detection
 - a. Noninterference
 - b. Shared Resource Matrix Model
 - c. Information flow analysis
 - d. Covert flow trees
4. Noninterference
 - a. Version of the Unwinding Theorem
 - b. Specifications of SAT
 - i. *object_create*
 - ii. *can_read*
 - iii. *readable*
 - c. Example analysis for SAT
5. Shared resource matrix methodology
 - a. Identify shared resources, attributes
 - b. Operations accessing those attributes
 - c. Building the matrix
 - i. Covert storage channels
 - ii. Covert timing channels
 - d. Issues about the methodology