Abstract

Computational grid has been measured as the best model for managing large scale distributed system having geographically owed resources. Load balancing algorithms are important in the research of network applications. The proposed algorithm minimizes the average execution time and response time. The proposed Response Time Minimization algorithm is implemented with Cloudanalyst toolkit which can simulate a decentralized module. The Cloudanalyst toolkit abstracts the features and behavior of complex fundamental elements such as tasks, resources and users. The proposed algorithm presents service namely resource discovery. The proposed Response Time Minimization Approach is compared with Round Robin Algorithm and equally spread execution algorithm. The main objective of the Response time minimization algorithm is to share the load to the available Virtual Machine (VM) efficiently in order to improve the response time, data processing time and minimize delay time. The performance analysis indicates that the response time of the proposed task scheduling algorithm is much better than the Round Robin Algorithm and equally spread execution algorithm. Results support the proposed approach.
References


Index Terms

Computer Science
Algorithms

Keywords

Task scheduling, Response Time, virtual Machine Data center and Load balancing.