Abstract

Cloud computing is one of the newest technology. Today lots of business organizations and educational institutions using Cloud environment, but one of the most important thing is to improve the Quality of Service (QoS) of the Cloud service provider (CSP), there are so many parameters affecting QoS, waiting time is one of them. If waiting time can be optimized QoS may get improved. QoS improvement means how fast it shares the resources for the client machines. There are lots of algorithms available but the waiting time is the important factor in this case. The algorithm is said to be best if it requires very less waiting time to share resources to its client machines. In this paper we propose an algorithm which requires optimum waiting time as well as it does not suffer from starvation in comparison to other algorithms. Here we implement the algorithm in M/M/S queueing model where k number of clients send request to
the job scheduler and this scheduler selects resources from the resource pool and using those algorithms job scheduler give permission to the Cloud Users (CU) how they use the resources in less waiting time. In Cloud environment there are numbers of resources present inside CSP in Resource Pool module and there are number of clients send request to the Cloud Service Provider (CSP) and a dedicated Job Scheduler, inside CSP handles those resources in a very efficient manner. In cloud environment cloud user sends the request to cloud service provider which selects the resources for the user using scheduling algorithm. In this paper we describe how the job scheduler handles those resources for the users using our proposed algorithm which is Improved Round Robin scheduling algorithm (IRRA).

References

- Borja Sotomayor, Rubén S. Montero and Ignacio M. Llorente, Ian Foster, "Virtual Infrastructure Management in Private and Hybrid Clouds" 1089-7801/09/$26. 00 © 2009 IEEE
- Hongqi Li, Zhuang Wu "Research on Distributed Architecture Based on SOA" 978-0-7695-3522-7/09 $25. 00 © 2009 IEEE 670-674
- Francesco Maria Aymerich, Gianni Fenu1, Simone Surcis "An Approach to a Cloud Computing Network" 978-1-4244-2624-9/08/$25. 00 ©2008 IEEE 113 page 113-118
- Kaiqi Xiong and Harry Perros, "Service Performance and Analysis in Cloud Computing"; 2009 Congress on Services –I

Index Terms
Keywords

Cloud computing  Queuing model  Cloud service provider  Cloud user  Improved Round Robin Algorithm

Quality of Service