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Chapter

Secure Data Deduplication (SD2eDup) in Cloud Computing: Threats, Techniques and Challenges

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Authors:



Basappa Kodada

A J Institute of Engineering & Technology Mangaluru



Demian Antony D'Mello

Canara Engineering College

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Abstract

Storage is the most important service provided by cloud computing technology helps many individuals from managing in-house storage infrastructure. To provide the availability of data at any time and anywhere, the cloud service provider will store the redundant copy of data in the cloud storage server. This will leads to the waste of storage space by duplicating the user's data in the cloud. The data deduplication technique has attracted many cloud vendors to increase the storage space by deleting the same copy of data from the cloud storage server and reduce the storage cost for cloud users. The data deduplication comes with many security issues due to its exploration of metadata stored in the cloud. To deal with these security issues, many secure data deduplication techniques have been proposed. Hence, in this article, we present the taxonomy on the classification of data deduplication techniques for general data. And we discuss the secure data deduplication along with different security threat models during data deduplication process. In this article, we also discuss the various existing secure data deduplication schemes proposed by researchers and present in taxonomy. Finally, we identify some of the open research challenges and present for future research direction in the big data era.

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Advanced structure of CDMI with CSP

October 2017 · Journal of Computational and Theoretical Nanoscience

Jae-Yun Jeong · Jae-Woong Jeong

The cloud computing technology is not new trend anymore, but it is still very useful and good way to use contents, systems, services and all devices via the internet. Nowadays, the data interface for cloud computing environment was introduced, that is CDMI (Cloud Data Management Interface). In this paper, we propose advanced CDMI structure considering Big Data. Especially, the structure consist ... [\[Show full abstract\]](#)

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