

## Week 5 Questions

### Lecture 23

1. No. They are categories that both refer to the development category. However, SD is a confidentiality category while ID is an integrity category.
2. In case a particular object needs to be seen by a lower-level role. The system controller needs to have the ability change levels for this to happen.
3. Yes.
4. Weak tranquility.

### Lecture 24

1. The four fundamental concerns addresses the unique concerns of commercial security.
2. Bank balances, checks
3. Candy bowl on the counter
4. Certification gives more specific, detailed instructions for the policy whereas enforcement is more of a guideline for the policy. Enforcement is like a metapolicy and certification is a policy.
5. (teller, deposit money, {bank balances})

### Lecture 25

1. The consultant could potentially give sensitive information from either company to each other. If the consultant gave information from AA to United, United could potentially use that information against AA.
2. Yes, because GM and Microsoft are in different conflict classes.
3. You can access files from Microsoft, Bank of America, Citicorp, and Wells Fargo.
4. The Chinese Wall Policy addresses a very specific commercial concern—the potential for conflicts of interest and inadvertent disclosure of information. BLP protects confidentiality and integrity within a system—or in this case, a company like GM. The Chinese Wall Policy protects confidentiality and integrity between systems, like information flow between GM and Ford.

### Lecture 26

1. By associating permissions with roles, then every subject that has that role is authorized for those permissions. You don't have to authorize each subject for the same permissions.
2. Authorized roles are roles that a subject is able to fill. Active roles are the roles that the subject currently occupies.
3. Role authorization says a subject's active role must be an authorized. Whereas transaction authorization says that the transaction must be an authorized transaction for the active role.
4. RBAC is easier to administer than standard access control policies. In a standard access control policy, when changing roles, the subject needs to also change identities. Overall RBAC is more flexible than standard access control policies.

### Lecture 27

1. Storing the matrix explicitly is expensive and usually unnecessary.
2. Access Control List, Capability-based System, a set of rules for "on the fly" computations.