Abstract

Wireless sensor networks have recently gained a lot of attention from the researches. Wireless sensor networks are often partitioned into clusters, each managed by a cluster head (gateway). This paper reviews medium access control (MAC), an enabling technology in wireless sensor networks. MAC protocols control how sensors access a shared radio channel to communicate with neighbors in small area coverage. It classifies traditional (IEEE 802.11) and existing MAC protocols and a power efficient gathering protocol, known as PEGASIS, as examples of MAC protocol designed specifically for a sensor network. SENSOR MAC sets the radio to sleep during transmissions of other nodes unlike PEGASIS which involves non sleeping cycles. Finally this paper compares the performance of both protocols and displays the results.

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