

ABSTRACTION

Bluetooth is one of peripheral type wireless which can be interfaced to various peripherals. Because its usage of low energy and can be activated in autonomous without manual setup to make connection, the existing Bluetooth can increase users. Bluetooth operation frequency is 24 GHz ISM BAND that can be divided into 79 canals RF with 1 MHz bandwidth for each channel. Modulation standard applied is Gaussian Frequency Shift Keying (GFSK).

Network built in bluetooth based on star topology called as piconet, the maximum network consist of 1 master and 7 slaves. Communications happened in piconet are master-slave, slave-master and slave-slave. If a slave wants to make connection to another slave, it must pass by via master first to avoid the bottleneck. To know about the success of delivery information at network piconet, parameter which must be paid attention are throughput, package loss, and delay happened at piconet network.

For research of this Final Tasks, we did comparison analysis to network performance of Bluetooth piconet at the time of delivery data with throughput, delay and package loss parameters. The delivery data divided into 3 lines: delivery of master data - slave, slave – master, and slave - slave in idle condition and when some peripatetic slave move. Method applied in this Final Tasks is the simulation of piconet network at peripheral Bluetooth using network simulator software.

From the simulation result, we can conclude that delivery data based on line which has been simulated has enough effects in performance. So do with client movement, when client moves closer to master, we can get good performance.