Interactive-path routing in wireless sensor networks

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Abstract— **Beside the common applications in wireless sensor networks (WSNs) such as data-collection which sensing data are carried from sensors to the sink, sometimes a sensor needs to communicate with other sensor or an actuator or between two actuators. Although those communications are not frequently established, those require high reliable transmission. Besides, the nature of resource constraints in WSNs leads to frequently changing topology due to loss link. However, there is no proposal of point-to-point communication applied in WSNs which concerns both reliability, delay issue and resource constraints. Additionally, Reactive Discovery of Point-to-Point in Low Power and Lossy Networks (p2p-rpl) has been proposing to become the standard protocol for routing between two nodes in WSNs. In order to address the above problem and utilize the p2p-rpl protocol, this paper proposes a mechanism to enhance the reliability and minimize the delay is suggested by utilizing interactive-path based on the p2p-rpl routing protocol. And by analyzing, we prove the efficiency of our proposal.**

Keyword— **interactive-path, routing, wsn**

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