ABSTRACT

The development of technology in the telecommunications sector is currently growing very rapidly, various services are continuously developed by developers in the world. One of them is in real-time services, video streaming is a service that is real-time. For fast delivery, MPLS routing protocol is used by utilizing existing labels so as to speed up routing. Streaming video services are inseparable from network quality, so a reliable network is needed that is able to minimize the occurrence of data accumulation and high packet loss. Real-time communication is direct communication at the same time so that a redundancy gateway must be provided to anticipate link failures or network breaks during communication. The type of protocol used in the redundancy gateway is GLBP (Gateway Load Balancing Protocol). The GLBP protocol has a load balancing feature which is the principle of the load balancing process for packets to be sent through an active router. In the GLBP protocol, if in one network the gateway interface on the master router has a problem, it immediately moves to the backup router so that the packets sent can continue to run. Parameters that will be tested in data retrieval are delay, throughput, jitter and packet loss.

***Keywords**: Video Streaming, Multi Protocol Label Switvhing (MPLS), Gateway Load Balancing Protocol (GLBP)*