

Abstract Details

Title: The Impact of Transition from IPv4 to IPv6 in AODV VANET and MANET Routing Protocol

Authors: Omar Yousif Ahmed Abdelmotalab and Dr. Amin Babiker A/Nabi Mustafa

Abstract: The transition from IPv4 to IPv6 has become inevitable and fairly urgent. Thus, it is necessary to study and analyze the impact of this transition in all networks protocols, especially in a mobile ad hoc network (MANET) and in VANET as a part of it, the topology of the network may change rapidly and unexpectedly due to mobility of nodes. Routing protocols operate differently under distinct environments. Thus, it is necessary to analyze the behavior of different routing protocols under distinct environments. In this Paper study has been done on the performance observation of AODV routing protocol of MANET under IPv4 and IPv6 Environment using OPNET Modeler as simulation tool. We have analyzed the behavior of AODV routing protocol in WLAN delay, throughput, routing traffic received and total packets dropped.

Keywords: IPv4, IPv6, MANET, Routing Protocols, AODV, OPNET.