云计算下分布式数据安全读取算法研究

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摘　要：针对传统的云计算下分布式数据安全读取算法，一直存在数据读取质量不高，读取数据重复率较高的问题.提出基于范围型属性的云计算下分布式数据安全读取算法，首先采用经验分布函数与核估计对云计算下分布式数据的分布函数进行估计；然后以分布式数据的分布函数变换进行均匀分布的假设检验；再以分布式数据分析结果为依据，利用范围型属性的值域特征，将分布式数据值域按照目标数据库的分布样本划分为多个子区间，在此基础上完成云计算下分布式数据的安全读取.实验结果分析证明，所提算法能提高分布式数据的安全读取速度和读取正确率，降低计算复杂度，适用范围广.

关键词：云计算下；分布式数据；安全读取；经验分布函数；范围型属性

Cloud Computing Distributed Data Security Read Algorithm Research

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Abstract：In view of the traditional distributed data security algorithm under cloud computing, there has been a problem that the quality of data reading is not high, and the repetition rate is high. The range of attribute based cloud computing distributed data security read algorithm, using the empirical distribution function and kernel estimation of distribution function under distributed cloud computing data are estimated; then to transform the distribution function of distributed data assuming uniform distribution of inspection inspection; then distributed data analysis based on the results, the range of feature range type attribute, the distributed data domain into multiple sub intervals according to distribution of samples into the target database, complete cloud computing security read based on distributed data. The experimental results show that the proposed algorithm can improve the security of the distributed data reading speed and reading accuracy, reduce the computational complexity, and the application scope is wide.

Key words：under the cloud computing; distributed data; security read; empirical distribution function; range type attribute

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