

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. One of 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. It is expected to make this WMN has more advantages such as robustness, reliability and better service coverage.

The protocol used in this thesis is the AODV (Ad hoc On-Demand Distance Vector) and OLSR (Optimized Link State Routing). AODV is a reactive routing protocol, which means forming a route to a destination only on request. AODV maintains these routes as long as they are needed by the source. While OLSR is a proactive routing protocol, which means he will always automatically update the routing table without any prior request.

The result of this final task is the performance of routing protocols in Wireless LAN Mesh Network networks that use protocols AODV and OLSR for Video Conference (VCON). The parameters analyzed the throughput and rtt time. On the results show that the two of routing protocol has the advantage of each. OLSR is superior in time configuration himself because it is always updating routing tables at each time, this can be seen from the calculation of self-configuration and self healing faster than AODV. While AODV is more efficient in data transmission and channel bandwidth usage because the route was made when there is demand, it can be seen from the results of throughput and RTT calculation that shows the value of packets sent AODV is more efficient than OLSR

Key Word: *routing, ad-hoc, AODV, OLSR, VCON, Video, wireless, mesh*