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Avoiding Packet Drop for Improved through Put in the Multi-Hop Wireless N/W

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Abstract : Mobile ad hoc networks (MANETs) are infrastructure less and intercommunicate using single-hop and multi-hop paths. Network based congestion avoidance which involves managing the queues in the network devices is an integral part of any network. QoS: A set of service requirements that are met by the network while transferring a packet stream from a source to a destination. Especially in MANETs, packet loss results in increased overheads. This paper presents a new algorithm to avoid congestion using one or more queue on nodes and corresponding flow rate decided in advance for each node. When any node attains an initial value of queue then it sends this status to its downstream nodes which in turn uses the pre-decided flow rate of packet transfer to its upstream nodes. The flow rate on each node is adjusted according to the status received from its upstream nodes. This proposed algorithm uses the existing infrastructure to inform to other nodes about its current queue status.

Keywords : mesh networks, MANET, packet count, threshold, throughput
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