Abstract

Distributed Computing System (DCS) computing plays an important role in computing world where processing load is distributed for computational efficiencies. DCS are designed to facilitate the sharing of resources as well as to reduce communication costs, increase throughput, and decrease delay of services. DCS are motivated by the need for cost reduction in tasks execution. In such applications the quality of the output is proportional to the amount of real-time computations. To meet such challenging computing requirements at electrifying speeds efficient clustering strategies are required for proper utilization of Distributed System. In this paper, we proposed a model for efficient utilization of the processing units in distributed environment and calculated the throughput of individual processor as 0.339789, 0.371609 and 0.529287 which is far better in comparison to the non-clustering model of Sig05.
Efficient Clustering Model for Utilization of Processor’s Capacity in Distributed Computing System

- Florina M. Ciorba, Timothy Hansen, Srishti Srivastava, Ioana Banicescu, Anthony A. Maciejewski, and Howard Jay Siegel, &quot;A Combined Dual-stage Framework for Robust Scheduling of Scientific Applications in Heterogeneous Environments with Uncertain Availability,&quot; 21st Heterogeneity in Computing Workshop (HCW 2012).
- Mourad Elhadef and Amiya Nayak, Comparison-Based System-Level Fault Diagnosis: A Neural Network Approach IEEE transactions on parallel and distributed systems, vol. 23, no. 6, june 2012

Index Terms

Computer Science Distributed Computing

Keywords

Distributed System Communication Cost Clustering