

ABSTRACT

Wireless mesh network (WMN) is a wireless communications network made up of radio nodes in which at least there are two or more lines of communication data at each node. In the application of WMN there is a rule that has been standardized from the IEEE international institutions. To own a WLAN mesh network is an IEEE 802.11s standard, which was formulated around 2004 and still in the process of setting up now. The goal is the development of an extension changes the standard for wireless mesh networks that underlie the IEEE 802.11.

WMN was originally built for a static network (infrastructure). But its implementation, there are several nodes in WMN clients may stir at slow speed (such as pedestrian movement) allows that this network can also be dynamic. Moreover, because WMN is a network that is wireless means that will allow any user in the network which sometimes increases or decreases. With the change in speed and number of users, WMN needs a reliable routing protocol to find the optimal path.

In the Final Project, the writer has done testing in the form of a simulation which will then be analyzed to see which one best routing protocols for WMN. Routing protocol, that were used, were HWMP (hybrid) that is default routing protocol on WMN, AODV (reactive) and DSDV (proactive). With this routing protocol will be observed the changes that occur based on test parameters such as Routing Overhead (RO) and Normalized Routing Load (NRL) which will be simulated on a network simulator 2 (NS-2). The result of the simulations was obtained by concluding that the DSDV routing protocol is the most efficient routing protocol in this test.

Key words: WMN, IEEE 802.11s, HWMP, AODV, DSDV, *Routing Overhead, Normalized Routing Load*