Abstract

Load balancing in distributed systems is the technique to handle maximum requests in minimum time. Load balancing aims to optimize resource use, maximum throughput, minimize response time, increase reliability and scalability. Trying to achieve this is however not an easy task. Various techniques and approaches have been used to achieve this goal. The proposed work is inspired by the Ant Colony Optimization (ACO) technique. The algorithm is designed on a Semi-Distributed system where clusters are formed and each cluster consists of number nodes. Ant is created on these clusters and acts accordingly the needs of the environment. The objective of paper is to develop an efficient load balancing technique that can improve the performance of system.
- Parveen Jain and Daya Gupta, "An algorithm for dynamic load balancing in distributed systems with multiple supporting nodes by exploiting the interrupt service"; IJRTE, Vol. 1, No. 1, May 2009.
- Ali M. Alakeel, "A Fuzzy Dynamic Load Balancing Algorithm for Homogeneous Distributed Systems"; World Academy of Science, Engineering and Technology, Vol. 6,
A Framework to Optimize Load Balancing to Improve the Performance of Distributed Systems

2012.

**Index Terms**

- Computer Science
- Distributed Systems

**Keywords**

- Load Balancing
- Semi-Distributed systems
- ACO.