

ABSTRACT

Along with the development of the economy in the current era, causing the birth of many types of businesses, one of which is an internet service company. Currently, ISPs (Internet Service Providers) are mushrooming in various areas, including internet cafes, because ISPs are in demand by the public. People everywhere also need a quick source of information to meet their needs, such as lectures, school assignments, or just to open social networks, because they believe that the need for the internet is important. Sukamulya Village is a village in Tangerang Regency where the distribution of internet network quality is still inadequate. Where every customer who wants to install WiFi has to pull a cable from the Base Transceiver Station (BTS) whose cable pulling distance is quite expensive. The purpose of this research is to design a network known as Hotspot RT/RW Net with design testing carried out in Sukamulya Village which will be tested for internet speed using a voucher system, this research will be tested with 5 users who will be given 5Mbps bandwidth per user. The development method used in this study is the Prototyping Method where the work system to be carried out includes using the steps contained in the Prototyping development method, namely defining user needs, configuration steps for Mikrotik Router, Access Point and TP-LINK WiFi Extender and testing. RT/RW Net hotspot system and determine whether the prototype can be used by the user validation test, the next step is to use the prototype if it is acceptable to the user, if not then return to the step of defining user requirements. The results of this study show that the proposed hotspot design can be used properly with internet speed of 3.49 Mbps with a distance of about 5 to 10 meters.

Keywords: RT/RW Net, Hotspot, Mikrotik RouterOS.