Abstract

Cloud computing is the fastest new paradigm for delivering on demand services over internet and can be described as internet centric software. In cloud computing there are many tasks that needs to be executed by the available resources to acquire high performance, reduce task completion time, minimize response time, utilization of resource usage and etc. Scheduling theory for cloud computing is gaining a lot of attention with increasing popularity in this cloud era. Service providers like to ensure that resources are utilized to their fullest and best capacity so that resource power is not left unused. This paper proposes a priority based scheduling optimization algorithm which addresses these major challenges of task scheduling in cloud. The incoming tasks are grouped on the basis of data and requested resources by the task and prioritized. Resource selection is done on the basis of its cost and turnaround time both using greedy approach. Task selection on the basis of a priority formula. This way of resource selection and task selection gives more better results over sequential scheduling.

References

- Q. Cao, B. Wei and W. M. Gong, "An optimized algorithm for task scheduling"

- Ashutosh Ingole, Sumit Chavan, Utkarsh Pawde. &quot;An optimized algorithm for task scheduling based on activity based costing in cloud computing&quot; (NCICT) 2011, Proceedings published in International Journal of Computer Applications® (IJCA)


- S. Singh and K. Kant, &quot;Greedy grid scheduling algorithm in dynamic job submission environment,&quot; in International Conference on Emerging Trends in Electrical and Computer Technology (ICETECT), 2011, pp. 933-936.


Index Terms

| Computer Science | Information Sciences |

Keywords

Priority based scheduling task scheduling cloud computing optimization algorithm