

Image and Text Encrypted Data with Authorized Deduplication in Cloud

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Abstract: *Cloud data storage is the most crucial service. Textual data and data pertaining to data bearers' privacy may occasionally be encrypted and kept in the cloud. Deduplication of encrypted text data continues to present new difficulties, and this has serious implications for the cloud's ability to store and handle large amounts of data. Cloud data should be protected so that unauthorised users can't access it. A data security technique called encryption is now available. The data is kept in the cloud in an encrypted manner to protect the users' privacy and security. Data access control and revocation cannot be flexible supported by these issues. We implement a method to deduplicate encrypted textual data saved in cloud-based services in this work.*

In order to prevent wasting the storage capacity supplied by cloud providers, good file storage and management is now crucial. The technique of data de-duplication, which only allows for the storage of one copy of a file, is commonly used to prevent file duplication in cloud storage systems. It contributes to a significant cost reduction for cloud service consumers by reducing the amount of storage space and bandwidth required. Data that must be stored today is encrypted for security purposes. Therefore, since data encryption with a key changes data, data encryption by data owners with their own keys prevents cloud service subscribers from doing data de-duplication. Cloud computing is a network-based computing system with a large storage area that allows authorized users to access the platform from any location at any time as long as there is strong network or internet connectivity. Cloud computing is mostly used to supply the device with shared hardware, software, and resources on demand. Instead of using a desktop, it functions like a remote server on the internet to store, manage, and process data. Therefore, compared to other local computers, the working time is quicker.

Keywords: Machine Learning, AES, MD5, Proxy re-encryption, Role authorized tree, Approved deduplication, Privacy leakage

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