

## Cryptographic Protocol for Secure Cloud Storage

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**Abstract :** Cloud storage, as a subservice of infrastructure as a service (IaaS) in Cloud Computing, is the model of networked storage where data can be stored in server. In this paper, we propose a secure cloud storage system consisting of two main components; client as a user who uses the cloud storage service and server who provides the cloud storage service. In this system, we propose the protocol schemes to guarantee against security attacks in the data transmission. The protocols are login protocol, upload data protocol, download protocol, and push data protocol, which implement hybrid cryptographic mechanism based on data encryption before it is sent to the cloud, so cloud storage provider does not know the user's data and cannot analysis user's data, because there is no correspondence between data and user.

**Keywords :** cloud storage, security, cryptographic protocol, artificial intelligence

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