Abstract

Power consumption is a crucial design concern in Wireless ad hoc networks since wireless nodes are typically battery limited. It might not be possible to replace/recharge a mobile node that is powered by batteries. To take full advantage of life time of nodes, traffic should be routed in a way that power consumption is minimized. Power Aware Routing is a consideration in a way that it minimizes the energy consumption while routing the traffic, aims at minimizing the total power consumption of all the nodes in the network, minimizing the overhead etc. and thus, at maximizing the lifespan of the network using some Power Aware Routing Protocols. They minimize either the active communication energy required to transmit or receive packets or the inactive energy consumed when a mobile node stays idle but listens to the wireless medium for any possible communication requests from other nodes. Transmission power control, load distribution and power management approaches are used to minimize active communication energy.

References


Index Terms

Computer Science    Wireless

Keywords

Power Aware Routing, Transmission Power Control Approach; Load Distribution Approach;