



## IMPLEMENTATION OF FIREFLY VERSION 2 ALGORITHM

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**Abstract** – Cloud computing has been built upon the development of distributed computing, grid computing and virtualization. Since cost of each task in cloud resources is different with one another, scheduling of user tasks in cloud is not the same as in traditional scheduling methods. The objective of this paper is to schedule task groups in cloud computing platform, where resources have different resource costs and computation performance. Due to job grouping, communication of coarse-grained jobs and resources optimizes computation/communication ratio. For this purpose, an algorithm based on both costs with user task grouping is proposed. The proposed scheduling approach in cloud employs an improved cost-based scheduling algorithm for making efficient mapping of tasks to available resources in cloud. This scheduling algorithm measures both resource cost and computation performance, it also improves the computation/communication ratio by grouping the user tasks according to a particular cloud resource's processing capability and sends the grouped jobs to the resource.

**Keywords** - Cloud computing, job Scheduling, cloudlet scheduling, firefly, Improved firefly