Cost-Time Optimization in Economic Computational Grids

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Abstract: In economic computational grids, resources have price and the users must pay for executing their applications. The user determines his deadline and budget and then requests cost or time optimization. The scheduling algorithms that adopt cost or time optimization strategy, may waste user's time and budget. In these cases, users need a strategy that can minimize cost and time simultaneously. In this paper, a new strategy and two scheduling algorithms that adopt it are introduced for this purpose. To study the performances of the proposed algorithm they have been simulated using GridSim simulator.

Keywords: Computational Grid, Economic Scheduling, Cost-Time Optimization