



BI-FILTERED FORWARDING: A QUASI-OPTIMAL ROUTING ALGORITHM FOR QUERY DELIVERY IN WIRELESS SENSOR NETWORKS

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Abstract- A quasi-optimal query propagation algorithm Bi-Filtered Forwarding (BFF) for quickly routing a query throughout a wireless sensor network is proposed in this paper. BFF is implemented in a limited flooding manner for guaranteeing quick query propagation and low message consumption in wireless sensor networks. The experimental results show that in comparison with the flooding algorithm, BFF can greatly reduce the redundant message consumption during the procedure of real time query propagation throughout a wireless sensor network.

Index terms: Real time routing, distributed query processing, query propagation, constrained flooding, wireless sensor networks.