Abstract

Grid computing is rapidly growing in the distributed heterogeneous environment for utilizing and sharing large scale resources to solve complex scientific problems. The main goal of grid computing is to aggregate the power of widely distributed resources and provide non trivial QOS services to the users. To achieve this goal, an efficient grid scheduling algorithm is required.
An ACO Algorithm for Scheduling Data Intensive Application with Various QOS Requirements

The problem of scheduling on data intensive application in terms of QOS requirements is challenging and it significantly influences the performance of grids. The existing algorithms for scheduling the data intensive application can only tackle the problems with either system centric or application centric. This paper aims to propose a new algorithm based on ant colony optimization to schedule the data intensive application which combines both application centric and system centric benefits. We formulate the problem and simulation results demonstrate the effectiveness of proposed scheduling algorithm.

Reference


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Xiangang Zhao, Bai Wang et al “QOS – Based Algorithm for Job Allocation and Scheduling in Data Grid” GCCW'06 IEEE international conference 2006.


Index Terms

Computer Science

Distributed Systems

Key words

Data intensive scheduling

ant algorithm

Pheromone intensity