

عنوان مقاله:

Provable Data Possession Scheme based on Homomorphic Hash Function in Cloud Storage

محل انتشار:

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خلاصه مقاله:

Cloud storage can satisfy the demand of accessing data at anytime, anyplace. In cloud storage, only when the users can verify that the cloud storage server possesses the data correctly, users shall feel relax to use cloud storage. Provable data possession(PDP) makes it easy for a third party to verify whether the data is integrity in the cloud storage server. We analyze the existing PDP schemes, find that these schemes have some drawbacks, such as computationally expensive, only performing a limited number provable data possession. This paper proposes a provable data possession scheme based on homomorphic hash function according to the problems exist in the existing algorithms. The advantage of homomorphic hash function is that it provides provable data possession and data integrity protection. The scheme is a good way to ensure the integrity of remote data and reduce redundant storage space and bandwidth consumption on the premise that users do not retrieve data. The main cost of the scheme is in the server side, it is suitable for mobile devices in the cloud storage environments. We prove that the .scheme is feasible by analyzing the security and performance of the scheme

کلمات کلیدی:

Cloud Storage, Provable Data Possession, Homomorphic Hash Function, Data Possession Checking

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