

ABSTRACT

Wi-Fi (Wireless Fidelity) is a concept of LAN (Local Area Network) network using wireless media. In building a wireless network needs to need an Access Point device that serves as a regulator of data traffic, which allows many clients can connect to each other through the network. In the implementation of this 802.11 standard is often found in offices, schools and homes. But there are still many found the installation of Access Point which is located near each other and use the same frequency channel, this will lead to interference. Such interference is called Co-Channel interference. Therefore, it is necessary to examine the effect of Co-Channel interference that occurs in the 802.11 standard. In this study using an infrastructure topology where two PCs will communicate using the main AP intermediaries. The research was done by knowing the influence of the addition of Interferer Access Point number to network performance, with total number of Access Point interferer devices is four pieces. From the measurements obtained in this study when the network does not occur interference with the size of data transmitted is 1000 MB obtained throughput value of 55.378 Mbps, then on the delay obtained 0.15 ms and packet loss of 0.01%. While on the measurement with four AP interferences obtained throughput value of 45.254 Mbps, delay of 0.18 ms and packet loss 0.079%

Keywords: Access Point, Co-Channel interference, throughput, delay, packet loss