CSE4001: PARALLEL AND DISTRIBUTED COMPUTING

J COMPONENT: REVIEW 1

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Title:

Improvising Scatter-Gather Protocol for Efficient Distribution of Workload among Fog Nodes.

Introduction :

With the advent of technological advancement not only the amount of computation performed matters but the time and speed of such computation matters as well. Minimizing the computation

time has become one of the primary interests with the increasing workload as no

one wants to wait to for some processing to take place as evident by the need of refreshing and checking our internet connection when such processing takes longer than expected. As distributing the work relieves the individuals, same can be applied to the machines where instead of having one single computer do all the processing a group of computers are employed to complete them in less time and with more efficiency. And with the advent of cloud computing, sharing computer processes and resources over the internet has grown rapidly.

However, it may happen that distributing the work among so many computers can actually increase the time delay as the data has to travel to and from the cloud with addition to the distribution and actual processing. So in this paper we put forward the advantages of using the Fog Computing over the cloud at the same time we try to improve on Scatter-Gather algorithm so that we can optimize the time taken to decompose the workload and then distribute the task to a geologically placed nearby fog node, so that the workload gets distributed on the nodes that are in the vicinity so that the time latency can be minimized.