Cloudlet Networks Performance Analysis and Improvement

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***Abstract*— Cloud computing is a Participation in the process and storage operations across distant servers that are shared by many organizations and users and thus be transferred from an application to a service. The organization can share data over the Internet and user can pay only for the resources that will be used only. While cloud computing has disadvantages, there are some advantages for cloudlets have over cloud computing which include: lower network latency and users having full ownership of the data shared. When the need of data to be stored in the servers grows quickly, the workload in every resource will grow too. So, we need a load balancing algorithm and the load balancing is important issue in the cloud environment. Load balancing defined as a technique that divides the extra load equally across all the resources to ensure that no one resource overloaded. . So the performance of the cloud can be improved by having an excellent load balancing strategy. For that we will discuss the existing load balancing algorithms in cloud computing and propose algorithm to improve round robin algorithm by CloudAnalyst simulator based on a factor of response time and processing time and the proposed algorithm was found to be best in response time and processing time when we compare it with round robin algorithms.**

***Index Terms*— Cloud Computing, CloudAnalyst, Load Balance, Mobile Cloud Computing, Cloudlet Networks.**

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