

# Optimization Based Dynamic Resources Allocation Strategy in Cloud Computing

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**Abstract:** We propose a cloud service scheduling model that is referred to as the Task Scheduling System (TSS). In the user module, the process time of each task is in accordance with a general distribution. In the task scheduling module, we take a weighted sum of makespan and flow time as the objective function and use an Ant Colony Optimization (ACO) and a Genetic Algorithm (GA) to solve the problem of cloud task scheduling. Simulation results show that the convergence speed and output performance of our Genetic Algorithm-Chaos Ant Colony Optimization (GA-CACO) are optimal.

**Keywords:** AODV, OSLR, DOS, DSLR

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