Abstract

Cloud computing is the utility computing that provides virtualized resources, applications, and services using distributed network and Internet. Cloud computing service offers the ability to scale up and scale down your computing requirements and most importantly to reduce the cost of deployment. Many organizations are migrating to cloud computing services to lower the risk and for better business continuity. In case of on-demand access user requests infrastructure services for immediate access and for a very short interval of time, they have to pay certain charge depending upon that duration. In cloud computing, infrastructure requests are served by the allocation of virtual machines to those requests; these virtual machines should be placed on the underlying hardware infrastructure called datacenter. In this paper we have proposed a model for the efficient allocation of virtual machines on the cloud infrastructure to reduce the allocation time and to optimize the resource utilization. The proposed model is simulated and its performance is compared with two other existing models.

References

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Index Terms

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Information Systems
Keywords

Cloud Computing  Virtualization  Resource Allocation  Resource Utilization
Scheduling

Infrastructure as a Service (IaaS)

Open Nebula

Eucalyptus