Abstract

Clustering very large and multidimensional data set in data mining, requiring a fairly long time if done by a computer. PC Cluster technology is able to increase the performance (execution time) because of clustering process is done by several computers. The Open Mosix and MPI (Message Parsing Interface) is PC Cluster technology which is used. For the clustering data mining algorithm using MAFIA (for Merging of adaptive Finite Intervals).

Tests conducted to compare performance with the clustering data mining using a computer, the Open Mosix Cluster, the MPI Cluster and combination between the Open Mosix and the MPI Cluster. From the test results, conclusions obtained, clustering performance improved when run over the Open Mosix Cluster, the MPI Cluster and combination between the Open Mosix and the Open MPI Cluster. Blend with combination between the Open Mosix and the MPI Cluster provide the best increased performance clustering data mining.

Keywords: open mosix, MPI, clustering, data mining, MAFIA.