May 24, 2017 Outline

Reading: Chapters from revised text, §18.2.2.2-18.3.1.3

Due: Homework #4, June 7 Final project, June 7

- 1. Isolation: non-virtual machines
 - a. Program rewriting
 - b. Loading
- 2. Covert channels
 - a. Storage vs. timing
 - b. Noise vs. noiseless
 - c. Existence
 - d. Bandwidth
- 3. Covert channel detection
 - a. Shared Resource Matrix Model
 - b. Information flow analysis
 - c. Covert flow trees
- 4. Shared resource matrix methodology
 - a. Identify shared resources, attributes
 - b. Operations accessing those attributes
 - c. Building the matrix
 - d. Issues about the methodology