Abstract

Online applications are vulnerable to theft of sensitive information because adversaries can exploit software bugs to gain access to private data and because curious or malicious administrators may capture and leak data. DBCrypto provides practical and provable confidentiality to the database by using queries. The proposed system is a middleware between user application and DBMS. The encrypted data is stored in tables by preserving its format and decrypted data can accessible to the user through regular queries. The various encryption and decryption algorithms are implemented at Query Level to secure the data from malicious administrator or from information leak.

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Index Terms

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