Performance of MANET Routing Protocols considering Impact of Node Density under Different Traffic Patterns

Abstract

TA mobile ad-hoc network has certain characteristics such as dynamic topology, limited bandwidth, and energy-constraint etc, which imposes new demand on the routing protocols. This work specially aims to study and investigate the performance of one proactive routing protocol-DSDV and two reactive protocols-AODV and DSR for mobile ad-hoc networks under both CBR and TCP traffic patterns using network simulator NS-2. Based on extensive simulations, we present a comparative analysis of these routing protocols covering performance metrics such as packet delivery ratio, average end-to-end delay, normalized routing load, and average jitter. We will investigate the effect of varying number of sources and node density on MANET routing protocols.
References

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Index Terms

Computer Science
Keywords
MANET  DSDV  AODV  DSR  CBR  TCP