Grid scheduling is one of the vital tasks in grid environment, which maps tasks to resources. More recently, a Reputation based scheduling method based on Reliability was proposed for workflow applications to overcome the deficiencies of the existing reputation methods. The method was focused on only computational-intensive tasks. Other recent effort to improve reliability of the scheduling include RDGS (Reliable Distributed Grid Scheduler), which attempts to enhance the Successful Schedule Rate of the mixed tasks by using rescheduling concept. The RDGS method considers various parameters (Priority, Deadline, and CCR) for both computational and communication intensive mixed tasks (Hard, firm, and soft). In this paper we propose a novel method which exploits the merits of both Reliability based reputation method and RDGS. We conducted exhaustive simulation experiments to prove the superiority of the proposed method as compared to other existing methods (GDS, RDGS). The proposed method shows its merit in terms of successful schedule rate, task queuing time and overall time.
References

- Xiaofeng Wang, Chee Shin Yeo, Rajkumar Buyya, Jinshu Su, Optimizing the makespan and reliability for workflow applications with reputation and a look-ahead genetic algorithm.
Reputation Aware Reliable Distributed Grid Scheduler for Mixed Tasks


Index Terms

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