Weight based Task Assignment Model to Tolerate Faults in Heterogeneous Distributed Systems

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Abstract

Distributed frameworks play a critical part on accomplishing superior performance and better system utilization. The objective of a task allocation framework is to productively deal with the disseminated computing power of workstations, servers, and supercomputers keeping in mind the end goal to expand work throughput and system utilization. There are many issues of distributed computing system which are discussed in this paper in brief. This paper focuses on task assignment which in turn emphasizes on fault tolerance and recovery from fault with less processing time. The proposed algorithm assigns tasks to other nodes only when candidate node moves from its original position. The major area of concern in this architecture is task scheduling, if one slave node fails the task allocated by master node will not be completed and this situation is considered as fault. In this paper, we have exchanged views about a method which serves to lessen faults of the system and increase performance of the system.

References

Index Terms
Keywords

Distributed systems, Task allocation, job scheduling, and scalability.