

Outline for October 9, 2014

Reading: *text*, §15

1. Access Control Lists
 - a. Full access control lists
 - b. UNIX method
 - c. ACLs: describe, revocation issue
2. Capabilities
 - a. Capability-based addressing
 - b. Inheritance of C-Lists
 - c. Revocation: use of a global descriptor table
3. Lock and Key
 - a. Associate with each object a lock; associate with each process that has access to object a key (it's a cross between ACLs and C-Lists)
 - b. Example: use crypto (Gifford). X object enciphered with key K . Associate an opener R with X .
Then:
OR-Access: K can be recovered with any D_i in a list of n deciphering transformations, so $R = (E_1(K), E_2(K), \dots, E_n(K))$ and any process with access to any of the D_i 's can access the file
AND-Access: need all n deciphering functions to get K : $R = E_1(E_2(\dots E_n(K) \dots))$
 - c. Types and locks