

ABSTRAK

Muhamad Haerul Anwar
Teknik Elektro

Integrasi *Intrusion Detection System* Suricata Dengan Firewall PFSense Untuk Mitigasi Serangan DDoS pada Jaringan IPv6

Serangan DDoS (*Distributed Denial of Service*) menjadi salah satu serangan yang banyak ditemui. Serangan tersebut mengakibatkan trafik jaringan menjadi padat. Serangan tersebut dapat cegah dengan *software Intrusion Detection System* (IDS) Suricata yang dapat mendeteksi sumber serangan. Serangan yang dideteksi akan diblok oleh Firewall PFSense, sehingga *server* kembali normal. Hasil pengujian yang diperoleh, persentase nilai QoS saat Firewall PFSense diaktifkan, nilai *throughput* mengalami kenaikan sebesar 1,08%, total paket rata-rata yang dikirim mengalami kenaikan sebesar 57,32%, nilai *delay* mengalami penurunan sebesar 88,78%, nilai *jitter* mengalami penurunan sebesar 88,99%, dan nilai *CPU Utilization* mengalami penurunan sebesar 81,23%.

Kata Kunci: PFSense, Suricata, DDoS, IDS, IPv6

ABSTRACT

Muhamad Haerul Anwar
Teknik Elektro

Integration of Suricata Intrusion Detection System With PFSense Firewall For DDoS Attack Mitigation On Ipv6 Networks

DDoS (Distributed Denial of Service) attacks are one of the most common attacks. The attack resulted in dense network traffic. These attacks can be overcome with the Suricata Intrusion Detection System (IDS) software which can detect the source of the attack. Detected attacks will be blocked by the PFSense Firewall, so that the server returns to normal. The test results obtained, the percentage of QoS value when the PFSense Firewall is activated, the throughput value has increased by 1.08%, the average total packet sent has increased by 57.32%, the delay value has decreased by 88.78%, the jitter value decreased by 88.99%, and the CPU Utilization value decreased by 81.23%.

Keywords: PFSense, Suricata, DDoS, IDS, IPv6