Congestion Avoidance Routing in Wireless Sensor Networks

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Abstract

Wireless sensor nodes consist of group of self organized sensor nodes with limited resources in terms of processing power and battery energy. Wireless sensors are used increasingly in many industrial and consumer applications. Sensors detect events and send via multi hop routing to the sink node for processing the event. The routing path is established through proactive or reactive routing protocols. Congestion happens due to flow of packets exceeding the capacity of link & exceeding the capacity of nodes in terms of Queue Size. Due of congestion packet loss occurs and it affects the quality of application services built on top of sensor network. In this work, we address the congestion from point of reducing the probability of congestion rather than make it to occur and solve it. We propose a NOCO routing protocol which is built on top of AODV and follows reservation based mechanism to avoid congestion and also alleviate the congestion if it happens.

References

Index Terms

Computer Science  Wireless
Keywords

Sensor Networks, Multi hop routing, Congestion, AODV, NOCO.