ABSTRACT

Servers are computers that serve, limit, and control the client and the access to resources on a computer network. A server certainly has a special function in accordance with the type of server. The main function of the server is able to meet the demand of clients and provide additional services in order to facilitate client communication.

Real time communication server is a server that provides a service to a client can communicate in real time with other clients. The main purpose of this server is the user can exchange the data at that time.

In the final task is made the design and realization of real time communication server as a remote control on system campus car transportation. System created is a server communicating with 2 car robot and 2 pieces of existing aid applications on the terminal. Terminal here is the place for the robot car stops and there are applications that are used to run the car and to call at the terminal of the car if there is no robot car. Transmission media used in communication systems using wireless. Access Point is used as the only local network so no bandwidth in this system. In the server there is a fuzzy, that uses to process data received from the car robot. A delay that can be tolerated in the process receive and send data after fuzzy process is <70 ms. However, the average delay at the time of testing is 28-32 ms. In this case the delay is very influential on the system because if the delay ≥ 70 ms, the data information is sent to the robot car will be too late and result in a collision between two cars of the robot.

Key words: Server, Wireless, Delay, Real time