Abstract

Cloud Computing provides various services to its users just over an internet connection. For this the Cloud providers have to set up large datacenters which consists of number of computing nodes. These datacenters consumes a huge amount of energy. This not only leads to higher expenses but it also causes harmful effects on our environments. Thus, the attention is shifting towards energy efficiency in Clouds. This is done by optimizing VM allocation and migrating them to some other hosts. For VM migration various utilization thresholds are required. In this paper, we have done a comparative study of some of these utilization thresholds. The simulation is done on CloudSim toolkit. It has been concluded that for the same configurations of datacenter and for the same workload IQR utilization thresholds gives the best results for energy efficiency as well as lowest SLA violations.

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Index Terms

Computer Science  Distributed Systems

Keywords

Cloud computing  Datacenters  Virtual Machines  VM migrations