

Design of a Horizontal Data Fragmentation, Allocation and Replication Method in the Cloud

Publisher: IEEE

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2
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197
Full
Text Views



Abstract

Document Sections

- I. Introduction
- II. State of the Art
- III. Design of the Horizontal Data Fragmentation, Allocation and Replication Method Fn the Cloud
- IV. Results
- V. Conclusion

Abstract:

At present, the demand for information in distributed database systems is large and growing day by day. While this is happening, new challenges arise to improve the performance of the databases. Data fragmentation and replication methods have a leading role in distributed systems over the cloud, which is why this paper presents the design of a horizontal fragmentation, allocation and replication method in the cloud. This research proposes an algorithm for solving the problem of overlapping horizontal fragments in a data fragmentation and replication method in the cloud. The design of a Web application using the aforementioned method is also presented, this allows the fragmentation, assignment and replication scheme proposed by the method to be directly applied on a distributed database.

Published in: 2019 IEEE 15th International Conference on Automation Science and Engineering (CASE)

Date of Conference: 22-26 August 2019

DOI: 10.1109/COASE.2019.8842934

Date Added to IEEE Xplore: 19 September 2019

Publisher: IEEE

▼ **ISBN Information:**

Conference Location: Vancouver, BC, Canada

▼ **ISSN Information:**

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