

## ABSTRACT

The development of data communication grows rapidly nowadays. And also the necessity of internet connection. Along with that, the modern community that has high mobility wants the service of data communication technology to be easier and more efficient, wireless LAN is an answer from that issue.

In a company that active in communication technology really needs a wireless technology which is one of methods that easy to communicate between user and work on high rate up to 54 Mbps for device that follow IEEE 802. 11g standardization.

Wireless network is a computer network without using wire to communicate between user by using access point. Wireless LAN standard that we will use is Wi-Fi (Wireless Fidelity). Wi-Fi can be built in houses, companies or public place such as airport, hotel, café, hospital, school, university and others.

In this final project, we will discuss a planning of wireless LAN network by using access point in order to cover all users surround the access point's coverage and also discuss a good placement of access point in a company that has some rooms and floors. With Network Stumbler and Wireshark softwares, we can see the quality of signal in a certain location, then we can put access point in the part where has the best signal. We also will count pathloss as a parameter of signal quality that is to repair the network performance so the access quality can be better. This final project will take place in Pustekkom Depdiknas in Ciputat. This final project will show us how to plan wireless network to the other place.

---