MEAN ABSOLUTE TIGER HASH ENERGY OPTIMIZED SLA IN GREEN CLOUD ENVIRONMENT

S.NIVAS
ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE, NIFT-TEA COLLEGE OF KNITWEAR FASHION, TIRUPUR, TAMILNADU, INDIA.

ABSTRACT

An Energy-efficient Service Level Agreement (SLA) for virtualized graphic processing unit (GPU) was developed with reducing power consumption based on the achieved frames per second. Initially, service providers need to be assured of meeting their SLA requirements, which indicates service performance between a customer and a service. This minimizes the power consumption in order to reduce operation costs with respect to higher energy efficiency. However, SLA approach cannot be directly applied to the current virtualized GPU environments in Green Cloud environment. This work focuses on greener cloud service as per Service Level Agreement (SLA), called Service Level Agreement based Tiger Hash Storage and Energy Optimization (SLA-THSEO) framework. Hash storage technique is developed to attain optimal storage space for data in cloud environment and optimal sampling size is carried out to minimize the energy storage. To this, Tiger Hash Energy Optimized Service Level Agreement is constructed to obtain efficient computation and storage resources. The virtualized cloud servers in green cloud handles storage space dynamically and presented as one or more fused computing resources as per service level agreements. The flexibility of the proposed framework is proved, and evaluates the storage resources performance by detailed experiments and comparisons with the existing ones. The results demonstrate that the proposed framework can effectively achieve storage capacity for cloud storage, and outperforms the previous frameworks in service level distribution time, energy consumption and data storage capacity.

KEYWORDS: Service Level Agreement, Graphic Processing Unit, Tiger Hash, Green Cloud environment, virtualized cloud servers.

REFERENCES


