Integrating Encrypted Cloud Database Services using Query Processing

Abstract

In today’s environment the various vital information should need to be stored in more secured manner. In the cloud computing, original plain data must be accessible only by trusted parties that do not include internet and cloud providers or intermediaries. Storing this confidential information in cloud must provide guarantee of availability of data and security. There are too many solutions are provided to handle data, but still confidentiality problem is at risk. For that reason in this work proposed a new novel architecture SecureDBaaS which provides confidentiality and as well as allows concurrent execution of operations on encrypted data with distributed policy also. SecureDBaaS architecture retrieves the necessary information or metadata through SQL processing. This architecture has advantage that eliminates the intermediate server between client and cloud database also modifies the database structure. It guarantees for data confidentiality by performing SQL operations over encrypted cloud databases. This intended result of the proposed architecture is evaluated through comparison of AES n DES algorithm, where AES is better than DES is proved by studying comparison results.
References

21. Luca Ferretti, Michele Colajanni, and Mirco Marchetti “Distributed Concurrent and independent access to encrypted cloud databases.” IEEE transactions on parallel and distributed systems, vol. 25, no. 2, February 2014

Index Terms

Computer Science
Information Sciences

Keywords

SecureDBaaS, cloud, security, DBaaS