An Adaptive Congestion Control Method for Guaranteeing Delay in RED-Based Queue Using Learning Automata

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Abstract

Some applications such as audio and video conferencing require a network to provide QoS End delay is one of the prominent factors in QoS. Packets after crossing the routers queue node. Thus with guaranteeing the queuing delay in routers the network will be able to guar delay. Furthermore developers can contract service level agreement (SLA) intelligently. In queuing delay, congestion control algorithms can be used in routers. Furthermore provide level agreement (SLA) intelligently. Congestion control algorithms are a solution to guaran Random early detection (RED) is the most known and applicable congestion control algori extended researches in this field were carried out, but there is no investigation on queuing RED based queue yet. To achieve this goal, in this paper a novel method using stochastic proposed. In the proposed method, thresholds of RED algorithm, in order to guarantee del previous approaches are adjusted dynamically. Proposed method, in addition the delay gu increase the utilization of output link. Therefore, the proposed method can provide better C