

PERFORMANCE ANALYSIS OF ROUTING PROTOCOLS IN MANET WITH STATIC AND MOBILE NODES USING HTTP TRAFFIC

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ABSTRACT

A mobile ad hoc network (MANETs) consists of mobile wireless nodes where inter-node communication is carried out without centralized control. MANETs, therefore requires self organization and self configurability. The mobility feature of MANETs enables nodes to move arbitrarily. Each mobile node can receive and forward packets as a router; therefore routing is one of the critical parts of MANETs. In this paper, the performance of four routing protocols i.e. AODV, DSR, TORA and OLSR is compared to static node and mobile node using delay, data rate and throughput as performance metrics. On the basis of these comparisons the best routing protocol for MANETs has been proposed.

KEYWORDS: Mobile Ad Hoc Network (MANET), Dynamic Source Routing (DSR), Optimized Link State Routing(OLSR), Temporarily Ordered Routing Algorithm (TORA), Ad Hoc on-Demand Distance Vector (AODV), throughput; Delay, Data Rate