ABSTRACT

The network technology development to optimize the user movement rapidly growing up. One of the developing of technology WLAN is a Wireless LAN Mesh Network which is one part of the Wireless Mesh Network (WMN). Wireless mesh network is one technology that is similar to a mobile system that is centralized. WMN is a technology using a combination sisitem infrastructure and ad hoc that will work conditional. In the WMN has advantages, such as self-organized, self-configured, and self-healing, that is how this network can allow for rerouting or other efforts to keep its network remains reliable. It is expected to make WMN has more advantages such as robustness, reliability and service coverage better.

In WLAN applications have been standardized rules of international institutions of the IEEE. Standard for WLAN mesh network is a IEEE 802.11s standard, which was formulated around 2004 and still in the process of setting up now.

In a WLAN mesh network, because work in wireless, it means to connect users on the network effect is sometimes increased, decreased and moved so that it is necessary to analyze Mesh Access Point MAP performance. MAP that functions to send or forward data to a user desired destination. With a growing user random on a network, the interference is increased, so have done a simulation to see the quality of MAP performance in maintaining the quality of service for existing users in the system with the introduction of a new user or a user who moves out.

DCF in MAP that user entered is still able to receive the user at the time of the random data access conditions, it looks from 0.06 ms delay increased, decreased throughput of 178 Kbps, and there is no packet loss at the receiver side. This is because the ability to share media DCF fair access regardless of its services. Hybird Wireless Mesh Protocol (HWMP) influence the process user migration, since there are approximately 20s to check traffic conditions in the WLAN network mesh network.

Keywords: MAP, throughput, packet loss, delay, DCF, HWMP