Abstract

In this paper, we describe the formatting guidelines for IJCA Journal Submission. Impulsive stresses posed by unanticipated drifts of requests from users on Internet have made it exceptionally perplexing for E-Commerce to offer projected enactment of the architecture. In order to provide stable service, it is important for electronic commerce architecture to recognize the performances in terms of response time for requests, delay in accessing the services offered by servers implemented in E-Commerce architecture, and the number of requests waiting in the queue and thereby identifying the strategies to service the requests promptly. The correct and swift algorithm can prominently aid to build and operate electronic commerce architecture more proficiently. In this paper, design and implementation of an algorithm named, AQTA is proposed, which uses the queuing models to prioritize the requests from different classes of users. The proposed algorithm takes the requests from clients, and uses three different set of algorithms simultaneously, namely, Classifier Algorithm, Priority Queue Algorithm and Final Queue Algorithm, to improve the performance of architecture. The comprehensive performance of the AQTA Algorithm is depicted using various Queuing models and the results are shown accordingly. The queue models which are implemented using the simulation study include the comparative study of the AQTA models using M/M/n/K and G/G/n/K models.
References

- Riktesh Srivastava, ”Analysis of Mobile Agent based e-Supply Chain Management system using Queuing Theory: A comparative study between M/M/1 and M/D/1 models”, International Journal of Research in Computer Application and Management, (IJRCAM).
- Riktesh Srivastava, ”Analysis of job scheduling algorithm for an e-Business model in a Cloud Computing Environment via GI/G/3/n/k Queuing Model”, November 4-5, 2011 International Conference on Business and Technology, Organized jointly by IAMS and FRI University, INDIA.
Assessment of the Performance for E-Commerce Architecture vis-à-vis Advance Queuing Topology Algorithm (AQTA)


Index Terms

Computer Science

Algorithms

Keywords

AQTA  Classifier Algorithm  Priority Queue Algorithm  Final Queue Algorithm

M/M/n/K

G/G/n/K.