OTS: an optimal tasks scheduling algorithm based on QoS in cloud computing network

ABSTRACT

Cloud Computing has emerged as a service model that offers online accessible resources to the clients. These resources contain storage, servers, and other applications and it provides security, flexibility, and scalability. In Max-Min algorithm where the large tasks have their priority to be scheduled first this leads small tasks to stay longer in the queue until all huge tasks finished their execution. This study presents an optimal tasks scheduling algorithm by enhancing Max-Min algorithm. The simulation results have proven that the Proposed Optimal Tasks Scheduling OTS completes tasks execution with less execution time and higher performance compared with Max-Min and TS algorithms. The overall results show that the performance of the proposed algorithm achieved 6% better in terms of time execution compared of both of Max-Min and TS algorithms.

Keyword: Cloud computing; Scheduling; OTS; QoS; Max-Min