ABSTRACT

Server security is necessary to avoid all attack that will happen. IPS (Intrusion Prevention System) is an example of solution for the security system. IPS can prevent an attack by using the IDS (Intrusion Detection System) features and firewall features to block access of a connection.

In this research, IPS (Bro and Snort) on the server tested with some attack include DOS (Denial of Service), port scanning, and FTP brute force with three different topologies. These attack will conclude security metric analysis using VEA-bility metric which the value of that metric will determine how secure a system owned by a range of value 0 to 10 based on calculation involving the value of vulnerability dimension, exploitability dimension and attackbility dimension. . In this experiment we got 3.07 score from non-firewall toplogy, 5.98 score from separated server withour firewall topology, and 6.81 score from separated server with firewall topology. Meanwhile we got 1.83 score for DOS attack, 0.267 score for port scanning attack and 4.27 for FTP brute force attack for CVSS value.

Keyword : Intrusion Prevention System (IPS), Snort, Bro, VEA-bility metric.