

Abstract

Mobile Ad-Hoc Network (MANET) is an improvement of Ad-Hoc Network, which its node has capability of dynamic mobility. This feature will cause the topology changes in current condition. Ad-Hoc On Demand Distance Vector (AODV) is a relevant reactive routing protocol for MANET since the route is built based on the current network topology. Research proved that mobility characteristic of MANET will cause congestion as a trigger of frequent packet loss and longer delay. In that case, DCCP (Datagram Congestion Control Protocol) is suggested as a congestion control featured transport protocol for MANET. Through the scenario of different Packet Rate and Pause Time, simulation will compare the performance of UDP and DCCP when handling video streaming traffic model. Simulation result showed better performance of DCCP, where average mark of Packet Delivery Ratio reached 95%, Packet Loss Ratio reached 5%, End to End Delay reached 0.3s dan Routing Overhead reached 0.20.

Keywords: MANET, AODV, DCCP, congestion control