

Performance Analysis of Routing Protocols for WLAN Based Wireless Sensor Networks (WSNs)

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Abstract : This paper focuses on the performance evaluation of routing protocols in WLAN based Wireless Sensor Networks (WSNs). A comparative analysis of routing protocols such as Ad-hoc On-demand Distance Vector Routing System (AODV), Dynamic Source Routing (DSR) and Optimized Link State Routing (OLSR) is been made against different network parameters like network load, end to end delay and throughput in small, medium and large-scale sensor network scenarios to identify the best performing protocol. Simulation results indicate that OLSR gives minimum network load in all three scenarios while AODV gives the best throughput in small scale network but in medium and large scale networks, DSR is better. In terms of delay, OLSR is more efficient in small and medium scale network while AODV is slightly better in large networks.

Keywords : WLAN, WSN, AODV, DSR, OLSR

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