Devising Solution to SQL Injection Attacks

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Abstract

Web application plays an important role in different fields like finance sector, business, shopping etc. There is no. of web application vulnerabilities such as SQL injection, Buffer overflow etc. Above these SQL Injection vulnerabilities are very harmful for web applications. In literature survey there are number of technique used to prevent SQLIA in application level, but not in database level. SQL injection attacks occur due to vulnerabilities in the design of queries where a malicious user can take advantage of input opportunities to insert code in the queries that modify the query-conditions resulting in unauthorized database access. In this paper we design an effective algorithm to prevent stored procedure from SQLIA in database level. Hirschberg’s algorithm is used to prevent the stored procedure, which reduces both time as well as space complexity. We also analyse several aspects which have been discussed further.

References

1. Ke Wei, M. Muthuprasanna, Suraj Kothari, “Preventing SQL Injection Attacks in Stored
Devising Solution to SQL Injection Attacks


Index Terms

Computer Science Security

Keywords

SQL injection, Hirschberg’s Algorithm, Database security, DBMS audit