Developing Secure Cloud Storage System by Integrating Trust and Cryptographic Algorithms with Role based Access Control

Abstract

Cloud computing is one of the rising and encouraging field in Information Technology. It provides services to an organization over a network with the ability to scale up or down their service requirements. Cloud computing services are established and provided by a third party, who having the infrastructure. Cloud computing having number of benefits but the most organizations are worried for accepting it due to security issues and challenges having with the cloud. Security requirements required at the enterprise level forces to design models that solves the organizational and distributed aspects of information usage. Such models need to present the security policies intended to protect information against unauthorized access and modification stored in a cloud. The work describe the way for modeling the security requirements from the view of tasks performed in an organization by using the cryptography concepts to store data on cloud with the less time and cost for process of encryption and decryption. In this work, the RSA and AES algorithms are used for encryption and decryption of data. The role based access control model is used to provide accessibility according to the role assigned to the user. This paper has the mathematical model for the trust calculation of the
Developing Secure Cloud Storage System by Integrating Trust and Cryptographic Algorithms with Role based Access Control

This system gives the rights for uploading to the user when he/she is authorized by the Administrator and Owner.

References

Developing Secure Cloud Storage System by Integrating Trust and Cryptographic Algorithms with Role based Access Control


23. Prof. S. A. Ubale, Dr. S. S. Apte, Comparison of ACL Based Security Models for securing resources for Windows operating system, IJSHRE Volume 2 Issue 6, Page No 63.


**Index Terms**

Computer Science  Security
Keywords

Role Based Access Control, AES, RSA, Cloud computing, Trust Management.