Abstract

The parallel computing on loosely coupled architecture has been evolved now days because of the availability of fast, inexpensive processors and advancements in communication technologies. The aim of this paper is to evaluate the performance of parallel merge sort algorithm on loosely coupled architecture and compare it with theoretical analysis [1]. The parallel computational time complexity is $O(p)$ [3] using $p$ processes and one element in each process. It has been found that there is no major difference between theoretical performance analysis and the actual result.

Reference

[1]. K.B.Manwade, R.B.Patil; Parallel merge sort on loosely coupled architecture; National Conference, PSG Coimbatore.
[4]. http://penguin.ewu.edu/~trolfe/ParallelMerge/ParallelMerge.doc

Index Terms

Computer Science
Computer Architecture
Key words

Parallel computing                  Parallel Algorithms
Message Passing Interface
Merge sort
Complexity