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Abstract

An increasing number of enterprises outsource their IT functions or business processes to third-parties who offer these services with a lower cost due to the economy of scale. Quality of service has become a major concern in outsourcing. When database owners outsourced their data to service providers, which might be untrusted or compromised, two issues of data security emerge, data confidentiality and data integrity. Most of the previous research focuses on only

one issue and the solution to integrate two approaches is expensive. Furthermore, no solution is raised on various character queries. We propose an approach which keeps data confidentiality and integrity. The proposed approach is based on bin checksum, which can be used to check correctness, completeness and freshness of multiple tuples at one time.

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