عنوان مقاله:

Improving Resource Management Performance using ArtificialIntelligence: a Genetic Algorithm based Approach

محل انتشار:

اولین کنفرانس بین المللی مدیریت و مهندسی کیفیت و قابلیت اتکا (سال: 1401)

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خلاصه مقاله:

Resource management in networks is recently appeared as a major challenge in our new information technology eraand it has been widely attracted researchers of the field. There are many providers in each network that offer differentservices in form of applications to end-users all around the world and various resources are needed for deployment ofthese services. Developing effective resource management schemes improves functionality of providers. In thisresearch, genetic algorithms which can consider numerous states simultaneously while investigating their fitness areapplied to provision the resources. The proposed approach finds the exact virtual resources for hosting requests ofdemanded applications by keeping costs at minimum; previous approaches focused on workloads and minimizing theirmake spans. The approach helps cloud providers select the most proper computing virtual resources for hosting thedemanded applications while considering both cost and mapping of requirements of the .applications. Results show theefficiency of each approach in comparison with other approaches

کلمات کلیدی:

;distributed systems; performance; genetic algorithms; resource management; virtual machine