

عنوان مقاله:

Energy aware Virtual Machine Allocation Algorithm in Cloud Network

محل انتشار:

کنفرانس فناوری شبکه های الکتریکی هوشمند (سال: 1391)

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خلاصه مقاله:

Nowadays, power consumption of data centers has huge impacts on environments. Researchers are seeking to find effective solutions to make data centers reduce power consumption while keep the desired quality of service or service level objectives. Virtual Machine (VM) technology has been widely applied in data center environments due to its seminal features, including reliability, flexibility, and the ease of management. We present Energy aware Virtual Machine Allocation Algorithm to reduce data center power consumption, while guarantee the performance from users' perspective. We use switching idle nodes to the sleep mode allow Cloud providers to optimize resource usage and reduce energy consumption. We have validated our approach by conducting a performance evaluation study using the CloudSim toolkit. The experimental results show that the proposed algorithm achieves reduced energy consumption in data centers

کلمات کلیدی:

cloud computing, virtual machine, cloudsim, energy consumption, genetic algorithm

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