

ABSTRACT

Gateway Load Balancing Protocol (GLBP) is a method that divides routers that are valued equally or equally. Gateway Load Balancing Protocol (GLBP) itself was born from the concept of load balancing, which is a pointless concept for balancing loads or loading on multiple links to the same remote network. Previously there has been research that also discusses this GLBP, but the discussion is more detailed to the load traffic parameters. What distinguishes at this time is the author uses the burden of Voice over Internet Protocol (VoIP). The research method used was testing using GNS3 simulator software with 1 VoIP server with 2 clients. Tested using the wireshark application. The results of this study are to discuss traffic loads in the GLBP configuration, or without the GLBP configuration. Traffic expenses incurred are Throughput, Delay, and Packet Loss. By using VOIP (Voice Over Internet Protocol). The final results of measurements when obtained throughput, based on the TIPHON standard are categorized very well because it has a value of 75-100%. The value of throughput on measurements without GLBP (92.28%), while on measurements on the main line of GLBP (92.05%) and on the standby line of GLBP (95.12%). From the delay measurement, the measurement of the GLBP main line (381.32 ms) is categorized as being based on the TIPHON standard, which is 300 to 450 ms. While the measurement of the path without GLBP (1,480 ms) and the standby pathway (537 ms) is categorized poorly based on the TIPHON standard that is > 450 ms. From the packet loss measurement, according to the TIPHON standard, it is categorized very good because it has a value of 0%. There are no lost packages. (0% on the track without GLBP, 0% on the main GLBP line, and 0% on the GLBP standby line)

Keywords : GLBP, *Throughput, Delay, Packet Loss, VOIP, Wireshark, GNS3, TIPHON,*