Abstract

This paper presented a proposed model for cloud computing scheduling based on multiple queuing models. This allowed us to improve the quality of service by minimize execution time per jobs, waiting time and the cost of resources to satisfy user's requirements. By taking advantage of some useful proprieties of queuing theory scheduling algorithm is proposed to improve scheduling process. Experimental results indicate that our model increases utilization of global scheduler and reduce waiting time.

References

Enhancing Cloud Computing Scheduling based on Queuing Models

551-556.
- Amazon. com, "Elastic Compute Cloud (EC2)";
- Qiang Li, Yike Guo. "Optimization of Resource Scheduling in Cloud Computing";
- K. Mukherjee, G. Sahoo, "Development of Mathematical Model for Market-Oriented Cloud Computing";
- Amazon.com, "Elastic Compute Cloud (EC2)";
- Qiang Li, Yike Guo. "Optimization of Resource Scheduling in Cloud Computing";
- K. Mukherjee, G. Sahoo, "Development of Mathematical Model for Market-Oriented Cloud Computing";

- R. Buyya, K. Sukumar "Platforms for Building and Deploying Applications for Cloud Computing";
- K. Mukherjee, G. Sahoo, "Development of Mathematical Model for Market-Oriented Cloud Computing";

- T. Helmy, A. Dekdouk "Burst Round Robin: As a Proportional-Share Scheduling Algorithm";
- L. Breuer, D. Baum "An Introduction to Queueing Theory";
- L. Breuer, D. Baum "An Introduction to Queueing Theory";


Index Terms

Computer Science
Distributed Computing
Keywords
Cloud computing; Queuing models; Scheduling process.