

## ABSTRACT

The usage of internet technology more and more develop but still concentrated in central business and offices. RT/RW Net is one of internet access spreading alternative for the people, especially at housing in residential area. RT/RW Net use LAN to give the internet access to the user at housing and by using RT/RW Net, cost of internet access usage could be reduce because it is pay by the members.

By the reason, decided to make a planning of RT/RW Net at housing of Cigadung Permadani Bandung, because the inhabitant know and was the user of internet. The planning is about how to choose appropriate equipment, calculate the link budget, and addressing client.

The purpose of this last task is to make a planning of RT/RW Net at housing of Cigadung Permadani Bandung, so RT/RW Net could be one of internet access technology alternative with enough of speed and low cost relatively. This planning is also could become a prototype to internet service user, so it could be a guide to build RT/RW Net at they housing.

For covering  $\pm 5200$  m<sup>2</sup> service area at housing of Cigadung Permadani Bandung, is needed one Access Point with two separate transmitter antenna (omni-directional), and needed power transmit of 12 dBm at 5.5 m antenna's height, with the gain of Access Point antenna is 15 dB. The longest distance which can receive signal well is 89.85 m with one wall obstacle. The number of wall that permitted so can receive signal well is three walls which the distance is 11.5 m. Distance and the number of wall have a reverse comparative relationship.