Abstract

A heterogeneous computing environment is a large-scale distributed data processing environment, it is depends to some extent parameters on the application and that classified in three main categories such as the hardware, the communication layer, and the software. A computer system is consists of hardware and software from two or more different manufacturers. Scheduling is one of the important factors in the heterogeneous environment and the aim of task scheduling in the processing environment is to move computation towards data. In order to achieve improve performance, increase the throughput and minimizing the makespan; scheduler must avoid unnecessary data transmission. Hence, different scheduling algorithms for heterogeneous computing environment are necessary to provide good performance. How to speedup scheduling the service resources to achieve the lowest cost becomes more and more important. This paper tries to illustrate and analyze the overview of eighteen different scheduling algorithms for heterogeneous computing environment and their scheduling issues and problems.
References


Index Terms

Computer Science Algorithms

Keywords

Task Scheduling Algorithm, Heterogeneous Environment, Heuristic Algorithm, Directed Acyclic Graph, MapReduce.