

Contemplation of Receiver Initiated Load Balancing in Distributed System

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Abstract: *In the period of evolution, the upcoming inventions and technology never fail to surprise us. One such excellent example is the implementation of distributed system. This system is made perfect by refining it continuously, overcoming the obstacles it faced. To strengthen the system, Load balancing and load sharing are the essential part which helps to grow the distributed network significantly by utilizing the resources. In this paper, a thoughtful study on load balancing algorithms is done with highlighting the significance of receiver initiated load balancing approach.*

Keywords: *Load balancing, load sharing, autonomous system, receiver initiated method, high throughput.*

1. Introduction

In the era of technology, inventions and evolution of computers amaze us and continue to do so. Looking from the beginning, when the computer first came in the picture, we have come a long way. What attracts the most were the invention of powerful microprocessor and high speed computer network[1]. Starting the journey with an 8 bit system, microprocessors have reached 64 bit and still getting upgraded [2]. The most interesting fact is the cost of computers which has decreased in the last thirty years. With the advancement in technology and the betterment of systems, their costs and size have changed to the extent of a microchip. Developed for military use initially, computers invaded the world in every field and its amalgamation with high speed networks made it a lifeline today. Computers connected the world, from a floor to building to cities and even spanned the countries. It is not a scientific gadget anymore but a household item wherein it's a source of information, learning, entertainment, inventions, and a lot more. Computers have eased human life manifolds. The greatest inventions of all are smartphones. They gave a new definition to the phone and are called minicomputers in the hands of every citizen, compact, small and a great computational device. [1]Taking a step forward, these powerful inventions can contribute a bundle full of benefits if used efficiently. This idea gave rise to the concept of "distributed system". A highly advance system incorporating the resources and computing power of various systems from different networks to perform the tasks which require a powerful processor, such performance cannot be achieved by a single computer. These networks are situated in geographically distinct areas. These systems can have one to millions of computers attached via wired or wireless, both network connections. [1][3] In the beginning, when the thought of sharing information came into the discussion, ARPANET[9][10] was invented and then, gradually the whole concept of the distributed network was developed.

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