

ECS 235B Module 7

Miscellaneous

Copy Flag and Right

- Allows possessor to give rights to another
- Often attached to a right (called a *flag*), so only applies to that right
 - r is read right that cannot be copied
 - rc is read right that can be copied
- Is copy flag copied when giving r rights?
 - Depends on model, instantiation of model

Own Right

- Usually allows possessor to change entries in ACM column
 - So owner of object can add, delete rights for others
 - May depend on what system allows
 - Can't give rights to specific (set of) users
 - Can't pass copy flag to specific (set of) users

Attenuation of Privilege

- Principle says you can't increase your rights, or give rights you do not possess
 - Restricts addition of rights within a system
 - Usually *ignored* for owner
 - Why? Owner gives herself rights, gives them to others, deletes her rights.

Quiz

Does Linux obey the principle of attenuation of privilege?

- Yes, because a subject cannot give others rights it does not possess. Nor can it increase its rights, as it has full rights over whatever it creates; it can deactivate the rights, but it still has them.
- Yes, because no user has as many rights as *root*, and so *root*'s privilege is attenuated to the other users.
- No, because a subject can acquire rights it does not have, for example if another subject changes file access permissions.
- No, because processes all have the same privileges as their owners.