

February 5, 2021 Outline

Reading: *text*, §7.4, 8.1–8.2

Assignments: Homework #2, due February 5
Project progress report, due February 12

Module 26

1. Countermeasures to network flooding
 - (a) Manipulate opening of connection
 - (b) Control which packets get through, or the rate at which they get through
2. Amplification attacks

Module 27

3. Chinese Wall Policy
 - (a) Low-level entities are objects; all objects concerning the same corporation form a CD (company dataset); CDs whose corporations are in competition are grouped into COIs (Conflict of Interest classes)
 - (b) Intuitive goal: keep one subject from reading different CDs in the same COI, or reading one CD and writing to another in same COI
 - (c) Simple Security Property: Read access granted if the object:
 - i. is in the same CD as an object already accessed by the subject; or
 - ii. is in a CD in an entirely different COI.
 - (d) Theorems:
 - i. Once a subject has accessed an object, only other objects in that CD are available within that COI;
 - ii. Subject has access to at most 1 dataset in each COI class
 - (e) Exceptions: sanitized information
 - (f) *-Property: Write access is permitted only if:
 - i. Read access is permitted by the simple security property; and
 - ii. No object in a different CD in that COI can be read, unless it contains sanitized information
 - (g) Key result: information can only flow within a CD or from sanitized information