A New Task Scheduling Algorithm for Maximizing the Distributed Systems Efficiency

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Abstract

Efficient task scheduling is essential to obtain high performance in distributed computing environment. Achieving a better makespan is a key issue in designing and development of task scheduling algorithms. Several algorithms have been proposed for homogeneous and heterogeneous distributed computing systems. In this paper, we proposed a new static scheduling algorithm called Leveled DAG Prioritized Task (LDPT) to efficiently schedule tasks on homogeneous distributed computing systems. LDPT aims to improve the efficiency of the system by minimizing the schedule length.

References

- Ebrahimirad, V.; Rajabi, A.; Goudarzi, M., "Energy-aware scheduling algorithm

Index Terms

Computer Science  Algorithms

Keywords

Task scheduling; Homogeneous distributed computing systems; Precedence constrained parallel applications; Directed Acyclic Graph.