Mobile nodes in an ad hoc wireless network have limited battery power. These nodes need to be energy conserved to maximize the battery life. Thus, development of energy efficient routing protocols is needed due to the limited battery power of all nodes. In this paper, we have considered two on-demand routing protocols- AODV & DSR for mobile ad hoc networks and evaluated the energy performance metrics in all the four modes (transmitting, receiving, idle &
sleep) and the residual energy. We have also evaluated other performance metrics such as packet delivery fraction, throughput and end-to-end delay for both protocols. The simulation has been carried out using ns2. Finally, by the observations we conclude that DSR offers the best combination of energy consumption and throughput performance. AODV gives better packet delivery fraction and delay performance compared to DSR in a more stressful conditions i.e., more number of nodes.

Reference

- Thomas Heide clausen, Phillipe Jacquel and Laurent Viennot, “Comparative Study of Routing Protocols for Mobile Ad Hoc Networks”.
Energy Aware QoS on-demand Routing Protocols for MANETs


Index Terms

Computer Science Wireless

Key words

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