Decentralized Distributed Processing
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Abstract

With the enormous amount of data being collected every day, a single computer's CPU's computational ability to analyze the data and to utilize meaning behind the data is less than satisfactory. In order to mine the rough of the data within certain time constraints, a collection of computers is needed.

The purpose of this project is to produce a medium for distributing the load of enormous tasks to networked peers with varying computing power in an efficient manner.

This will distribute the work load from one computer to other computers within a network of peer computers by sending portions of the data and the proper analytical tools to all of the specified peers while also computing various peer's tasks. Peers can be running on multiple computer platforms such as Windows and Linux.

Introduction

Though distributed servers and clusters have existed for a while, there is a lack of sharing, most distributing acts rely on a single task giver, and the peers being enslaved to the server, with little / no reciprocation As the quantity of data and complexity of analysis from individual groups becomes greater, the efficiency current distributed processing units will certainly become less than satisfactory.

Results and Conclusion

Currently the application is able to communicate with peers, do the analyses given to it, though the two modules do not currently work with each other.

Procedures and Methods

By being both a server and client, the application will have two portions which will act indepently of each other. Client be called upon remotely and will download the data and the analysis module, or it will be told locally a task to be done, and attempt to distribute the task over the network. Server will do the opposite, wait for local input and then send it to various peers