Abstract

In the current internet scenario more virtual servers and mirror servers are utilized to maintain load balance of the heterogeneous peer to peer networks. One of the most current existing works developed a state balancing system based on probability distribution of peer abilities, loads of virtual servers, and incomplete data of global peers. On the other hand state balancing method recognizing peer node capacities are difficult a) as the demand and weight of the peer differ time to time which requires to be addressed b) In account of this, the peer node persistence needs to be managed with its CPU cycles for processing the client demands c) Load diversion of peer neighbors supply to the difficulty of corresponding peer nodes on serving their vital demand d) At the lower dimension of load balancing, various data format increases the processing time of the peer servers. To overcome the issues, we plan to build Time Variant-Peer Node Heterogeneous Data Processing Scheme for efficient load balancing in distributed heterogeneous peer networks. Peer node time variant capacity is measured using Dynamic Time Warping (DTW) algorithm to evaluate the magnitude of load-demand balance factors of peer servers. With the resultant load-demand factor obtained from DTW, peer server processing cycle requirements are identified using Duty Cycle Data Appropriation (DCDA)
Technique. Load diversions are made to peer server with Node Selection Strategy based on DCDA rank representation. The heterogeneous data nature of the demand requisite by the peer servers is implicitly identified by Apriori of Data Format Load Levels are matched to current data format demand of respective nodes and its effect on load balancing the peer servers are calculated. Experimental performances are evaluated with the Heterogeneous peer networks data extracted from the large internet service providers. In addition simulations are carried out to show the effectiveness of our work with bench mark data sets from UCI Repository.

References

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**Index Terms**

Computer Science  Networks

**Keywords**

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