Abstract

Issues around security on the network are things that attract attention to always be discussed, because there is always an opportunity for an attacker to attack at every opportunity. For that attack detector is needed to know if there is an attack on the network, then an IDS is applied that will function to detect any attacks or suspicious packets that enter through the network. Usually IDS is only used by large companies because the cost is very expensive to implement, therefore an IDS is designed on Raspberry Pi to save implementation costs, the tool that will be used is Snort IDS, which to maximize the performance of Snort will be implemented PF_RING and to reduce packet loss problems that often occur. Evaluation that is used to determine the performance of the system by comparing the analysis of packet i / o produced by Snort with PF_RING and without PF_RING during an attack, where the results of analyzed packages and outsounding generated by Snort with PF_RING is better than without PF_RING as well as the resulting packet loss has decreased compared without PF_RING. Evaluation in terms of CPU and memory usage performance generated by PF_RING is also better than without PF_RING.

Keyword : IDS, Snort, PF_RING, Packet Loss, Syn Flood, CPU and Memory Usage, Raspberry Pi.