

A Comparative and Critical Analysis of Some Routing Protocols in Wireless Sensor Networks

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Abstract : Lifetime of a wireless sensor network (WSN) is directly proportional to the energy consumption of its constituent nodes. Routing in wireless sensor network is very challenging due its inherit characteristics. In hierarchal routing the sensor filed is divided into clusters. The cluster-heads are selected from each cluster, which forms a hierarchy of nodes. The cluster-heads are used to transmit the data to the base station while other nodes perform the sensing task. In this way the lifetime of the network is increased. In this paper a comparative study of hierarchal routing protocols are conducted. The simulation is done in NS-2 for validation.

Keywords : WSN, cluster, routing, sensor networks

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