ABSTRACT

The emergence of wireless access networks are already highly developed because of the not needed of connection of the cable for connecting between a client or a mobile node. It became an alternative for networks that are in offices, hotels, buildings, cafes and landscapes area. But in reality, to connect the access point still needs to wired a network. This becomes a problem in areas that somewhat difficult to install cables for plugging in a network. Solving this problem is a cause for Wireless Distribution System (WDS) as a solution.

Wireless Distibution System (WDS) is a system without a cable network that provides interconnection between the access point with another access point or to extend a network between the access point using two or more access points. WDS network does not require anymore as a liaison between backbone cables to connect. Wireless Distribution System (WDS) that is divided into two types, namely: Bridge Mode and Repeater Mode.

In this final project implemented and analyzed the influence of the speed of the mobile node and the number of clients in Wireless Distribution System (WDS) Bridge mode on data services. Parameters measured in wireless WDS mode bridge point to point have a interarrival jitter 6.35 ms, throughput 0.33 Mbps , interarrival delay 27.54 ms and packet loss 0.196% and for WDS bridge mode point to multipoint with interarrival jitter 7.83ms, throughput 0.34Mbps, interarrival delay 28.84ms and packet loss 0.41%.

Keywords: Wireless Distribution Sytem, Bridge Mode, Mobile Node