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Abstract

Grid computing is a recent advancement technology that enables resource sharing and dynamic allocation of computational resources, thus getting higher access to distributed data, promoting operational elasticity and collaboration. So, efficient resource management is one of the fundamental requirements in grid computing. Resource management is required in an environment where resources are quite limited and need to be utilised properly. Due to the

complex and dynamic properties of grid environments, existing traditional model-based methods may result in poor scheduling performance. To overcome of such problem, we need to develop improved algorithm that reduces the computation time. This paper proposed PSO algorithm specifically focused on improving computational grid performance in terms of equal load balance for all jobs and total computation time, which enhance grid throughput, utilization, response time and more economic profits.

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