Abstract

With the fast growing nature of enterprise business especially with the emergence of information technology, we are moving towards the era where database systems have become mandatory for the organizations to implement. Because of this, it has become very important to specify such access control model for the database systems in organizations that must ensure
the security of information but at the same time dynamic. Conventionally, access control models stress on pre-defined users for which access level is pre-determined by the database administrator. Considering the need of today’s business, that has become borderless, and most of unknown users also attempt to access the information, we present a design algorithm for access control model that can handle for both existing and unknown users of the database. The algorithm deals with three major parts, Environment Check, Roles and Permissions Check and finally the increment and decrement of permissions dynamically.

Reference

- http://en.wikipedia.org/wiki/Role-based_access_control
Design of Algorithm for Environment based Dynamic Access Control Model for Database Systems


- R. Indrakshi, K. Mahendra, "Towards a location-based mandatory access control model” compute r s & s e c u r i t y Science Direct 2 5 ( 2 0 0 6 ) 3 6 – 4 4


Index Terms

Computer Science Database Systems

Key words

Database Access Control Dynamic Access

Control Environment-based RBAC