

# **EFFECTIVE LOAD BALANCING IN CLOUD COMPUTING USING GENETIC ALGORITHM**

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## **ABSTRACT**

In the current cloud computing environments, VM resource scheduling only considers the current system condition and ignores the previous state of system which causes the system load imbalance. Number of VM migrations is more when most of the load balancing takes place. The entire migration cost becomes a problem when all the VM resources are migrated. This is largely due to granularity of VM resources and the large amount of data transferred in the migration with deferral of VM service.

This paper provides a scheduling strategy to enable effective load balancing. The method used in this paper will compute its influence on the system in advance, when current VM resources are allocated to every physical node and will opt for the deployment that will have the least load on the system. This is achieved using genetic algorithm, chronological data and the current state of the system.

**KEYWORDS:** Cloud Computing, Genetic Algorithm, Load Balancing, Virtualization