

## **ABSTRACT**

In the current technological era the use of the internet is widely used in everyday life, to reduce the quality provided by internet services, and the quality of internet services and networks that can significantly interfere with performance. Then a network simulation design was created to determine network connectivity without having to spend an expensive budget to build the original network structure. Multiprotocol Label Switching (MPLS) is a technology for delivering/sending packets on a network so quickly. The research objective is to determine network connectivity on the simulator using the EVE-NG software. The research method used is literature study by searching for data that supports this research and network topology simulation using EVE-NG software. The simulation results show that when the configuration is successful it is shown in the verification results that you can test the system on the ping, traceroute, and mpls forwarding table commands.

Keywords : Multiprotocol Label Switching (MPLS), Mikrotik Router, EVE-NG