Abstract

Cloud computing relates to the bunch of services that are provided to the customers on lease, by the servers located at different sites over the internet. The servers have pool of resources that can be scaled up and down on the basis of requirement. This results into communication and computation over the network. Divisible load theory has become popular during the past two decades. Based on divisible load theory the computations and communications can be divided into some arbitrarily independent parts and each part can be processed independently by a processor. The fraction of load must be allocated the processors based on some priorities. Analytical Hierarchy Process (AHP) is a multi-criteria based technique used for assigning priorities to the processors. Existing approach can handle the priority of processors using Eigen Value method of Analytical Hierarchy Process. The proposed model works on Geometric mean method of Analytical Hierarchy Process in order to improve parameters such as makespan, average response time and average waiting time.

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**Index Terms**

Computer Science

Distributed Systems
Keywords

Cloud Computing  Divisible load theory  Analytical Hierarchy process  Geometric Mean.