

Assignment 5

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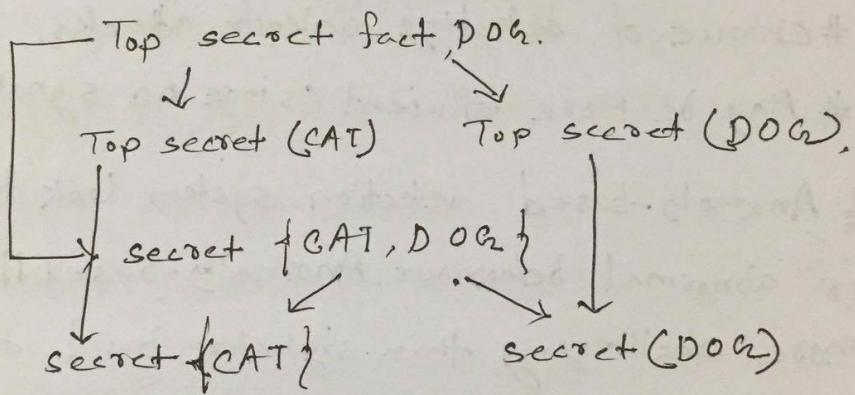
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CSE 490

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Assignment - 5

↳ Under need to know restrictions even if one has all the necessary official approvals to access certain information, one would not be given access to such information or read into a clandestine operation, unless one has a specific need to know.

Compartments designed to enforce the need to know principle. For example.



Here top secret divided into two compartment, named as $\{\text{CAT}, \text{DOG}\}$, so the $\{\text{CAT}\}$ compartment only access the secret $\{\text{CAT}\}$ compartment. Same thing goes for the Top secret $\{\text{DOG}\}$ compartment. For this compartment concept there is no interference between compartment.

b Advantages of signature-based detection:

- # Simple
- # Efficient
- # Detect known attacks.
- # Know which attack at the detection.

b Advantages of anomaly-based detection:

- # chance of detecting unknown attacks.
- # May be more efficient (since no signature)

c Anomaly-based detection system look for unusual or abnormal behaviour. Anomaly-based IDs are more challenging than signature based detection because of

→ We don't know what is normal for this system

→ How far from normal is abnormal?

3 Picture identification of captcha:

This captcha provides user for selecting the elementary choices of selecting correct image that they are asked to identify. This type captcha usually never gets harder than the basic images. So you do not have to worry about your users not being able to depict them.

4 Advantages of capabilities over ACL:

- ⇒ Easy to Add/Delete users.
- ⇒ Easy to delegate avoid the confused deputy.

Advantages of ACL over capabilities:

- ⇒ Protection is data oriented.
- ⇒ Good when users manage their own files.