Abstract

Data deduplication began to emerge approximately ten years ago, but has only recently become an important technology and also it is one of important data compression techniques to eliminate duplicate copies of data. Different from traditional deduplication systems, the differential privileges of users are further considered in duplicate check besides the data itself. Here new deduplication constructions supporting authorized duplicate check in this hybrid cloud architecture are presented. Security analysis demonstrates that our scheme is secure in terms of the definitions specified in the proposed security model. We show that our proposed authorized duplicate check scheme incurs minimal overhead compared to normal operations.

References

Design and Implementation of a Hybrid Cloud Approach for Secure Authorized Deduplication

Issue 2.


Index Terms

Computer Science          Distributed Systems

Keywords

Authorized duplicate check, deduplication, hybrid cloud, private cloud, public cloud, security algorithms