Abstract

Given paper contain proposed approached for task scheduling to achieve load balancing which is done on a group of computers. The processor idles due to large set of data, on the multiprocessor computer. Consideration of process data part by dividing them into number of fixed part & merge into single set that as good as previous original data set. Parallelism an approach for doing jobs in amount of time i.e. very fast. The paper contains dynamic approach for process migration using thread level paradigm. Creating a thread of process into number of task, that leads to reduce total execution time of process. An algorithm is used to calculate PCB for decision purpose to achieve load balancing. We are taking CPU and MEMORY parameter in
A Statistical Approach for Load balancing on Cluster Computing

this approach. Fair share approach is considered to allocating task to every processor using preemption strategy. The MPI is used for process communication. This system has defined to reduce total execution time on onboard & between board times. Open knoppix & MOSIX platform (Middleware) are used to show the results. Prime number calculation code is used to show parallel architecture like SIMD computer. Cluster computing is way of resource managing & scheduling strategy.

References

A Statistical Approach for Load balancing on Cluster Computing


- Nikolaos D. Doulamis, Member, IEEE, Anastasios D. Doulamis, Member, IEEE, Emmanouel A. Varvarigos, and Theodora A. Varvarigou, Member, IEEE ”Fair Scheduling Algorithms in Grids”. IEEE transactions on parallel and distributed systems, vol. 18, no. 11, november 2007

Index Terms

Computer Science Engineering and Technology

Keywords

Cluster computing MOSIX MPI load balancing threads Task load. Onboard-time betweenbord time