Abstract

In this paper, we propose database intrusion detection mechanism to enhance the security of DBMS. In a typical database environment, it is possible to define the profile of transactions that
each user is allowed to execute. In our approach, we use the transactions profile and overall system architecture is divided into two parts, learning phase and intrusion detection phase. The learning phase generates authorized transactions profile automatically and is used at detection phase to check the behaviour of executable transactions. We also implement the detection phase with the help of Counting Bloom Filter (CBF) and comparing both the approaches.

References

Index Terms

Computer Science

Security

Keywords

Database Security

Database Auditing

Transaction Profile

Counting Bloom Filter (CBF)