

Number 1 - Article 2

Year of Publication: 2011

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10.5120/2856-3670

{bibtex}pxc3873670.bib{/bibtex}

Abstract

Due to the rapid evolution of grid computing, which deals with the effective utilization of the globally distributed computer resources to solve massive problems, grid scheduling is the major focus. Efficient scheduling algorithms are the need of the hour to achieve efficient utilization of the unused CPU cycles distributed geographically in various locations. The existing job scheduling algorithms in grid computing had mainly concentrated on the system performance

rather than the user satisfaction. In this paper we have presented a new prioritized user demand algorithm that mainly focuses on better meeting the deadlines of the statically available jobs as expected by the users. This algorithm also concentrates on the better utilization of the available heterogeneous resources. The performance analysis shows that the prioritized user demand algorithm performs better than the other heuristic scheduling algorithms in terms of makespan and resource utilization rate.

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Index Terms

Computer Science

Distributed Computing

Key words

Grid scheduling
utilization
Makespan

User satisfaction

Resource

Meta tasks

