Packet Transfer Delay of the RPR Rings in Comparison between the Store-and-Forward and Cut-Through Architecture

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ABSTRACT

In this paper, the high and low priority packet transfer delay of the N nodes Resilient Packet Rings (RPR) in the store-and-forward architecture is analyzed based on the queuing theory. The result indicates that both high priority and low priority packets' delay increase with the node number N of the RPR rings. The high priority traffic has less packet delay than the low priority traffic at the same node number N. The increase of the low priority transfer delay is much larger than the high priority traffic with the increase of the node number.

Keywords: RPR, Packet Transfer Delay, Store-and-Forward, Queuing Theory.