Abstract

A 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

- “The Network Simulator version 2”, the source code of ns-allinone-2.34 can be downloaded from http://www.isi.edu/nsnam/ns/ns-build.html
- Kevin Fall, Kannan Varadhan, and the VINT project (May, 2010), available at http://www.isi.edu/nsnam/ns/ns-documentation.html
- NS by example available at http://nile.wpi.edu/NS

Index Terms

Computer Science
Keywords
MANET  DSDV  AODV  DSR  CBR  TCP