Performance Evaluation of Two-Space Genetic Algorithm for Optimizing Load on Video on Demand Servers

Abstract

To improve the performance of video on demand servers there is need of selecting an appropriate load balancing technique so requests can be distributed in optimized manner. To meet the growth of web traffic the concept of load balancer was introduced. The role of load balancer is to distribute the tasks among the web servers efficiently. In this paper system compared algorithms used for distributing the loads are: FCFS, Genetic, and two space GA algorithms. Performance of algorithms is calculated on the basis of makespan and average resource utilization. Two-Space Genetic Algorithm is proved better over other server selection techniques. Two-Space Genetic Algorithm gave lower makespan and higher resource utilization.

References

Performance Evaluation of Two-Space Genetic Algorithm for Optimizing Load on Video on Demand Servers


Index Terms

Computer Science Algorithms

Keywords

Video-on-demand Server Make span CPU-Utilization Fitness Function

FCFS

Genetic Algorithm

Two-Space-Genetic Algorithm