عنوان مقاله:

Resource Allocation in Volunteer Computing Networks Based on Node Reliability

محل انتشار:

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

Volunteer Computing is a special distributed computational architecture as composed of a network of volunteer computational units connected to each other and organized to perform some specific tasks. These networks are distributed in large networks or even vast geographical areas. Rather than lower communication capabilities in these networks, resource management capabilities are limited than compared with other types of computational networks. In this research, we tried to model resource allocation, in these networks considering such limitations in these networks. We put node reliability in this the model as a factor of how much we can rely on a node to complete an assigned task on a specified time and assign one task to multiple nodes in parallel to increase probability of completing task. We model this problem as an economic model to decrease costs and increase revenue on the network based on each tasks priority.

کلمات کلیدی:

Volunteer Computing, Desktop Grids, Resource Management, Grid Resource Reliability, Distributed Computing

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