Enhanced Load Balancing Architecture using EE-GA

Volume 131
Number 7

Year of Publication: 2015

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Abstract

Cloud computing is the long dreamed vision of computing as a utility, where data owners can remotely store their data in the cloud to enjoy on-demand high-quality applications and services from a shared pool of configurable computing resources. In the meantime, the cloud environment represents various difficulties. Two players in distributed computing situations, cloud suppliers and cloud clients, seek after diverse objectives; suppliers need to amplify income by accomplishing high asset usage, while clients need to minimize costs while meeting their execution prerequisites. Nonetheless, it is hard to allot resources in a commonly ideal manner because of the absence of data sharing between them. In addition, continually expanding heterogeneity and variability of the surroundings poses considerably harder difficulties for both sides. This paper describes the work which mainly aimed at enhancing the load balancing architecture where firstly genetic algorithm is been implemented with simple architecture [1]. Secondly, genetic algorithm is been implemented with enhanced architecture named as E-GA where job grouping is done according to job’s requirements. Finally the whole architecture is been enhanced by using job grouping method with enhanced genetic algorithm.
named as EE-GA. In enhanced genetic algorithm, artificial bee colony algorithm uses the output given by genetic algorithm as their input and provides efficient resources. Both E-GA and EE-GA have been successful in better resource utilization so that the jobs are handled in a more efficient manner and also time is saved [3]. All the comparison results prove that the EE-GA provides a more efficient way as compared to the others.

References


**Index Terms**

Computer Science \hspace{2cm} Software Engineering

**Keywords**