Abstract

Today's storage systems have a major issue for the long-term storage of massive amounts of unstructured data. The reliability and availability of that fortune of data become important factors. So, distributed storage system is essential for many large-scale organizations. It is challenging that how to access the distributed data from a place. In this paper, a structure of the Bloom filter array (BFA) is proposed to get time and space efficiency in distributed storage system. The proposed structure that can efficiently lookup the queries will be discussed from the algorithm perspective and then evaluate BFA through simulations.

References

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Using Bloom Filter Array (BFA) to Speed up the Lookup in Distributed Storage System

SIGCOMM, 2006.

Index Terms

Computer Science

Algorithms
Keywords
Unstructured data  large-scale distributed storage  replication  availability  reliability
bloom filter