

基于无Hello消息的无线传感器网络路由技术的改进

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摘要:

重点分析了AODV协议的特征、路由建立、维护过程。针对无线传感器网络节点电量局限性问题, 提出采用取消Hello消息的AODV协议。并基于OPNET平台仿真了无Hello消息的AODV协议的性能, 改进的协议极大地减少了能量的消耗并且有效地延长了节点的生命周期, 表明协议基本符合无线传感器网络的要求。

关键词: 无线传感器网络, AODV协议, Hello消息, 网络生命周期

improvement of routing technology based on no-hello-message for wireless sensor networks

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Abstract:

Emphasis is laid on the routing characteristics, routing establishment and its maintenance of the AODV protocol. Since the nodes' energy is so limited, we propose a no-hello-message scheme in AODV protocol to solve the problem. Using OPNET, we make some simulation of the predominance of the reformative AODV protocol. And the improved protocol greatly reduces the energy consumption and effectively prolongs the lifetime of the nodes, which are the main concerns of wireless sensor networks.

Keywords: wireless sensor network, AODV routing protocol, hello message, network lifetime

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