

A Focal load balancer based algorithm for task assignment in cloud environment

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ABSTRACT

A new trend rising in IT environs is the Mobile cloud computing with colossal prerequisites of infrastructure along with resources. In cloud computing environment, load balancing a vital aspect. Cloud load balancing way toward disseminating workloads across numerous computing resources. Proficient load balancing plan guarantees effective resource usage by the supply of resources to cloud user's on-demand premise and it might even help organizing clients by applying fitting planning criteria the current paper discusses and implements the concept of load balancers, which are the lifeblood of any cloud computing network. In this paper, a new load balancing system is presented Focal Load Balancer (F-LB), which has been developed to reduce the traffic in the Cloud, whilst assuring a smooth flow of data in the cloud network. The proposed algorithm takes advantage of the dynamic load balancing characteristics over static balancing, and avoids the damage that a static load balancer causes if it fails. Simulation results show that the proposed algorithm operates efficiently and effectively, and it provides a significantly improved performance over existing algorithms. Comparisons with the krill-LB and agent-based algorithms show that the new system provides a reduction in average wait time, a significant increase in throughput, and a dramatic reduction in CPU time consumption.

KEYWORDS

Cloud computing; load balancing; throughput

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