

## **ABSTRACT**

*Virtual Local Area Network (VLAN) is a network model that logically divides the network into several different paths but still passes through the same connecting devices, the benefits of using VLANs are increasing security and improving better performance. In the process of sending data, the shorter the path used, the faster the data will be sent. In addition, Open Shortest Path First (OSPF) and Enhanced Interior Gateway Routing Protocol (EIGRP) are two routing protocols that are widely used in computer networks, OSPF Routing is routing that uses the concept of a routing hierarchy, which divides the network into several levels, while EIGRP combines the capabilities of the link state protocol and the Distance Vector protocol. In this study, we compare two routing protocols OSPF and EIGRP. The purpose of this research is to know the results of QoS parameters such as Throughput, Delay, Packet Loss. With data file sizes of 10MB, 25MB, 50MB, 100MB, and 150MB. For the results of the research on QoS parameters based on the TIPHON standard, this study provides the results of testing the OSPF protocol showing that the parameters of delay, throughput and packet loss are in the good range. Meanwhile, the EIGRP protocol shows that the delay and throughput parameters are in the good range, but packet loss is in the poor range.*

*Keywords: VLAN, OSPF, EIGRP, QoS*