Abstract

Mobile ad hoc network(Manet) is a network consist of mobile device connected with wireless link. The main attribute of Manet is its self-organized network with routing and packet-forwarding function. Until today, based on its characteristic there are three routing protocols for Manet, which are: table driven routing protocol, on-demand routing protocol and hybrid routing protocol. In this paper, those three routing protocols were simulated using NS-2 and reviewed in order to evaluate the performance of those three routing protocols in Manet. The main purpose of this work is to evaluate those three routing protocols based on node's mobility and conncection's incrementation. Performance measure of interests in this work are average throughput, average end to end delay and packet delivery ratio. Based on simulation result in this work, concluded that ZRP has better performance than DSDV and AODV in all scenario. While AODV and DSDV show similar result in connection's incrementation scenario. It's also proved that DSDV has better performance in quick changing topology.

Keyword: on-demand driven routing protocol, table driven routing protocol, hybrid routing protocol, Manet, NS-2