**ABSTRACT** 

Communication without cable / wireless is now a basic need or a new lifestyle

information society. Wireless networks are more flexible because, in practice, wireless

networks do not need cables to connect computers to each other. Computer and data will be

linked with the radio network. Of the technologies developed in the field of Wireless LAN

(WLAN) is a Wireless LAN Mesh Network, which is one part of the Wireless Mesh Network

(WMN). Wireless mesh network has certain advantages, such as self-organized and self-

configured. In addition, wireless mesh networks, also known as self-healing properties,

namely how these networks allow for rerouting or can make another effort to keep its

network remains reliable.

From the measurements obtained throughput values in scenario 1 At a distance of 10

meters throughput value 3.8043 MBit / sec and the value of 0.0031835 sec delay, at a

distance of 20 meters throughput value 3.7977 MBit / sec and the value of 0.0033709 sec

delay, at a distance of 30 meters throughput value 3.6682 MBit / sec and the value of

0.0034802 sec delay, while at a distance of 40 meters the throughput of 3.1054 MBit / sec

and the delay value 0.0035566 sec. The number of hops that lie between the client and server

greatly affect the value of throughput and round trip time. From the experiments between 1 to

4 hops throughput values obtained 2.0211, 2.2836, 2.5015, 3.0615 MBit / sec and the delay

value 0.0053438, 0.0047508, 0.0043619, 0.0036789 sec. more and more hops in dianatara

client and the server ate throughput will increase while the value decreased delaysemakin.

Effect of number of users that access the server on a wireless network using AODV routing

protocol causes the effect on the value of throughput and delay. More and more users are

accessing the throughput value will increasingly come down and the delay value will rise.

**Kata kunci:** *ruting*, *ad-hoc*, AODV, VOD, Video, wireless, *mesh*