Abstract

This paper is all about finding multipaths available in the network using disjoint edges and disjoint nodes strategy. In single path routing congestion is a big issue, multipath routing is helpful to find less-congested or congestion free route from source to destination. Disjoint nodes means having no repetition of node that are followed earlier by the data packets to avoid packet congestion or load over the network. Disjoint edge means having no repetition of edges while following the path. The paths have been choosen on the basis of available bandwidth, time required, sequential order of node or hop-count. The sequence of every available single path from the given source to destination have been found using minimum hop dijkstra algorithm so that it is shortest among all available remaining paths. Results are shown on the basis of bandwidth and delay for single path and multipath routing (using disjoint node and disjoint edges).

**Index Terms**

Computer Science  
Information Sciences

**Keywords**

Disjoint edges, Disjoint nodes, Multipath Routing, Recovery Path Failure, and Single Path Routing.