A Study of Performance Enhancement in Heterogeneous Multi-Cluster System

Volume 124

Number 14

Year of Publication: 2015

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Abstract

In this system composed of number of clusters of processors. In Parallel Processing, Heterogeneous Scheduling plays main role. BPU is used to compute the speed of processors. Speed heterogeneity is a most important feature which affects the overall performance of the system. The scheduling process used technique of Job scheduling and Processor allocation are two main area of concern for improving the performance in Multi-cluster systems by using parameter of response time that could enhanced the CPU performance in a heterogeneous multi-cluster system. Job sequences decide by Job Scheduling for processor allocation and processor allocation is concerned with assign number of processors for incoming job. In this paper we try to propose a processor allocation job scheduling algorithm that maximizes the CPU utilizations which consists of heterogeneous Multi-cluster System. Scheduling is the most essential part in Multi-cluster System. In Multi-cluster, Multi-cluster schedulers mustn’t only for nodes resources allocation but also inter–cluster network utilization. The idea of clustering the jobs based on arrival time. In this paper we produce the value of different parameters to make effective scheduling by job co-allocation in a multi-cluster system. To study the effect of
parameters, calculate response waiting time and co-allocation time.

References


Index Terms

Computer Science Distributed Systems

Keywords

Global scheduler, job sizes, heterogeneous multi-cluster system, scheduling, processor requirement and allocation, FCFS