Abstract

This paper clips a reduced graph from a graph, and redefined it into levels. Then find the set of shorter paths from Source to Destination. Source node as root in the first level and destination node as leafs in different levels of the graph. This paper formulates an algorithm which provides other shorter paths from source to destination. The graph may represent network lines for transferring packets, pipeline for transferring liquid and transportation links. The proposed algorithm finds the shortest path and discovers other shorter paths from source to destination with lesser traffic. The selection of node is done using GIS because it is capable enough to express the connectivity of node with one another. The proposed algorithm is compared with
Dijkstra's Algorithm and the results are satisfactory. Simulated results are formulated using Matlab. The result assures the potential of the Algorithm.

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Index Terms

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