

ABSTRACT

Mobile Ad Hoc Network (MANET) is a wireless network configuration with dynamic multihop topology. Radio environment and node mobility on Ad Hoc network can cause unstable network condition if compare with wired network. These effects will make network problems such as network failure. Data packet transmission will be disturbed because of these problems.

This research will be focused on Ad Hoc network where several of nodes will move to other location that caused one of link get failure or changing. I will use TCP packet with protocol agent TCP Reno, TCP SACK and protocol routing DSDV. There are two kinds of TCP packet. TCP as observation traffic and several TCP packets as background traffics. Network performance will be analyze are throughput, delay and packet loss.

At the first time, analysis will be done for TCP performance on Ad Hoc network in normal configuration where all nodes doesn't move. At the second time, analysis will be done if there are some of nodes do some movement to other location until link will get failure or changing. There are two cases of node mobility. First, configuration where one node move toward to other node and second, configuration where one node move far away to all nodes. Network performance will be analyze on each configuration.

Keywords: Ad Hoc, Reno, SACK, mobilitas node, throughput, delay, packet loss