

## ***ABSTRACT***

*The development of this technology develops with the development of computer networks. In designing an optimal network infrastructure, it takes a network architecture that is adaptable, dynamic and easy to set up in adjusting hardware or software. Software-Defined Network (SDN) is a new architecture created to solve traditional network problems.*

*Network slicing is defined as an end-to-end (E2E) logistics network that runs on the same network platform (physical or virtual), builds on each other between user groups, with independent control and management, and is on-demand. Network separation can reduce latency in services or applications, increase data traffic rates, allow for updates, and allow SDN to deliver user data more efficiently.*

*In this research, Mininet emulator is used to simulate SDN technology. Simulations show that the number of hosts and the shape of the topology affect the final result of data transmission, and in this study, 1 controller, 5 switches, and 4 hosts were used. The evaluation method in this study uses a quantitative approach. In this study, the QoS results were obtained with 0% Packet Loss, Bandwidth on the Host 81.375 Gbps and on the Switch 135.76 Gbps, and throughput on the Host 85.45 Gbps and on the Switch 135.72 Gbps.*

**Key Word:** *Network Slicing, Software Defined Network, Mininet.*