ABSTRACT

Exchange of information is not only limited to text and images only, but the need for information that is real time also it is extremely needed one application is video streaming. It is inseparable from the quality of the network, therefore required a reliable network that is able to minimize the buildup of data and packet loss is high, caused due to the failure of links in a network. To make a reliable network in this study implements the Protocol Gateway Load Balancing Protocol (GLBP). Protocol GLBP load balancing feature which is the principle of balancing the load of packages that will be sent through a router-router is active. So if there is a line that was cut off, expected connectivity data is still maintained by the existence of an alternative path. In the study carried out using the streaming video service to know the performance of a network protocol GLBP. Delay parameter of scenarios 1, 2, and 3 on variation of 720 p in a row 2.60 2.60 ms, ms, and Ms. 2.75 On successive variations of 1080 p 1.68 1.68 ms, ms, and ms 1.76. Those results are included in the category of good by the standards ETSI TIPHON TR 101 329. Throughput parameter from scenario 1, 2, and 3 on variation of consecutive 2.11 Mbps 720 p, 2.11 Mbps, and 1.99 Mbps. Variation 1080 p consecutive 3.27 3.27 Mbps, ms, and 3.10 packet loss Parameters Mbps. from scenario 1, 2, and 3 on variation of 720 p in a row 0 %, 0%, and 10.57%. On the variations of 1080 p in a row 0%, 0%, and 10.19%. Results from scenario 1, 2 on the second variation of the resolution including a very nice category, while from scenario 3 in both categories include medium resolution variation according to the standards of the ETSI TIPHON TR 101 329.

Keywords: Gateway Load Balancing Protocol, Streaming Video, QoS