

ABSTRACT

The rapid growth of portable computing platform and wireless technology has been triggering the appearance of interest in design and deployment of protocol for wireless multi-hop network that known as *Mobile Ad hoc Network* (MANET). MANET is slightly different with *wireless single-hop* network (cellular), even if both of them utilizing the wireless link and mobile node, but no base station required for MANET as a transmission relay, it is mainly due to the node could become a router for another node, but it is likely that MANET could be combined with the cellular network to create another larger network.

MANET is a composite of mobile host that dynamically creating one certain network without using the existing or the well prepared network infrastructure and without using a centralize administration also able to communicate through a wireless link with certain bandwidth. MANET is needed in case of communication infrastructure is unavailable or damage at all.

MANET has a different characteristic and some certain different issue with the wired line. The network topology in MANET could change faster referring to mobile host movement. In this network architecture, the lost of the package is not merely due to the congestion but probably due to the transmission failure or the route error.

This final project will research the TCP Westwood performance at MANET. The analysis covered the performance of throughput and delay of TCP Westwood protocol.