Abstract

Normally the distributed network has to execute the tasks that shall be the more than the number of processors. The assignment problem is a case of linear programming helps to solve the problems related to tasks and processors. The problem of execution of “m” tasks to “n” processors (m > n) in a distributed networks is addressed here through a new modified tasks allocation policy for distributed networks. The model, presented in this paper allocates the tasks or modules to the processor to increase the performance and to reduce the execution time. This paper reduces the problem of allocation of tasks where number of processors is less than the number of tasks. The example mentioned in the paper has three tasks and solved it in such a way that the task t1 processed with minimum time, the task t2 with minimum cost while the task t3 with maximum reliability. In this problem, the tasks are fused (or clubbed) with another task(s) on the basis of minimum communication cost to form a balanced allocation.

References


Index Terms

Computer Science  Networks
Keywords

Allocation, Cost, Distributed Network, Performance, Processor, Reliability, Task, Time.