Abstract

A cloud is a type of distributed system, it consist of, collection of interconnected and virtualized computers. It offers pool of resources like data, software and infrastructure etc, to the user. So the efficient utilization of cloud resources has become a major challenge in cloud computing. Scheduling in cloud is responsible for selection of best suitable resources for executing a task, by considering some static and dynamic parameters like makespan, cost, resource utilization;
speed etc. The Min-Min algorithm first executes smaller tasks [1]. So the Min-Min algorithm does not provide better performance when the number of smaller tasks is high, in this case the Max-Min algorithm outperforms Min-Min algorithm in terms of parameters like makespan and load balancing. So in order to overcome the limitations of Min-Min algorithm the improved version of Min-Min algorithm has been proposed. It randomly selects the task for execution based on the values of average completion time and standard deviation of existing tasks. Even though the improved Min-Min algorithm avoids the limitations of Min-Min algorithm; still it takes more time to execute large number of tasks. So the future work is to enhance the performance of improved Min-Min algorithm to execute large number of tasks within in a small time and also to use this algorithm in any one of the network technique to schedule packets in a cloud environment in an effective manner.

References

Enhanced Heuristic Model for Effective Resource Utilization in Cloud


Index Terms

Computer Science  Cloud Computing

Keywords

Cloud Computing  Max-min Algorithm  Min-min Algorithm  Makespan