Abstract

In Grid system, we need an advance reservation to ensure that specified resources are available for applications in a particular time in the future. The impact of advance reservations is decreasing resource utilization due to fragmentations. To mitigate this problem in our previous work we have proposed a novel advance reservation scheduling namely First Come First Serve – Ejecting base Dynamic Scheduling (FCFS-EDS) with advance planning. In order to implement reliable FCFS – EDS scheduling, it is important to store information in data structures about future allocations and to provide fast access to the available information. This paper proposes a novel data structure used by FCFS – EDS scheduling strategy to increase the throughput in a grid environment.

References
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