Secure sharing of data in private cloud using Oaep algorithm

September 2015

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Abstract

Cloud computing is a type of computing where data owners can remotely store their data in the cloud to enjoy various applications and services from a shared pool of computing resources. In general, private cloud environment is set for a specific organization. It can either be managed internally or can be managed externally (i.e.), through a third-party auditor. Outsourcing of data and computational services are one of the major features of a private cloud. Even though encryption of data is performed before outsourcing the data, still there are some privacy issues that occur during outsourcing. Data outsourcing eliminates the physical control of the data (i.e.), the owners of the data no longer physically possess the storage of their data thereby affecting security. Computational outsourcing eliminates the correctness of the data. The data to be stored in cloud is encrypted before the storing process. In order to provide solutions for security issues concerning data and computational outsourcing, we implement a new concept, of generating padding bits in order to provide more security to data.