ABSTRACT

Quality Of Service (QoS) on networks is one of the main focuses on the development of packet-based network infrastructure. This is the reason for the development of packet forwarding methods such as MPLS. MPLS is expected to be a solution to improve network performance in terms of packet transfer speeds on the network. However, besides the speed of data transfer, aspects of reliability and quality assurance of services also become important to maintain user convenience in communicating.

Multi-Protocol Label Switching (MPLS) is a method of forwarding data through a network using information in labels attached to IP packets. Along with its development, whereas to ensure the quality of a service, the Differentiated Service (DiffServ) or Integrated Service (IntServ) method is usually used. Protocol (RSVP), while Diffserv is a method where packets to be sent are given priority on the network.

From the test results on a predetermined scenario, the results are compared. On the comparison graph of Throughput, Delay, Jitter, and Packet loss, the average is good for all services, namely the MPLS-Diffserv and MPLS-Intserv methods compared to scenarios without MPLS or using MPLS.

Keywords: Qos, MPLS, Intserv, Diffserv, Triple Play