Abstract

Cloud computing is a specialised form of distributed computing that introduces utilization models for remotely provisioning scalable and measured resources. The driving motivation behind the cloud computing is to provide IT resources as a service that encapsulates other IT resources. Data service outsourcing is one of the service that is economically enabled by the cloud computing. But in order to protect data privacy sensitive data has to be encrypted before outsourcing to the commercial public cloud. Data encryption protects data security to some extent, but this may lead to a compromise on the part of efficiency of storage and retrieval on the server. This paper analyzes various searchable encryption schemes where data owner itself is responsible for his data security. These searchable encryption schemes allow retrieval of encrypted data over the cloud thereby making data retrieval fast and efficient. These schemes also guarantee high security and efficiency.
1. P. Mell, T. Grance,”The NIST Definition of Cloud Computing”, Version 15,10-7-09


Index Terms

Computer Science Distributed Systems

Keywords

Data outsourcing, data encryption, searchable encryption