

ABSTRACT

Security is an important aspect in implementation of network services. The open port cause server can accessed by anyone, so users who are not interested can access server network service. Network services contained on the server is vulnerable to being hacked. Therefore, at the development of network services on the server we need firewall and adequate security which aims. To reduce hacking on the network service that have been built on the server. Network service on the research will be built on the Linux operating system Ubuntu 14.04. Security port of network service, using method of port knocking to authenticate before access server and combined with features firewall IP filter and packet timeout on the Mikrotik router. Where this method will choose the IP allowed to access server. The methods will be implemented on the firewall Mikrotik router, so that in the development of network services on the server is more secure and reduce hacking. In this study the authors use the waterfall method in order to facilitate the work in progress. The results of this study are establishment of the security system on the services the network services on the server using port knocking method with firewall in Mikrotik router. With this research expected can be a security solution server network services are susceptible to be hacked.

Keywords: Mikrotik, Port knocking, Network Security, IP filter, Packet timeout