ABSTRACT

In the era of modern technology, internet use in daily life has increased significantly, resulting in a decrease in the quality of internet services and networks, which can significantly disrupt performance. To determine network connectivity, a simulation design was created. This makes it possible to avoid spending expensive money on building the initial structure of the network. The technology for fast delivery and delivery of packages is Multiprotocol Label Switching (MPLS). The aim of this research is to determine network connectivity in a simulator that uses EVE-NG software. To achieve this goal, this research method includes relevant literature studies and network topology simulation using EVE-NG software. The simulation results show that the configuration is successful, demonstrated by verification results that allow the system to test the ping, traceroute, and mpls forwarding commands.

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