Abstract

The enhancement of cloud computing make storage outsourcing becomes an exceeding trend, which result a secure data auditing a cool topic that emerge in research literature. Recently some researches consider the problem of efficient and secure public data authentication inspection for shared dynamic data. However, these schemes are still not secure against the collusion and leakage of cloud storage server from unauthorized attacker and revoked group users during user revocation in cloud storage system. In this paper, there will be auditing the integrity of shared data with dynamic groups in cloud. A new user can be added into the group and an existing group member can be revoked by preserving privacy including data backup based on vector commitment and verifier-local revocation group signature. This scheme supports the public validation and efficient user revocation and also some nice properties such as traceability, efficiency, confidently, countability. Finally, the security and experimental analysis show that our scheme is also secure and efficient.
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Index Terms

Computer Science

Distributed Systems

Keywords

Public integrity auditing, dynamic data, cloud computing.