COE 449: Network Security Engineering
HW 2 – Chapters 2, 4, 5
Posted: 3 November 2008   Due: 10 November 2008

1) Give a brief example of each of the 4 types of security policies?

2) Give a concise scenario clarifying the 3 types of access control?

3) In the Unix Data General System, why is the virus prevention region below the user region? Give a brief example that justifies your answer ?

4) In the Unix Data General System, why is the Administrative region above the user region? Give a brief example that justifies your answer ?

Consider the set of rights {read, write, execute, own}, subjects {p, q}, and objects {AA, BB}. Using the syntax in Section 2.3 of the book (similar to the 6 primitive commands as in lecture slides), write commands as specified below showing your updated ACM after running the command, start by assuming no ACM:

  5) Build a new (empty) ACM with subjects alone.

  6) Include the objects in the ACM.

  7) Include the rights up to your interest such that all entries have at least one right, remember to involve all 4 rights.

  8) Modify your rights replacing all rights of AA & BB visa versa.

  9) Show a command to delete "execute" right only if all other entries of the same object is having "write" right.

  10) Show a command to modify the ACM and delete all rights making it empty as output of (b).