

AUTONOMIC BROKERING FOR MINIMIZATION OF SERVICE LEVEL AGREEMENT VIOLATIONS IN CLOUD COMPUTING

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ABSTRACT

Cloud computing is emerging as a vital player in the field of information technology. Brokering in cloud computing is the main issue as with the emergence of cost effectiveness and managing virtual machines in cloud, cloud broker is an important entity to tackle. Therefore in this research paper, we bring these parameters together and create an economical broker framework. Brokering in cloud computing is considered to be a challenging job when multiple parameters are taken into consideration. Different scheduling strategies, monitoring results of virtual machine etc. are the different things that need to be catered by cloud broker. However maximization of revenue is main but difficult job. In this research work, we develop a framework which generates best mapping between virtual machine and request. We proposed Genetic Algorithm to minimize SLA violations. The results are compared against financial brokerage model in which broker uses to reserve instances based on historical records and earns profit. Simulation result using CloudSim simulator shows the effectiveness of our scheme.

KEYWORDS: Scheduling, Broker, Revenue, Virtual Machine, SLA Violations