Abstract

In many organizations, transformation of information and storage of sensitive data has highest priority. Client data should be kept secret as well as inaccessible from all other unauthorized hacks [1]. To maintain the security of the user data, cloud computing environment has practiced. The cloud computing is a cost-effective, service availability, flexible and on demand service delivery platform for providing business through the internet [2].

However, as the security of a single cloud is concerned, it fails to provide a strong protection layer against the malicious attacks. So, there is always a risk of data unavailability in system failure. A movement towards of “multi clouds” or “multiple clouds” or “cloud-of-clouds” has emerged currently using Shamir’s Secret Sharing Algorithm [3]. Here, the implementation of Shamir’s secret sharing algorithm is performed to authenticate a unique user and to access a particular file from the cloud storage.

**Index Terms**

Computer Science  
Security

**Keywords**

Shamir’s Secret Sharing Algorithm, Data Security, Cloud Storage, Single Cloud, Multi Clouds Authentication.