Abstract

Achieving Parallelism is now a necessity to improve the performance of computer system. One of the main issues is how to effectively utilized parallel computer that have become increasingly complex. It is estimated that many modern supercomputers and parallel processor deliver only 10 percent or less of their peak performance potential in a variety of applications. Yet high performance degradation are many. Performance losses occur because of mismatches among
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applications software and hardware. Research is active in the direction of developing new multiprocessor architectures and schedule the partitioned program on to it to achieve higher performance. [1, 3, 4] In this paper, effort concentrated on the Study of all factors for developing a novel multiprocessor architecture and after developing we will evaluate the performance of a multiprocessor architecture for server and networking with simulation study and to schedule the arriving load on to it in order to achieve higher performance. The other important issue are accessing delay and downloading the information while using multiprocessor technique comparable with similar architecture. In addition to designing an appropriate network, the efficient management of parallelism on the network involves optimizing performance needs, like the minimization of communication and scheduling over head. A simulation studies are carried out to compare the performance of different multiprocessor architecture (such as LEC, LET, Hypercube, Debruinju etc) with the various standard dynamic scheduling algorithms like Sender initiated diffusion (SID), receiver initiated diffusion(RID) etc. The simulation result will show that our Multiprocessor architecture (linearly extensible triangle) gives better performance as compare to other existing multiprocessor architecture with low cost and reduce the load balancing time and scheduling over head.

References

- Marc H. Willebeek-LeMair, Member, IEEE, and Anthony P. Reeves "Strategies for Dynamic Load Balancing on Highly Parallel Computers", Senior Member, IEEE, IEEE Transactions on Parallel and Distributed Systems, VOL. 4, NO. 9, September 1993
- Rafiq, M. Q.; Padam kumar and gupta J. P. "A Novel Tree -structured multiprocessor Network" Proc. Int'l conf on robotics vision and parallel processing for automation, Malaysia, VOL. 2, pp 576, 585, 1999

Index Terms
Keywords

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