Abstract

Doing computation on the collection of computer resources from multiple locations to reach a common goal is known as grid computing. Task scheduling is a very important problem in complex grid environments. Prior, there are numerous algorithms proposed to do effective task scheduling. Among them, the min-min algorithm is simple and well-known scheduling algorithm. Even if it works efficiently, some drawbacks in this with respect to load balancing and resource utilization. To overcome these drawbacks, a new Two Level Load Balanced (TLLB) grid scheduler algorithm is proposed. In First Level min-min algorithm is used to create ITQ and in Second Level a new Transformation technique is used to reschedule. The performance analyses show that the proposed algorithm improves the performance in both make span and effective utilization of resources.


Index Terms

Computer Science

Algorithms

Keywords

Grid computing  Min-min  Load balancing  resource utilization  Task Scheduling  Flow-time