عنوان مقاله:

Increasing the Total Efficiently Executed Work on Volunteer Computing Environment Based on Work Send Policy

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خلاصه مقاله:

Volunteer computing is a type of parallel computing systems that is defined by a large number of nodes and autonomous changeable resources. Task scheduling is one of the most crucial issues on volunteer computing. A welldefined scheduling attracts the versatile guest applications to submit their jobs to this environment and motivates internet-users to contribute more. Hence, optimization of the server-side policies will stimulate volunteers' eagerness to contribute more of their resources. The existent methods cannot use the capacity of the host system efficiently. In this paper, we propose a new scheduling mechanism, which tries to decrease the idleness factor of the host system and keeps down its waste factor. In our method, we schedule some of the jobs in one RPC round earlier than usual. The experimental results show that the total efficiently executed work increases up to ۷۰% and the average increases by ۳۵%.

کلمات کلیدی:

volunteer computing, scheduling mechanism, remote procedure call, EDF algorithm

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https://civilica.com/doc/1426579