Abstract

Every organization is associated with huge amount of information which is more valuable. Data is important and so it should be consistent, accurate and correct. Today many approaches are used to protect the data as well as networks from attackers (attacks like SQLIA, Brute-force attack). One way to make data more secure is using Intrusion Detection System (IDS). Many researches are done in this intrusion detection field but it mainly concentrated on networks and operating system. This approach is for database so that it will prevent the data loss, maintain consistency and accuracy. Database security research is concerned about the protection of database from unauthorized access. The unauthorized access may be in the form of execution of malicious transaction and this may lead to break the integrity of the system. Banking is one of the sectors which are suffering from million dollars losses only because of this unauthorized activities and malicious transactions. So, it is today’s demand to detect malicious transactions and also to provide some recommendation. In this paper, we provided the detection system for the real-world problem of intrusion detection in the banking system and we are going to give some preventive measures to avoid or reduce future attacks. In order to detect malicious transactions, we used data mining algorithm for framing a data dependency miner for our banking database IDS. Our approach extracts the read-write dependency rules and then these rules are used to check whether the coming transaction is malicious or not. Our
system not only finds the malicious transactions that corrupt data items but also identify the transactions that write data without permission and read data without permission.

References


Index Terms

Computer Science Database Management And System
Keywords
Intrusion Detection  Malicious Transaction  Data Mining  Data Dependency.