

## VIRTUALLY MODIFIED MULTI PROTOCOL LABEL SWITCHING

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### Abstract

This Journal presents before you the virtually modified version of Multi-protocol Label Switching. MPLS is very unique and one of the widely used protocol which is been implemented in several of the networks which are working very well today. For Labeling in MPLS it requires  $M*N$  numbers of Labels for its proper working. Where  $N$  is number of nodes present in MPLS network and  $M$  is number of Edges Present in MPLS network. This product of number of labels can easily be reduced to  $K (M+N)$  for some constant  $K$  as explained by some researchers (reference [1]). After this the number of labels gets reduced and hence the overall label complexity reduces. As we know that MPLS is complex protocol for transferring data to intra MPLS based network. Moreover it is also seen that MPLS efficiently routes data from one node to another using several protocols as defined by FEC forward Equivalence Classes. Several network analysts have analyzed the efficiency of MPLS and other related protocols (reference [2]). Here in this journal we discuss about virtually modified MPLS protocol with basic idea of increasing the efficiency on the basis of division of packets into two parts namely control packets and data packets. After then we show with help of several algorithms that how adding extra nodes(s) in MPLS the efficiency can be increased and delays can be minimized. This work is also implemented as live project in Dr. M.C. Saxena college of Engineering and Technology, Lucknow.

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