Empirical study of CSMA, MACA and EMACA Protocols to Support QoS under varying conditions of Pause Time in Ad-hoc Wireless Network by resources of DSR Routing Protocol

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Abstract

DSR routing protocol was used to evaluate the MACA and EMACA performance. Results show that the EMACA simulation performs well as compared to MACA in sense of Throughput, Total Packet Receive, Drop Packet Ratio and Average Jitter under varying conditions of Pause Time. In this paper we will try to change route selection mechanism proactively. We will also define a link stability parameter in which a stability value is assigned to each link. Given this feature, destination node can estimate stability of routes and can select the best and more stable route. Therefore we can reduce the delay and jitter of sending data packets. We have evaluated the operation of DSR through detailed simulation on a variety of movement and communication patterns, and through implementation and significant experimentation in a physical outdoor ad-hoc networking testbed we have constructed, and have demonstrated the excellent performance of the protocol.
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**Index Terms**

Computer Science Wireless

**Key words**

AWNs QoS MAC

CSMA

MACA

EMACA

DSR

Throughput

Total Packet Received Drop Packet Ratio

Average Jitter