Load Balancing Techniques: Need, Objectives and Major Challenges in Cloud Computing - A Systematic Review

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Abstract

One of the emerging areas in the field of information technology (IT) is Cloud Computing. It is internet based technology which emphasizes its utility and follows pay-as-you-go model. Load balancing is a critical issue in cloud computing. It is a technique which uses multiple nodes and distribute dynamic workload among them so that no single node is overloaded. The main goal of load balancing includes optimal utilization of resources which increases the performance of the system and minimization of resource consumption which minimizes carbon emission rate. This paper is mainly focused on the concept of load balancing techniques in cloud computing. This review helps in analyzing the issues of existing load balancing algorithms and gives a comparison among these algorithm on the basis of different qualitative metrics like throughput, reliability, power saving feature, performance, scalability, associated overhead etc.

References

1. Tinghuai Ma, Ya Chu, Licheng Zhao & Otgonbayar Ankhbayar, “Resource Allocation and


11. A. Bhadani and S. Chaudhary, “ performance evaluation of web servers using central load balancing policy over virtual machine on cloud”, proceedings of third Annual ACM.


Index Terms

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Keywords