

## ABSTRACT

*Network Monitoring System (NMS) is a system that continuously monitors computer networks, so that if an interruption occurs, it can immediately notify a network administrator or system administrator. Network Monitoring System really helps network administrator in making their job easier.*

*This final project implements monitoring of personal computers and network devices, The mikrotik wireless router RB941-2 nd (Hap Lite) which is connected to the SDN (Software Defined Network) using the open source graphana and Zabbix software. The initial stage that must be done is to plant an exporter pn a personal computer and proxy to take the data on the device and send it to the Data Collector, then the Data Collector collects all the data so that it is given to the Grafana Server to be displayed in real time.*

*The result of this level project testing, namely monitoring personal computers and mikrotik on the SDN network, is that it is able to display the UP and Down status of the Mikrotik device where the monitoring software and graphana software as a visualization dashboard sidplays the same data or graphics. The result obtained will be used by an administrator in monitoring the state of the device.*

**Keywords:** *Network Monitoring System, SDN, Zabbix, Grafana*