

## **ABSTRACT**

With rapid technological development, it required the technology to compensate. It also similar with the development of data transfer, people does not want any interference in data transmission both in the network or the internet, especially connection loss and must repeat the transfer from beginning.

Problems that occur when router in a network have problem, to solve the problem, router configured with VRRP and continued with load balancing on the server side. In this system the router work in redundant, when the main router cut off then the backup router take control, so the connection in the network still runs. So the backup server changes the function become the main router. And for load balancing, can divide client who wants to access the web server and all network connect with wireless.

In technical test there two routers to be pairs of wireless, in VRRP the main router switch off and got delay 6,2 millisecond. The result of the system are when the access to the web server automatically from backup router. And load balancing work when the first server has fulfilled the target, then the next client automatically move to the second server.

*Kata kunci: Router, VRRP, Redundant, Load Balancing, wireless*