

## **ABSTRACT**

OpenStack is an open source cloud computing platform that is widely used in the industry. Where OpenStack allows users to manage their computing resources independently. With the rapid development of technology and the high demand for cloud computing, the community is pushing to develop and update OpenStack so that it can continue to serve these service requests.

Open vSwitch and Open Virtual Network are open source software switches that provide network abstraction and can connect virtual machines to different computers. Open vSwitch or Open Virtual Network can be implemented in OpenStack cloud computing. This study was conducted to determine the extent of differences in traffic performance that can be passed by Open vSwitch and Open Virtual Network on OpenStack cloud computing.

Based on the results, Open Virtual Network has better performance than Open vSwitch on different interconnections of virtual networks and have same performance with Open vSwitch on interconnections in single virtual network. Open Virtual Network can be used in cloud computing OpenStack other than Open vSwitch because it has an average performance that is better than Open vSwitch.

**Keywords:** Open vSwitch, Open Virtual Network, OpenStack, Cloud Computing