Admission Control Algorithm for MPLS-TE Networks

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Abstract

Today real-time applications involve, Voice over IP (VoIP) is gaining increasing popularity. MPLS is developed to combine properties of Data-Link Layer with the flexibility and robustness of datagram Network Layer in efficient traffic transmission and QoS support. Connection Admission Control (CAC) mechanism for the RSVP-TE in MPLS network lacks its availability to achieve high performance especially with the increased importance of real-time application that need high end-to-end QoS. So, in this paper, Connection Admission Control (CAC) mechanism is proposed with inputs parameters not only bandwidth but also end-to-end delay and jitter to making its decision. A simulation comparison using OPNET simulator between the proposed algorithm and the most used CAC is presented. The results indicate that the proposed algorithm outperforms the other one.

References

Index Terms

Computer Science Algorithms
Keywords

MPLS, Traffic Engineering, RSVP-TE, Admission Control.