

Lottery Scheduling is developed for a considerably high fairness in distributed computation systems. It is based on randomized algorithms, and also applies economic concept to the scheduling. Looking it detail, Lottery Scheduling provide some of objects such as tickets and currency. In order for clients to take a chance to execute their application, they should fund tickets. More funding, the chance to execute is more high. Furthermore, to support resource management fairly, Lottery Scheduling uses a currency which approve to name, share and protect resource rights. Resources can be managed by Lottery Scheduling is diverse, like memory, lock, I/O and so on.

Because Lottery Scheduling is based on randomized algorithms, whenever clients fund tickets, they have a possibility for executing applications. So it removes starvation in scheduling and priority inversion problem. Also, it supports resource management for memory, I/O bandwidth, and lock. So, in distributed computation system, Lottery Scheduling is very fairness and efficiency scheduling mechanism. However, sometimes, the accuracy of lottery scheduler is irregular. Because a client who win the lottery has a binomial distribution.