

## **ABSTRACT**

Computer networks is not something new today. Almost in every company there is a computer network to facilitate the flow of information within the company. Internet is gaining in popularity today is a giant computer network that is connected to a computer network and can interact with each other. This can occur because of the development of network technology is very rapid. But in some ways connected to the Internet can be a dangerous threat, many attacks that can occur both inside and outside such as viruses, trojans, and hackers. Ultimately Security Computer and computer networks will play an important role in this case.

A good firewall configuration and optimized to reduce these threats. Firewall configuration there are 3 types of them are screened host firewall system (single-homed bastion), screened host firewall system (Dual-homed bastion), and screened subnet firewall. And also configure the firewall to open the appropriate ports to connect to the internet connection, because the ports are configuring a firewall to filter out packets of incoming data in accordance with the policy or policies. This firewall architecture that will be used to optimize a firewall on the network.

**Keywords:** Computer Networking, Computer Security, Information Systems, Firewalls, Policy.