

## **ABSTRACRT**

### ***Analysis of Mikrotik Os Router Usage on Server Networks Using Eve-Ng Simulator at the Ministry of Home Affairs of the Republic of Indonesia***

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*Computer network communications facilitate the formation of networks that have grown to become very complex and very broad, known as interconnection networks or the Internet. To share the connection between several computers, the user needs a server to monitor and manage the network. In sharing connections between several computers, users can use a proxy to connect several local networks to the internet. Mikrotik plays an important role in managing the flow of data traffic. Furthermore, the use of Mikrotik is also a regulator of content from the internet that can be accessed by clients. Mikrotik also has a very complete set of features, one of which is the DNS server. The DNS server is a large database that functions to store all the IP addresses used in hostnames. This large database contains a lot of information about the IP address when the client visits the website that is accessed. In using Mikrotik RouterOS on a server network, administrators can use the Emulated Virtual Environment Next Generation (Eve-Ng) simulator. The EVE-NG simulator is a virtualization software that supports various network devices and operating systems to simulate a real network or server to obtain an IP address. Through this simulation with Eve-Ng it will assist the Ministry of Home Affairs agencies in designing and configuring in real time on a network. Based on the results that have been done for the server IP address configuration: 172.24.6.5 while for the client IP address between 192.168.10.2 to 192.168.10.254.*

**Keyword :** *Mikrotik Router OS, Server, Eve-Ng*