

## HBase 负载均衡分析及优化策略

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**摘要:** HBase 作为 Hadoop 分布式开源云数据库因其高可用性等优势越来越受到青睐, 但是随着大量数据的注入, HBase 对负载的分配状况将直接影响到整个集群的性能优劣. 针对原有负载均衡算法在负载分配过程中可能产生的负载严重不均衡问题, 通过分析原有算法和问题出现的因素, 提出一种基于子表限制的负载均衡改进方法, 并通过与不均衡状况下的对比实验, 验证改进后的分配方式可以有效利用集群中各个节点的资源, 从而提高分布式集群性能.

**关键词:** 云计算; HBase; 负载均衡; 节点资源; 集群性能

## HBase Load Balancing Algorithm Analysis and Improvement

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**Abstract:** As the Hadoop distributed open source database, HBase gradually gained a lot of attention due to its high-performance. However, with a large amount of data pouring into HBase, the situation of load distribution by HBase will directly affect the performance of the whole cluster. With the problem of load seriously imbalances in the process of original algorithm, proposed a novel load-balancing approach based on the limited child table, with the analysis of original algorithm and the causes of the problem. The contrast experiment showed that the improved approach of scheduling can make effective use of each node resources in the cluster, thereby improved the performance of the distributed cluster.

**Key words:** cloud computing; HBase; load balancing; node resources; cluster performance

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