Abstract

Today, cloud computing has emerged as revolutionary technology in the IT industry. It has provided boost to the area of parallel and distributed computing. Cloud computing deals with on demand allocation of remotely placed computing and storage devices to the cloud users on charge per utilization basis. Cloud service provider (CSP) is responsible for the allocation of cloud resources to consumers of cloud services so that cloud consumers should get satisfied. Thus to gratify cloud users, CSP must has to schedule cloud resources so that it charges minimum amount to users in return for execution of their tasks on cloud resources. In the proposed task scheduling strategy, Fuzzy C-Means (FCM) is used as a clustering technique which is applied complementary to well known optimization technique - Linear Programming. The proposed task scheduling strategy charges minimum amount to user for execution of his tasks within the time specified by him. The results obtained by proposed task scheduling are compared with the results of existing random task scheduling method.
Cluster Oriented Optimized Cloud Task Scheduling Strategy using Linear Programming


Index Terms
Computer Science Distributed Systems

Keywords
Cloud computing; Fuzzy C-Means; Linear programming; task scheduling; cloud resources.