Abstract

Cloud computing security challenges to many researchers. Priority was to focus on security which is the biggest concern of organizations moving to the cloud. Cloud computing help in costs optimization, easy maintenance and re-provisioning of resources, and so the increased profits. The adoption of Cloud Computing applies only if the security is ensured. How to guaranty a better data security and also how can we keep the client private information confidential? There are two major queries that present a challenge to Cloud computing providers.

When the data transferred to the Cloud we use standard encryption methods to secure the operations and the storage of the data. For processing data located on a remote server, the Cloud providers need to access the raw data. In this paper we are proposing a method to execute operations on encrypted data without decrypting them. It will yield the same results after calculations as if we have worked directly on the raw data.
References

1. National Institute of Standards and Technology - Computer Security Division
   http://csrc.nist.gov/groups/SNS/cloud-computing/


3. Cloud Security Alliance, Top Threats to Cloud Computing V1.0


Index Terms

Computer Science
Security
Keywords

Cloud computing, homomorphic encryption, Ciphertext, Data security