

ABSTRACT

Mobile Ad Hoc Network (MANET) is one of alternative option in network configuration. Basic principle of Mobile Ad Hoc Network is a wireless network without the infrastructure, which consists of some nodes. MANET network does not require the centralized administration of network infrastructure, Base Station or Access points. Each node functions as a router, which will handling every exchange of data from source node to destination node.

MANET can be used in every circumstances such as in natural disasters or other things that cause dysfunction of the telecommunications infrastructure. However, in apply, MANET got a few problems, such as node mobility, wireless communications, and limited resource availability. This becomes a huge obstacle, especially in real time data transmission

This Final Task will be analyzed the performance of protocol Dynamic Source Routing (DSR) and Temporally Ordered Routing Algorithm (Tora) in the MANET by simulating. The data will be passed is a multimedia, including video and voip. Delay, jitter, throughput and packet loss is chosen to compare the performance of these routing protocols. Then there are some parameters that changed, such as the speed of the displacement nodes, the addition of background traffic, and the increasing the number of nodes. Traffic generator used is CBR (Constant Bit Rate).

From the experimental results obtained that the protocol TORA has a smaller throughput than DSR protocol, when background traffic added, number of node added and movement speed increased.

Keywords: Manet, DSR, Tora, QoS