Abstract

Congestion an major problem in today's internet traffic had solution with TCP/IP congestion control mechanism. The active queue management (AQM) schemes stabilized the queue oscillations. Earlier RED AQM technique maintained the queue stability in which parameter setting was difficult. Hence a intelligent technique to stabilize the queue in the rapid growing traffic in internet was required. This paper proposes new unsupervised artificial neural network architecture with competitive learning mechanism. Learning vector quantization (LVQ) stabilizes the queue and reduces the queue oscillation. The results are compared with the Kohonen RED (KRED) and Modified Kohonen RED (MKRED) and prove that the proposed LVQ architecture stabilizes queue and maintain the queue delay.

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