

## ABSTRAC

Current technological developments increasingly sophisticated human beings using the internet as a means of carrying out routine activities either. In wireless technology are more simple in their use, but the problem occurs on a limited network coverage if users move through the place. So there happen problems on coverage or breakdown in the Wireless internet connection then it needs a system that is able to resolve the issue.

In this final project has been carried out the design of Wireless Distribution System as an alternative solution to expand coverage network with wireless media access that connects point one with the other. The design is done using two scenarios in order to choose the placement of the transmitters power is good. The test signal is using the software to know his little big vistumbler signals, measure menttesting and QoS. The parameters used in the measurement of QoS is throughput, packet loss, delay. The last stage of doing implemetansi.

From the results of the implementation done that network Wireless Distribution system can covers the range of the Wireless access point with the connection with mikrotik in the building FIT the second floor with three floors with the power of a largerscope. The application of the results of the scenario goes well evidenced the existence of power level received from software vistumbler. QoS parameters on throughput on the WDS network showed that better tan network without WDS. On the QoS delay parameter indicates that network without WDS nicer tan WDS network. QoS parameters on packet loss indicates that the network is equally ugly but seen from table parameters QoS network without WDS nicer tan WDS network. Although the network without WDS nicer than WDS network but on the purpose of this final Project is already that is able to expand the scope of Wireless networking Distribuion System.

***Keyword: Wireless Distribution System , vistumbler, QoS***